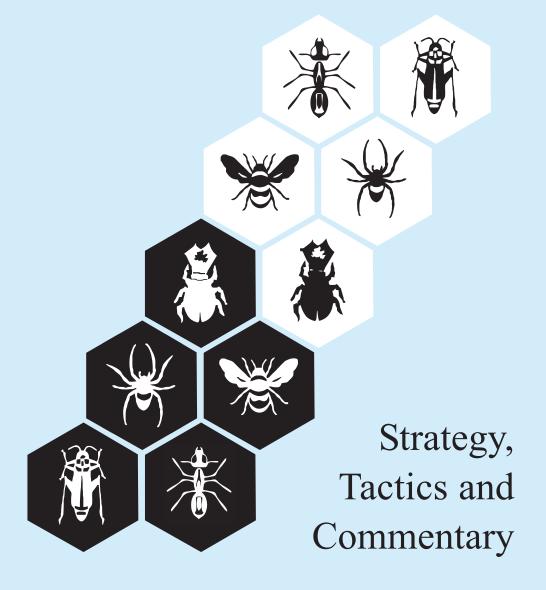
Play Hive® Like a Champion

Second Edition



by Randy Ingersoll BoardSpace 2011 Online Hive® Champion

> With foreword by John Yianni Designer of Hive®

Play Hive® Like a Champion Second Edition

Strategy,
Tactics and
Commentary

by Randy Ingersoll BoardSpace 2011 Online Hive® Champion Play Hive® Like a Champion, second edition

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Introduction

About the Game

Hive[®] is an addictive strategic 'board' game for two players. Because no actual board is used, it can be played anywhere on any flat surface. The basic game consists of 22 hexagonal pieces: 11 white, 11 black. The pieces represent five different types of bugs, each with its own unique way of moving. With no setup required, the game begins with the placement of the first bug. As the pieces are placed, a pattern quickly forms. This hexagonal pattern, for obvious reasons, becomes the hive.

Hive[®] was invented in 2001 by John Yianni and is published by Gen42 Games, London, UK. The game was expanded when the Mosquito was made available in 2007, followed by the Ladybug in 2010, and the Pillbug in 2013. Awards won include the 2006 Mensa Select and 2006 Dr Toy Smart Toy Product Excellence Award.

It is available for purchase at leading game and hobby stores around the world. For more information, please visit the official Hive® website at www.gen42.com/hive. To join the ever expanding worldwide community of Hive® players, you may register to play online at www.BoardSpace.net.



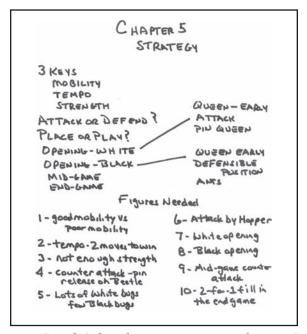
Hive® cover art from game box

About the Book

Chapters one and two introduce the basics of the game, including rules and bugs. These two chapters may be skipped by experienced players.

Chapters three and four are important for all players: chapter three, because knowing how to read movement notation is vital to follow along with the 100+ games that are used to illustrate the tactics and concepts being taught, and chapter four, because recognizing the basic formations is key to becoming a better player.

An overview of strategy is the subject of chapter five. Five elementary tactics are introduced in chapter six and then the heart of the book is chapter seven, discussing seventeen more advanced tactics that are sure to improve the performance of any player.



Randy's handwritten notes on chapter 5

Rounding out the discussion regarding tactics is chapter eight, Beginners' Mistakes. Beginning players may wish to jump ahead, read this chapter early, and immediately begin applying the lessons taught therein. All readers, of course, are invited to survey the table of contents and read and study the tactics in any order. Experienced players may identify tactics that they have already used or possibly learn about tactics that have already been used against them.

The book concludes with a brief discussion of Hive® openings in chapter nine, an in-depth discussion of Beetle/Mosquito/Ladybug/Pillbug movement atop the hive in the first section of chapter ten and an overview of some of the ideas for additional expansion bugs in the second section of chapter ten.

About the Author

Randy Ingersoll lives in Port Orange, Florida, USA with his wonderful wife, Diane. He is a recovering chess-a-holic who happened across Hive® in 2006. After playing a few games online at BoardSpace he promptly forgot about the game and played sparingly for the next four years. In July 2010, he visited BoardSpace and again played the game, this time with a bit more enthusiasm. He quickly fell in love with the game and set it as his goal to become a better player.

Under the tutelage of Christian Sperling (Eucalyx on BoardSpace) he rapidly improved and his enthusiasm became even more intense. His improvement continued as he played against other BoardSpace opponents, including Jason Wallace (DrRaven), Dimitris Kopsidas (Fumanchu), and David Gburek (BlackMagic) all of whom quickly became online friends. In the spring of 2011, he entered and won the 2011 BoardSpace Online Championship, beating his friends, Fumanchu in the semi-finals and DrRaven in the finals.

Since there were not any books available on the subject, he decided that he would write one himself. With editorial and layout help from both Christian and Jason, the first edition of the book became available in May 2012. Thanks also to Jeffrey Yang, who designed the offline Hive® reviewer used to review hundreds of games searching for examples to demonstrate the important concepts discussed in this book.

Randy wishes you the best in your learning to play the game. May you enjoy and benefit from this book. He looks forward to playing you at BoardSpace. Feel free to challenge him to a game. You may contact him at minigersoll@gmail.com.



Randy playing Hive® with Kate, his granddaughter

Foreword

by John Yianni, Designer of Hive®

When Randy Ingersoll first told me that he was writing a strategy book on how to play Hive[®], I was a bit taken aback. You see, this year marks the 30th anniversary of when I first had the idea for Hive.

Having a book written about a game that I invented is a tad humbling, to say the least.

As you've guessed my name is John Yianni, the designer of Hive®, amongst other games. I work as a full time games designer, making my living doing what I love, although a lot of people (me included) will tell you this is near impossible.

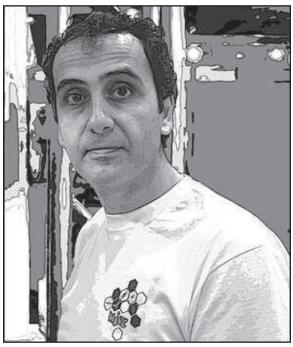
If you are reading this then I guess you already know Hive® or at least have heard of the game. But what you may not know are the humble beginnings that first gave this game life and the road, my family and I have travelled to get here.

Hive® started life as an idea I had, whilst watching a film 30 years back. The main characters were two old friends that met everyday in a park to play Chess. They would come together, each bringing one half of the board and half the pieces. I don't remember the name of the film but I do remember what inspired me. Looking at the unused empty spaces on their chessboard I wondered, could I design a game that had no need of a board, but still kept the essence of what makes Chess so appealing? The rest as they say, is history (and a lot of hard graft).

When I think back to the beginning, summer days spent with good friends in our back garden, sanding wooden blocks, nights spent sticking insect stickers by hand onto hexagons. All in the endeavour to make our first batch of Hive® games! I recall those days as a special time, when things seemed simpler, a time of adventure and a time where we believed anything was possible.

But that's quite enough about me. Let's get to what you really want to know, is this book any good? What hidden secrets lay within these pages? Why should you read it and can it really live up to its title and teach you how to 'Play Hive® Like a Champion'?

If you're a novice or a seasoned player the benefits of reading this book will differ, but one thing that resounds is the way Randy Ingersoll takes the game we all love and magnifies it, so that we see it through fresh eyes. He gives us a newfound



John Yianni, Designer of Hive®

respect for the game, by uncovering its many layers and revealing why we continue to play it, sometimes years after our first encounter. He takes the game and breaks it down to its essence, focusing on every part, whilst educating us in the subtle plays that distinguish a Hive player from a Hive® Champion. His eloquent writing style helps to make the many chapters of the book an easy read. At the same time he breaks down each one into bite size pieces, making what could have been a mammoth reading task, into a valuable resource. I especially like how Randy has assigned names to each tactic, which resemble, (well at least in my mind) that great 1973 classic film, 'The Sting.' Each play has a name that resounds of a well-planned hustle; The Fill, The Cover, The Shutout, The Squeeze. All we need are the cheeky smiles of Paul Newman and Robert Redford and the scene will be set.

New converts to the game will find this book a treasure trove of tantalizing tips, that all work together to form a well rounded strategy. They may even discover something about themselves in the book, when pondering over why they make certain moves that seem right, but don't quite know why.

Bringing me to what I consider is of most value to even seasoned players of the game. This book will inspire even those of us who have played the game for many years, to focus and define our own playing style, highlighting and outlining why we play the way we do. Why we go for The Squeeze, or why we would rather place a Spider in that precise position, or move an Ant to block, rather than surround.

I do appreciate how Randy does not presume to hand us the best strategy for the win, as if there could be just one. Instead he decides to take us on a journey through this beautiful land called Hive® and on the way, like a trusted guide, revealing to us the many paths that can lead us to victory. If walked correctly. This is the very reason why this book will not only be appreciated when read for the first time, but will also prove to be a lasting reference and guide that is often returned to. If you asked me to offer you just one statement that would describe this book, then I would have to say; "This is how you play Hive®, the way you always knew you could."

John Yianni Designer of Hive® June 27, 2012



Hive® Carbon, introduced in 2011

Play Hive Like a Champio	Hive® Like a Champion
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Chapter 1 – Basic Rules

1.1 – How to Win

The object of Hive® is to completely surround your opponent's Queen Bee, while at the same time blocking your opponent from surrounding your Queen Bee. The winner is the first player to reach this objective. Please note that the pieces surrounding the Queen can belong to either player. You are not required to surround your opponent's Queen solely with your own pieces. In *Figure 1.1* by moving Ant #3 into space A, White surrounds the Black Queen and wins.

Draws are possible. If, for example, the final move surrounds both Queens simultaneously, the game is declared a draw. Please look at *Figure 1.2* where both Queens are surrounded when White Hopper #3 jumps into space A.

The game is also declared a draw when the exact same position, with the same player having the next move, occurs three times. Finally, a game can be declared a draw by mutual agreement. (When playing online at www.BoardSpace.net, each player must repeat the same position until the computer recognizes the draw.)

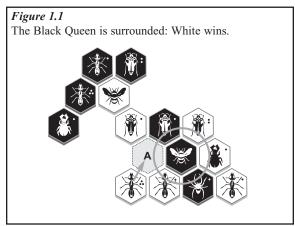
1.2 – Starting the Game

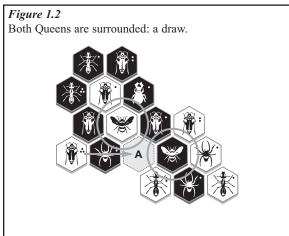
The game begins with the first player, playing White, placing any piece other than the Queen.* Next, the second player, playing Black, places any piece other than the Queen, adjacent to White's first piece. As an example please note *Figure 1.3* showing the position after White's initial placement of a Hopper followed by Black's placement of a Spider. Play continues with the two players playing alternately, each player either placing a new bug or moving a bug of his color already in the hive.

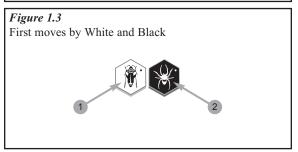
By rule, the Queen cannot be placed on the first turn* and must be placed no later than a player's fourth turn. Until the Queen is placed, a player's bugs already in the hive may not move.

A player with no legal placement or move must pass. A player cannot pass if a legal placement or move is available. Even if the only available moves will allow the opponent to win, a player must make a move or placement if one is available.

*White playing first and the prohibition of the Queen from being the first bug played are not official Hive® rules, but are used on BoardSpace and in this book.







1.3 – Placing a New Bug

When a new bug is added to the hive, its initial placement must meet two requirements. First, the new bug must be placed adjacent to a friendly bug. Second, its initial placement cannot be adjacent to any enemy bugs. In *Figure 1.4* White may only place a bug in spaces labeled W, Black may only place a bug in spaces labeled B, and neither player may place a bug in the two spaces labeled X. (Please note that these restrictions do not apply to each player's first bug placement.)

If there are no spaces in or around the hive that meet these requirements, a new bug may not be placed. If, as the game progresses, a space becomes available, the player may then resume placing additional bugs.

Bugs may not be placed atop another bug, even a friendly one. And finally, for bug placement purposes, only the color of the topmost, visible bug is considered.

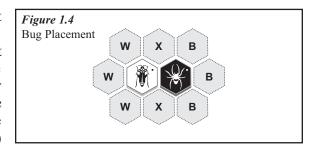
1.4 – Basic Principles of Bug Movement

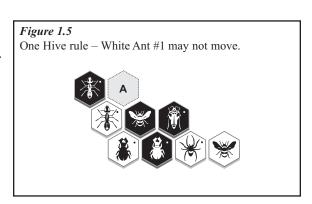
Until a player's Queen is brought into the game, bugs previously placed may not move. Once a player's Queen has been placed, however, that player's bugs already in the hive are free to move. Each bug has its own unique style of movement. When a bug moves it must adhere to three basic principles, unless its Special Rule provides an explicit exception.

1.4.1 – One Hive

All bugs in play must be linked together in one hive. At no time during a bug's move may the hive be separated into more than one group. The One Hive principle applies at the start of a move, during the move, and at the conclusion of the move.

Even if the final resting place for a bug would reunite the hive, a move violates the One Hive principle if at any time during the bug's move the hive is separated into more than one group. In *Figure 1.5* for example, White Ant #1 may not move because doing so would separate Black Ant #1 from the remainder of the hive. Even if White Ant #1 were to move to space A and reunite the hive, the move would still not be allowed because during the move the hive would be separated into more than one group. This would violate the One Hive rule. There are NO exceptions to the One Hive rule; it must always be obeyed.





1.4.2 – Freedom to Move

Standard bug movement is performed by sliding from one space to an adjacent space. A bug may only slide through the gap between two bugs if there is clearly enough room for the moving bug to fit. In *Figure 1.6* bugs may not slide into space A because there is not enough clearance between the White Spider and the Black Ant. For more information on this subject see Section 4.1 – Gate.

If a piece is surrounded to the point that it can no longer physically slide out of its position, it may not be moved. Please note *Figure 1.7*. Black Spider #1 may not move. There is not enough clearance between the White Spider and the Black Ant for the Black Spider to slide through.

The Freedom to Move rule does not restrict placement as long as no placing rules are violated. A bug may be placed into a space from which it may not move. In *Figure 1.8* any White bug may be placed in space A, even though after doing so the Freedom to Move rule would not allow an Ant or Spider to move

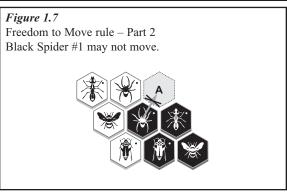
Note that the Special Rules for the Beetle, Grasshopper, and Ladybug make exceptions to the Freedom to Move rule. See their descriptions in Chapter 2 for more details.

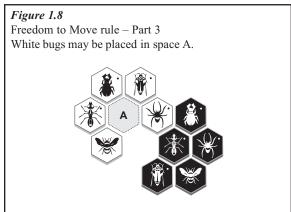
1.4.3 – Constant Contact

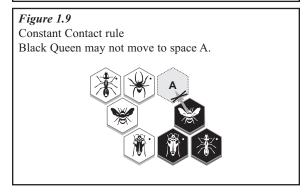
All bugs in play must remain in constant contact with the hive. At no time during its move may a bug lose contact with the hive. This rule applies to all bugs, but due to their limited movement, typically affects only Queens, Beetles, and occasionally Spiders.

In *Figure 1.9* even though space A is only one space away and within the movement range of the Black Queen, she may not move there. During the move, the Queen would lose contact with the hive and violate the Constant Contact rule.

Figure 1.6
Freedom to Move rule – Part 1
Bugs may not 'slide' into space A.

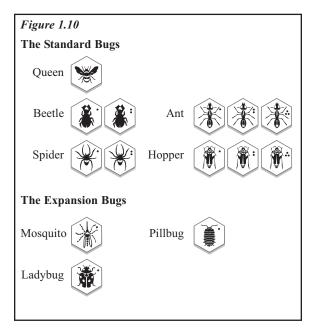






1.5 – Bug Quantities

The number of bugs of each type available to each player (as shown in *Figure 1.10*) is as follows: one Queen, two Beetles, two Spiders, three Ants, and three Hoppers. When the Mosquito, Ladybug and/or Pillbug are used, then the bug count of each of these bugs is one.



Chapter 2 – The Bugs

2.1 – Queen Bee - Q



The Queen Bee is the center of attention in our hive, just as she is the center of attention in a real hive. The dual goals of protecting your Queen while attacking your opponent's must always be kept closely in mind while playing Hive.

Movement – The Queen Bee, more commonly referred to as just the Queen, moves one space in any direction, but while doing so must obey all basic movement rules. In *Figure 2.1* the Black Queen can move one space to either of the two spaces labeled A. In *Figure 2.2* the White Queen, due to the special formation called a Ring (Section 4.3), can move to any of the four spaces labeled B.

Placement – The Queen cannot be placed on turn one*, but must be placed no later than turn four. This means that if a player has already placed three other bugs on his first three turns, that player's fourth placement must be the Queen.

Special Rules – A player may not move any other bug until that player's own Queen has been placed. The game ends when a player's Queen is completely surrounded. (See Section 1.1 – How to Win.)

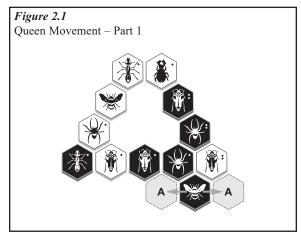
Strengths – The ability to move in all directions.

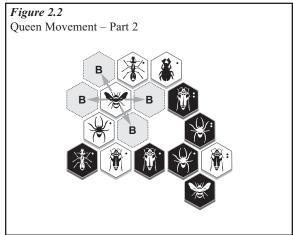
Weaknesses – Slow movement and the need to be protected.

2.2 – Beetle - B



In real life beetles can be very powerful, although admittedly slow-moving, bugs. This is well reflected here where the Beetle is one of the most powerful bugs. Its ability to climb atop the hive and cover other bugs gives it this great power on offense and defense.





^{*} In order to minimize draws between experienced players, tournament rules, which do not allow Queen placement on turn one, will be in effect throughout this book.

Movement – The Beetle, similar to the Queen, moves one space in any direction. Unlike the Queen, however, the Beetle can climb atop another bug. (See Special Rules below.)

Notice the movement options for the two Beetles in *Figure 2.3* and *Figure 2.4*. In the first figure, the White Beetle can move to space A1, space A2, or atop any of four adjacent Black bugs: Hopper #1, Spider #1, Spider #2, and Hopper #2. In the second figure, the Black Beetle can make a sliding move to either of the spaces labeled B or can climb atop either of the two adjacent bugs: White Ant #1 or Black Hopper #2.

Even though a Beetle can climb up onto the hive it still must obey the Freedom to Move rule. If another bug were in space A of *Figure 2.4*, the Black Beetle could climb atop it. But since it is sliding from ground level to ground level it does not fit between White Ant #1 and Black Hopper #2, and thus, may not move directly to space A. It may, however, go up and over either adjacent bug and arrive there in two moves.

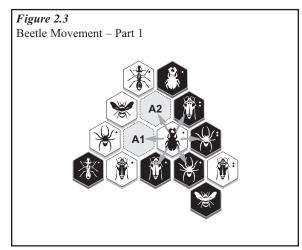
Placement – Placement of the Beetle must obey all standard placement rules. (Please note that the Beetle's ability to climb atop the hive does not give it the ability to be directly placed atop another bug.)

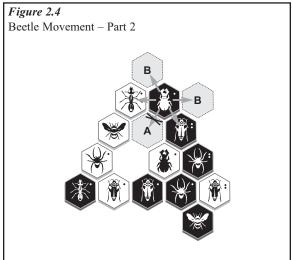
Special Rules — When all other standard movement conditions have been met, a Beetle may climb atop another bug. When atop the hive the Beetle may move from bug to bug, obeying all other standard movement rules, of course. Bugs trapped by a Beetle on top of them may not move. To determine new bug placement restrictions, the color of the topmost, visible bug is used. Note that the ability to climb on the hive can be thought of as a circumvention of the Freedom to Move rule, but while moving on the same level the Beetle is subject to the Freedom to Move rule.*

Strengths – The ability to climb atop the hive. Offensively, the Beetle can reach interior spaces that may not be accessible to other bugs. Defensively, the Beetle can cover another bug (particularly the opposing Queen) and render it immobile. While on top of an opposing bug, the Beetle also potentially allows placement next to its position, if all other normal placement conditions are met.

Weaknesses – A slow speed of movement.

* For a more thorough discussion of the Freedom to Move rule regarding Beetle movement atop the hive, see Chapter 10.1 – Bug Movement atop the Hive.





2.3 - Ant - A



In nature, ants seem to be always on the move, running this way and that to search for food or to defend the nest. This is well represented by the great mobility of the Ant, the fastest and most mobile bug in the standard game of Hive.

Movement – The Ant is the most mobile of all the bugs. It may move from its current space to any space adjacent to the hive. As with other bugs, the One Hive, Freedom to Move, and the Constant Contact rules must be obeyed. In *Figure 2.5* White Ant #1 can move to any of the gray shaded spaces!

Placement – Placement of the Ant must obey all standard placement rules.

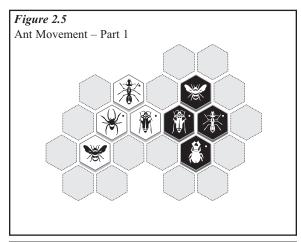
Special Rules – None.

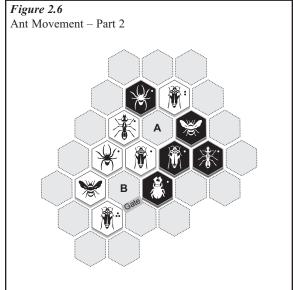
Strengths – Speed and agility. The Ant is the strongest of all the basic bugs. Offensively, the Ant can speed around the hive threatening any space that it may reach.

Defensively, an Ant can easily and quickly pin (Chapter 6.1 - The Pin) enemy bugs on the outside of the hive.

Weaknesses – The Ant has no glaring weaknesses. Because the Ant has no special movement ability and must obey the Freedom to Move rule, there are situations where an Ant cannot reach a specific open space. Two examples where Ants cannot reach specific spaces are shown in *Figure 2.6*. As in the previous figure, White Ant #1 can move to any of the gray shaded spaces except space A or space B.

Space A is completely surrounded and therefore not accessible without special movement ability. Space B is open to the exterior of the hive, but is protected with a gate (Section 4.1) and is, therefore, also not accessible to White Ant #1.





2.4 – **Spider** - **S**



The only arachnid in the hive is the Spider. Just as a real spider can be very dangerous, our Spider, properly placed in the hive, can dart in and execute a well-planned attack. A good player derives satisfaction from learning how to use this weakest of the bugs.

Movement – The Spider moves three and only three spaces; no more, no less. As with other bugs, the One Hive, Freedom to Move, and the Constant Contact rules must be obeyed. In *Figure 2.7* you can see how the White Spider moves exactly three spaces to either space A or space B.

Placement – Placement of the Spider must obey all standard placement rules.

Special Rules – None.

Strengths – None.

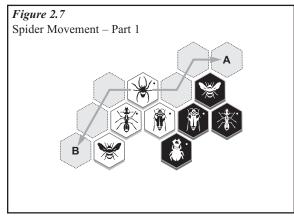
Weaknesses – The Spider's three space movement severely limits its access to any specific space. Extra care must be taken when initially placing a Spider to ensure that it can reach its intended position. Compare *Figure 2.7* to *Figure 2.8*. Note the differences between the two positions. If your goal were to pin the Black Queen (Chapter 6.1 – The Pin), you would place your Spider as in *Figure 2.7* and then move to space A. If, however, you were looking to keep Black from placing a new bug in space E, then the initial placement in *Figure 2.8*, with a move to space D would be the better choice.

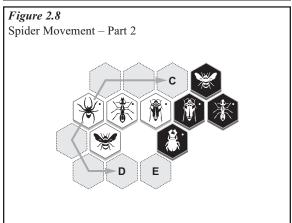
2.5 – Grasshopper - G



With their large, powerful hind legs and strong wings, the real life grasshopper can jump or fly virtually anywhere. In our game, its counterpart has the ability to circumvent the Freedom to Move rule and jump into and out of confined spaces!

Movement – The Grasshopper, known more commonly just as the Hopper, has a very unique movement, matching its real life counterpart's jumping ability. As with other bugs, the





One Hive and the Constant Contact rules must be obeyed. But because of its special movement ability, the Freedom to Move rule does not apply to the Hopper.

Placement – Placement of the Hopper must obey all standard placement rules.

Special Rules – The Hopper does not move in the standard manner, but jumps from its current space, over a straight row of adjacent pieces, to the first unoccupied space along the row. In order to move, it must jump over at least one other bug. In *Figure 2.9* Black Hopper #2 can choose to move to any of the four labeled spaces.

Strengths – The ability to hop into otherwise inaccessible spaces and the ability to hop out of surrounded spaces. Offensively, the Hopper can be used to hop into an inaccessible space. Many games end when a Hopper, coming from the outer edges of the hive, hops into the final open space adjacent to the enemy Queen. Defensively, a Hopper, adjacent to the friendly Queen, can hop out, thus keeping the friendly Queen from being surrounded.

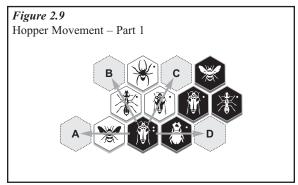
Weaknesses – Due to the Hopper's unique movement, access to any specific space may be limited. Like the Spider, care must be taken when placing the Hopper to ensure access to its intended destination. A player on the defense, with only one open space next to the Queen, can quite often stave off defeat by restricting placement of a Hopper.

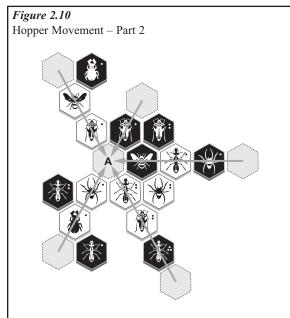
In *Figure 2.10* White can win by getting a bug to space A. To get White's final Hopper into that space, it must be placed in one of the five unlabeled gray spaces. But by carefully moving bugs adjacent to each of those spaces, Black has rendered White unable to place the final Hopper into a position to hop into space A and win.

2.6 - Mosquito - M (available as an expansion)



Anyone who has spent any time outdoors has no doubt been irritated and possibly bitten by a pesky mosquito. In our hive, the Mosquito, with its ability to mimic any other bug, is hard to combat and thus will irritate even the best player!





Movement – The Mosquito has no inherent movement ability on its own. It acquires its movement from any piece that is adjacent to it (i.e., in physical contact with it). For example, if adjacent to an Ant, it may move as an Ant. If adjacent to a Beetle, it may move as a Beetle. If adjacent to an Ant and a Beetle, it may move as an Ant or as a Beetle. If adjacent to a stack of bugs, the Mosquito only acquires movement from the topmost, visible bug. As with other bugs, the One Hive, Freedom to Move, and Constant Contact rules must be obeyed as they are applied to the Mosquito's current form of movement.

In *Figure 2.11* the Black Mosquito is adjacent to both a Hopper and the Queen. Moving as a Hopper, it can jump to either of the spaces labeled A. Moving as a Queen, it can slide to either of the spaces labeled B.

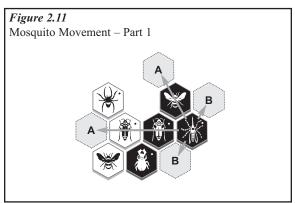
Placement – Placement of the Mosquito must obey all standard placement rules.

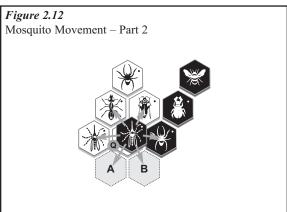
Special Rules – If moved as a Beetle atop the hive, it continues to move as if it were a Beetle until it climbs down from the hive. Then it again behaves just like a Mosquito. Since Mosquitoes have no inherent movement ability of their own, if the only bug adjacent to a Mosquito is another Mosquito, it cannot move. Likewise, when moving as a Beetle atop the hive, a Mosquito does not transfer the Beetle movement to another Mosquito.

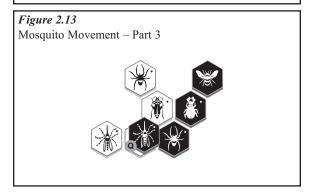
In *Figure 2.12* the Black Mosquito is atop the White Queen. It will only move as if it were a Beetle. The White Mosquito is adjacent to the White Ant and the Queen/Mosquito stack. It can only move like an Ant. It does not gain any movement ability from the Black Mosquito, even though the Black Mosquito is acting like a Beetle. Note that in *Figure 2.13*, the Ant has been removed and now the White Mosquito, being adjacent only to another Mosquito, is not able to move at all.

Strengths – In many respects, the Mosquito is the strongest of all bugs. During play, it may have the speed and agility of an Ant, the ability to climb atop the hive like a Beetle, or the ability to hop into vacant spaces like the Hopper.

Weaknesses – Care must be taken when moving a Mosquito because its movement will change depending on what bugs will be adjacent to it after the move. Opponents may also move bugs away from a Mosquito to intentionally limit its movement.







2.7 - Ladybug - L (available as an expansion)



Although beautiful, a real ladybug can be a voracious predator, attacking and eating many garden pests. With a movement pattern unlike any other bug, our Ladybug is a dangerous bug on the attack, but also has the ability to defend her friendly Queen.

Movement – The Ladybug has a very unique and interesting movement. Like a Spider, it moves exactly three spaces. But the three space movement must follow a very strict pattern. The first move must take the Ladybug atop the hive. The second move must also be atop the hive and the third move must take it down off the hive.* The Ladybug must start and end its movement off the hive. It cannot end its movement atop another bug.

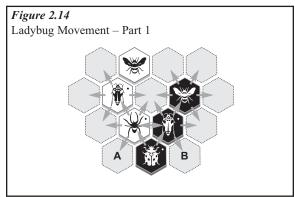
The Black Ladybug in *Figure 2.14* can move to any of the ten gray spaces. Movement to eight of the spaces is probably very easy to see. Movement to space A and space B, however, may not be so apparent. Let's take space A as an example. *Figure 2.15* shows the Ladybug's path as it arrives at space A. First it climbs atop the Black Hopper. Then it moves atop the White Spider and then, finally, lands in space A.

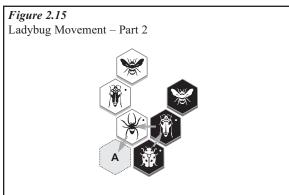
Placement – Ladybug placement must obey all standard placement rules.

Special Rules – Other than its unique movement, the Ladybug has no additional special rules. Note, however, that this movement is an exception to the Freedom to Move rule.

Strengths – As an attacker the Ladybug is very powerful. Like the Hopper it can move into completely surrounded spaces, but due to its unique movement pattern it has more flexibility in initial placement. Unlike the Hopper, the Ladybug can also, if circumstances are just right, move to an adjacent space. (Please see the above note regarding space A in *Figure 2.14*.) If placed adjacent to the Queen as a defender, the Ladybug can easily fly out, opening the spot or possibly even freeing the Queen to escape.

Weaknesses – Movement around the hive can be slow and tedious.





^{*} Please see Section 10.1.4 – Ladybug Movement atop the Hive to see how the Freedom to Move rule may restrict the Ladybug's movement.

2.8 - Pillbug - P (available as an expansion)



Our hive's first primarily defensive bug, the Pillbug is truly a unique piece, unlike anything currently in play. It changes the complexion of the game and forces a successful player to always keep its special ability in mind.

Movement – The Pillbug moves one space in any direction, just like the Queen. While moving, it must obey all standard movement rules. In *Figure 2.16* the White Pillbug can move to either of the spaces labeled A.

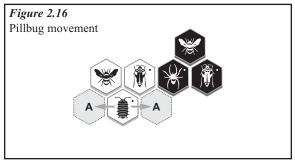
Placement – Pillbug placement must obey all standard placement rules.

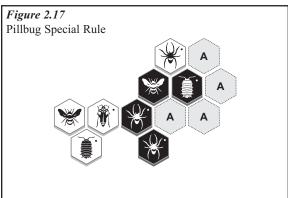
Special Rules – As well as having its own movement ability, the Pillbug has a special power: the power to move other bugs! When the circumstances allow, a Pillbug can pick up an adjacent bug (either friendly or opposing) and move it up on itself and then down into a different, unoccupied, adjacent space. In *Figure 2.17* the Black Pillbug may pick up the White Spider and move it to any of the spaces labeled A. But it may not move the Black Queen because doing so would violate the One Hive rule.

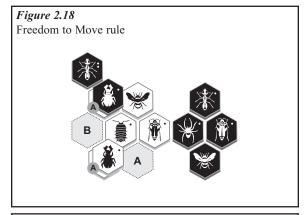
In addition, the Freedom to Move rule, as it applies to movement atop the hive, may affect the Pillbug's special ability. In *Figure 2.18* the White Pillbug may move the White Queen to space A but, may not move it to space B. This is because doing so would require that the White Queen move up and through the two Beetle stacks. The Freedom to Move rule, however, does not allow this to occur.*

A Pillbug may only move another bug if the bug to be moved is on ground level and neither it nor the Pillbug are covered by a bug atop the hive. In *Figure 2.19* the White Pillbug may not move either Black Beetle #1 or the White Ant below it.

A bug that has just been moved, either by a Pillbug or by using its own movement ability, is immune from the Pillbug's special ability in the immediate following turn. In *Figure 2.20* (page 13 from the game *U!HV-kkurtonis-ringersoll-2013-04-02-0001*), the White Ant has just moved on turn 39. The Black Pillbug may not move the White Ant on turn 40. It can, however, move the White Ant on a later turn.









^{*} Please see Section 10.1.5 – Pillbug Movement atop the Hive to see how the Freedom to Move rule may restrict the Pillbug's special ability.

And finally, a bug that is moved by a Pillbug is temporarily paralyzed, unable to move or use its special ability. The previous game continues in *Figure 2.21*. The Black Pillbug picks up White Hopper #2 and moves it on turn 40. Even though the White Hopper would love to jump into space A and free White Ant #1, it cannot move. Because of this temporary paralysis, the Black Pillbug can now pin the White Hopper on turn 42. If a Pillbug is moved by the opposing Pillbug, this paralysis also prohibits the just moved Pillbug from using its special ability.

Interaction with Mosquito – When adjacent to a Pillbug, the Mosquito acquires both the Pillbug's movement and the Pillbug's special power. In *Figure 2.22*, from the game *U!HV-fabian-stepanzo-2013-06-23-0951*, the White Mosquito, using the adjacent Pillbug's special ability, moves Black Ant #1 as shown. This temporarily immobilizes the Black Ant and frees the White Pillbug!

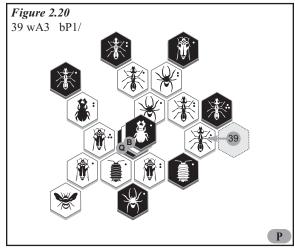
Notation – An additional notation is required when the Pillbug uses its special power. First the Pillbug is identified, followed by the bug being moved, followed by the destination space. The Pillbug and the bug being moved are separated by a colon.* See the notation in *Figure 2.21*.

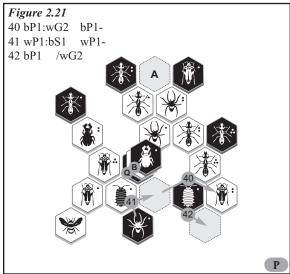
Strengths – The Pillbug has strengths both as a defender and as an attacker. As a defender, the Pillbug can defend the Queen by either moving it out of an almost surrounded position (See Section 7.15.1 – Rescuing the Queen.) or removing an attacking bug. (See Section 7.15.2 – Stripping an Attacker.)

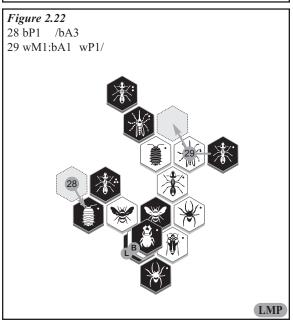
On the attack, a Pillbug can easily move a bug into an otherwise inaccessible position. (See Section 7.15.9 – The Direct Attack.)

Due to its ability to move adjacent bugs, it is very difficult to pin a Pillbug. A single bug will not do. (See Section 7.15.7 – Double Pin.)

Weaknesses – With only a one space movement, the Pillbug may require multiple turns to get into a favorable attacking or defending position. Using only standard movement, the Pillbug may get blocked by application of the Freedom to Move rule. And finally, if the Pillbug becomes completely surrounded, it may lose the opportunity to use its special power. (See Section 7.15.4 – Surround the Pillbug.)







^{*}This notation is different than that used on BoardSpace.

Chapter 3 – Notation

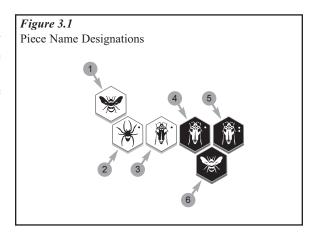
This notation convention is extracted from the web site: www.BoardSpace.net. In addition to the move number*, a move is notated by two bits of information. First is the identification of the piece being moved or placed and second is the target space of the piece. Accurate identification of the target space requires two additional bits of information. First is a reference piece adjacent to the target space and second is an orientation to the reference piece.

3.1 – Piece Name

The pieces are designated by color (lower case 'b' or 'w'), letter, and number. The Queen, being unique, is designated by color and letter only. The letter is based upon the piece name in English: Queen, Ant, Grasshopper, Beetle, Spider, Mosquito, and Ladybug. The number of the piece corresponds to the order in which it was played. In the figures in this book, pieces are identified with 1, 2, or 3 dots.

In *Figure 3.1* we see a typical game after each player has placed three bugs. The bug designations are: Bug #1 is wQ; Bug #2 is wS1; bug #3 is wG1; bug #4 is bG1; bug #5 is bG2; and bug #6 is bQ. Note how the two Black Hoppers are differentiated by the number of dots.

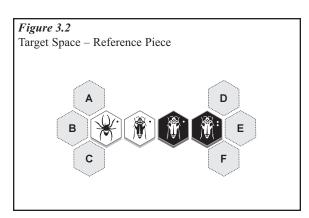
Note that on BoardSpace, the order of placement is designated by geometric orientation. The first piece is played oriented horizontally. The second piece played is oriented from upper-left to lower-right; the third piece is played oriented from upper-right to lower-left.



3.2 – Target Space - Reference Piece

The target space is identified by an adjacent piece (called the reference piece) and an orientation to that reference piece. We can see examples of reference pieces in *Figure 3.2*. If the next White bug were to be placed in space A, space B, or space C, White Spider #1 would be the reference piece for the move notation. At the other end of the hive, Black Hopper #2 would

^{*}In order to coincide with the numbering system used in the offline game review system mentioned in Section 3.5, this book will not assign a move number to a pass. This is slightly different than the numbering system used on BoardSpace where a move number is assigned to a pass.



be the reference piece for a new Black bug placed in space D, space E, or space F.

If a moving piece ends up next to more than one piece, then any of those pieces may be the reference piece and therefore there may be more than one way to identify the same move. (Please see Section 3.4 – Sample Move Notation.)

3.3 – Target Space - Orientation

If the moving piece ends up to the left of the reference piece, the orientation is placed before the reference piece designation (i.e., to its left). If the moving piece ends up to the right of the reference piece, the orientation is placed after the reference piece designation (i.e., to its right). If a move is the first move of the game or a 'Beetle on top' move, no orientation is required.

Three symbols $(/, \setminus, -)$ are used to identify the relationship of the moving piece to the reference piece. (In the following discussion, please refer to *Figure 3.3.*) The forward slash (/) designates the space above and to the right (space D) or below and to the left (space C) of the reference piece. The dash (-) designates the spaces immediately to the right (space E) or immediately to the left (space B) of the reference piece. The backward slash $(\)$ designates the space above and to the left (space A) or below and to the right (space F) of the reference piece. One way of picturing the use of the slashes is to see them as forming a line from the center of the reference piece to the center of the moving piece.

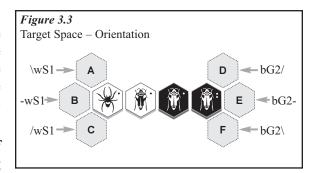
Please note, that to clearly identify orientation for Hive® movement notation, pieces must always be placed 'point downward' so that adjacent pieces are clearly either to its left or to its right. This is how all the figures in this book are oriented.

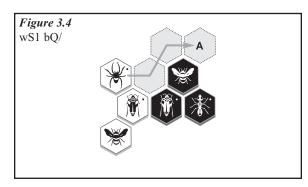
You will also notice that figures in this book that come from actual games will be noted with S (Standard Hive®), M (Mosquito), L (Ladybug), or LM (Ladybug & Mosquito).

3.4 – Sample Move Notation

Some notated moves are represented in *Figure 3.4* through *Figure 3.7*.

Figure 3.4 represents a basic Spider move. The White Spider ends its move adjacent to only one piece, the Black Queen, and therefore, there is only one possible notation for this





move.

Figure 3.5 shows a 'Beetle on top' move. Again, there is only one possible notation for this move and it does not require an orientation designation.

The placement of Black Spider #1 is notated in *Figure 3.6*. Since the Black Spider ends its move adjacent to two bugs, an alternate movement notation could be **bS1**/**bA1**.

Two different moves are shown in *Figure 3.7*, one by White Ant #2 and the other by White Hopper #2. Due to the particular situations shown in this figure, there are multiple possible notations for each of these moves. Note the alternate movement notations. White Hopper #2 has three alternate notations: wG2 -bQ or wG2 \bG1 or wG2 wG1/. White Ant #2 also has three alternate notations: wA2 bQ- or wA2 bA1/ or wA2 \wA1.*

3.5 – Online Play and Game Review

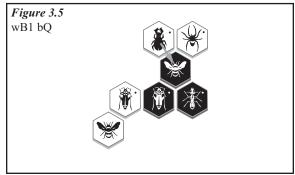
The web site www.BoardSpace.net is a great place to play Hive®. You can play against 'Dumbot,' the site's resident computer program, or against other players from all around the world. When getting started, you can log in as a 'Guest.' Then if you like what you see, there is no cost to register, create your own online user name, and play.

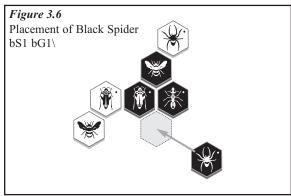
Logging in takes you to the online lobby where you can see what other players are logged in and what games that they are playing. From the lobby you can pick and choose what room you wish to be in and what you wish to do.

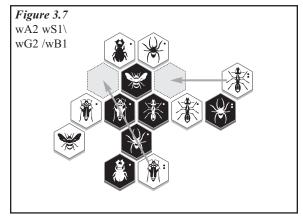
To review your own games or those of other players, all you have to do is to pick a Review Room, choose Hive® as the game of choice, and select a game to review. You can follow along move by move, or at any time click the Edit button and try different move combinations.

If you would like to review games without logging in to the lobby, you can do so by going directly to the Hive® review page at http://www.boardspace.net/hive/hive-viewer.shtml.

Another way to review games is to download the Hive[®] game reviewer written by BoardSpace user Hlaspoor. This reviewer allows you to copy SGF code from the BoardSpace review







^{*}With the introduction of the Pillbug and its special ability to move another bug, additional movement notation is required. Please see page 13.

page, store it in a Hive® Reviewer file, and replay and review the game at your leisure. To download this free program you may visit http://code.google.com/p/hive-game-reviewer/.*

3.6 – Standard Position

In order to simplify the review, comparison, and study of Hive® openings, many of the games in this book have been adjusted by rotation and/or reflection to be in Standard Position. Whether a game is in Standard Position or not is determined by the initial placement locations of Black's first bug and the two Queens.

In Standard Position, Black's first move is a bug placement immediately to the right of White's first bug. If Black's first move is to any of the other five spaces, a rotation is required to adjust the position.

Once the proper first move orientation has been achieved, the initial placements of the two Queens are considered. First, consider the placement of the White Queen in relation to the horizontal axis formed by a line drawn through the first two bugs placed. If the White Queen is initially placed above this line, the game is considered to be in Standard Position. If the White Queen's initial placement is below this line, the game must be reflected to achieve Standard Position.

If the White Queen is initially placed on this line, the initial placement of the Black Queen is used to determine Standard Position. If the Black Queen is placed above or on this line, Standard Position has been achieved. If the Black Queen is placed below this line, a reflection is required.

Figure 3.8 shows the position after 8 turns in the game *HV-ringersoll-guest-2010-07-22-2044*.

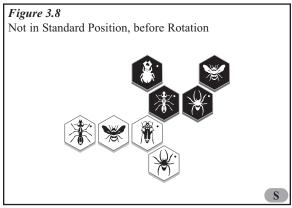
Figure 3.9 shows the same game after a rotation to place the game in Standard Position.

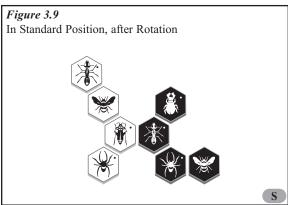
Figure 3.10 shows the position after 8 turns in the game *U!HV-ringersoll-Eucalyx-2010-10-23-2212*.

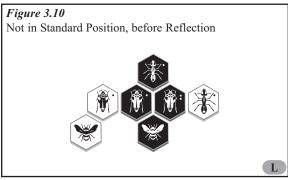
Figure 3.11 is the same game after a reflection puts the game in Standard Position.

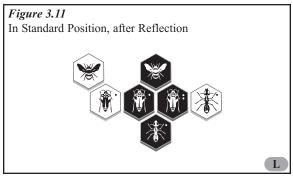
As you can see, due to the nature of the hive's hexagonal pattern, rotation and/or reflection do not change the essential nature of any position. But establishing Standard Position greatly increases a Hive® player's ability to study and compare opening positions.

*Each of the games used as examples in this book is available on BoardSpace or as Hive® Reviewer Files.









Chapter 4 – Common Hive® Formations

The ability to recognize and identify common formations is critical to the success of a Hive® player. The following will briefly consider five of the more common formations that regularly occur.

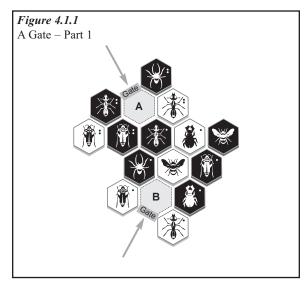
4.1 - Gate

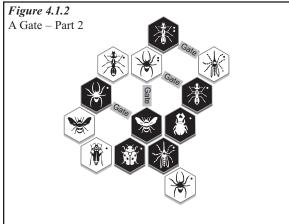
A gate formation occurs when two tiles are separated by the width of one side of a tile. A gate is easy to recognize as opposite points of two tiles separated by a small gap. The gap in a gate is too small for any piece to slide through, including Beetles.

Please see *Figure 4.1.1* where access to both space A and space B is through a gate. White Ant #1 may not move into space A. Black Ant #2 may not move into space B.

Also, two Beetles on top of the hive can form a gate which prevents other Beetles from moving through it. Of course, the Beetle, which cannot move directly through the gate, can move on top of one of the pieces which form the gate. For details regarding how a gate affects Beetle movement atop the hive, see Chapter 10.1 – Bug Movement atop the Hive.

Recognizing potential gates is an important part of strategy, as you may strive to create gates to render spaces inaccessible around your Queen (Chapter 6.3 – The Block), while not wanting them near your opponent's Queen. A gate most often needs five pieces surrounding a single, vacant space. Thus spaces, or pockets, with an arc of four bugs surrounding this vacant space can readily be used to form a gate through the addition of another bug. Gates may also appear when two lines of bugs approach each other as shown in *Figure 4.1.2*. Interestingly, it this particular case, the two arms of the hive create a series of four gates, each gate protecting access to not only the space immediately behind it but also to the next gate.

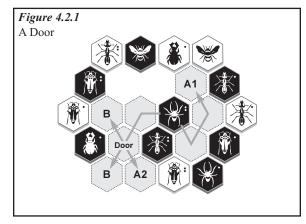




4.2 - **Door**

When two tiles are separated by the width of a whole tile, the formation is referred to as a door. Any piece can slide through a door. It is possible that a bug may gain extra mobility near a door because while passing through a door, a Spider or Queen, while maintaining contact with both pieces, may have up to three choices of direction in which to continue.

In *Figure 4.2.1* note that without the door formed by the presence of Black Beetle #1, Black Spider #2 would only have access to space A1 and space A2. The presence of the Black Beetle, however, makes a door. Entering the door extends the Black Spider's possible movements to the two spaces labeled B.



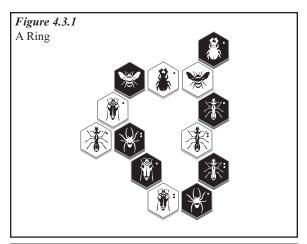
4.3 – Ring

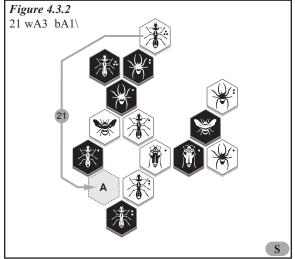
A ring formation occurs when pieces connect to form a continuous chain. A ring may consist of as few as six pieces, or in some cases, many more. All the pieces in the ring that are not limited by the standard movement rules potentially become mobile.

In *Figure 4.3.1* see how the ring increases the mobility of so many bugs. All of the bugs are mobile except the White Queen. (The placement of Black Beetle #1 keeps the White Queen immobile.) Note also that the mobility of both White Ant #2 and Black Spider #2 is limited because gates block these bugs' access to the outside of the hive. If either of these bugs moves, it must stay inside the ring.

In most cases, forming a ring is not a good idea because it can free opposing bugs to move. When one or more opposing bugs are freed, it can have disastrous consequences. A more thorough discussion of bad rings will be seen in Section 8.3 – Beginners' Mistakes – Making a Ring.

If only friendly pieces are freed by the formation of the ring, however, it may be a very effective move (Chapter 7.6 – Making a Ring). Offensively, friendly bugs released can be used in an attack. Or defensively, a bug, typically a Hopper, freed by the formation of the ring could escape, thus opening a space adjacent to your Queen, or possibly even leaving an escape route for your Queen.





To see an example of a ring from an actual game of standard Hive® (*U!HV-lucassus-ringersoll-2011-02-13-1932*), look first at *Figures 4.3.2* (page 20). In this figure, White forms a ring by moving Ant #3 into space A. Following this move, five of the six bugs in the ring are free to move. Only White Hopper #1 is unable to move. This is because doing so would violate the One Hive rule by disconnecting Black Hopper #1 and the three bugs beyond it from the hive.

Note the response in *Figure 4.3.3*, leading to the position diagramed in *Figure 4.3.4*. By moving Ant #1 to space B, not only has Black broken the ring, but in the meantime he has rendered both White Ant #2 and White Ant #3 immobile.

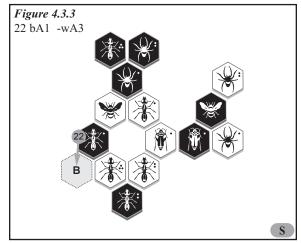
Note how, by application of the One Hive rule, all three of the White Ants are now unable to move! Even though the White Queen is now free to escape, the loss of the three most powerful bugs will probably result in a quick loss for White.

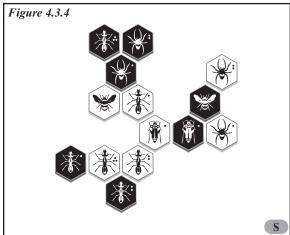
4.4 – Elbow

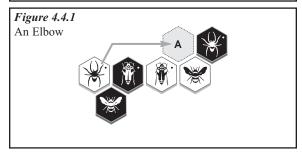
An elbow is formed when bugs are lined up in a string but the string is not straight. Typically, only the bugs on either end of a string are free to move. When an elbow forms, however, a properly placed bug can free the bug on the outside of the elbow. In *Figure 4.4.1* for example, the White Queen cannot move because doing so would violate the One Hive rule. But by moving White Spider #1 to space A (into the elbow), White provides an alternate connection between Black Spider #1 and White Hopper #1 and the White Queen is now free to move.

Defensively, an elbow can often block the approach of either a Queen or a Spider. If the line of approach lands either of these bugs in the inside of an elbow and an otherwise immobile enemy bug occupies the outside of the elbow, the enemy bug is not only free to move, but when doing so, it traps the new arrival in the elbow instead, again due to the One Hive rule.

As a real life example, let's compare the next two figures on page 22. The first, *Figure 4.4.2*, is from an actual game (*HV-cesc-ringersoll-2010-09-18-1309*). The second, *Figure 4.4.3*, is a 'what if' scenario showing the defensive value of an elbow.





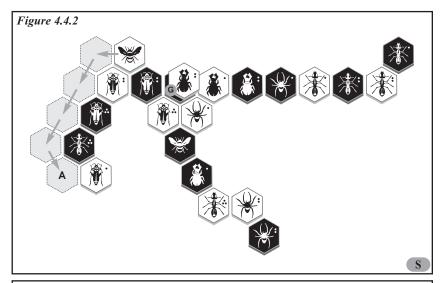


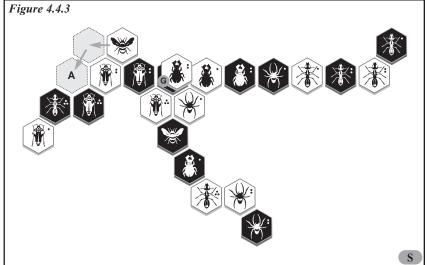
In the first figure, it is easy to see that Black is on the defensive. The Black Queen is immobile and the only two Black bugs that can legally move are both tied up in defensive positions. Black Spider #2 cannot move without releasing White Spider #2 and possibly, White Ant #3, to join the attack. Black Ant #1 is relegated to just moving back and forth, keeping White Ant #2 immobile.

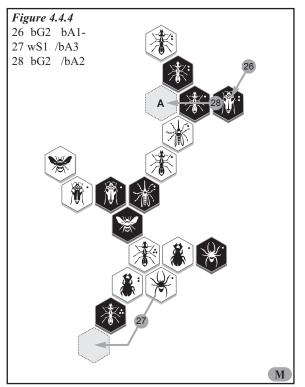
Due to the stretched out nature of the hive, however, this game may be headed toward a draw. White does not seem to have available the three additional bugs needed to surround the Black Queen and force a win. (See Chapter 7.1 – Counting Bugs.)

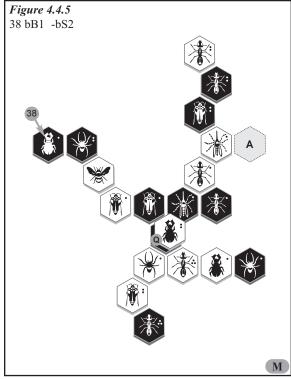
White Hopper #1 is the key. White first moves the Queen around the hive and into position (space A) to allow White Hopper #1 to move without mobilizing Black Ant #3. Once Hopper #1 is brought into play, White effectively uses his Hoppers and Beetles to force a win.

Now compare *Figure 4.4.3* in which Black Hopper #3 and Black Ant #3 are in an elbow position rather than inline. As the White Queen approaches and moves into space A, voilà, the Black Hopper is free to move! When the Black Hopper moves, the White Queen is left immobile behind it. And the result is probably going to be a draw.









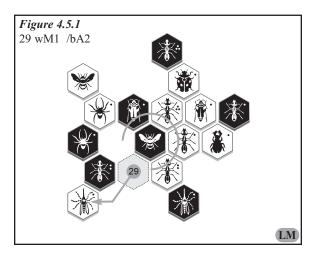
Another example showing the importance of understanding elbows comes from *U!HV-DrRaven-ringersoll-2011-02-15-0139*. *Figure 4.4.4* shows Black's 26th and 28th moves where a Hopper placement in the outside of an elbow, followed by a hop into the inside of the elbow enabled Black Ant #1 to move and be used elsewhere. Interestingly, some time later, White missed the chance to duplicate the feat and release an even more powerful bug.

In *Figure 4.4.5* White could, by placing a Hopper in space A, be in position to release the powerful White Mosquito. In the end, White's failure to release the Mosquito cost White the game.

4.5 – **Pocket**

A pocket is a C-shaped, four bug formation. A closed pocket has a fifth bug in the center, whereas an open pocket does not. *Figure 4.5.1*, from the game *HV-BlackMagic-ringersoll-2010-11-25-1402*, illustrates a closed pocket centered on the Black Queen, while *Figure 4.5.2* (page 24), from the game *HV-Faxiao-ringersoll-2010-09-18-1906*, illustrates an open pocket centered on space A.

Pockets regularly come into play in two basic ways. First, forming a closed pocket will typically allow the bug in the



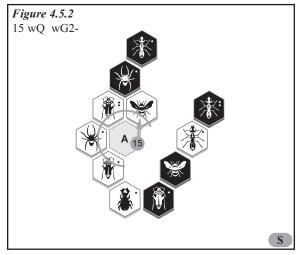
center of the pocket to move. This is particularly important if the bug in the pocket is the Queen. Forming a pocket around the Queen will quite often allow her to escape. This, of course, is a good thing if it is your Queen, but a bad thing if it is your opponent's Queen.

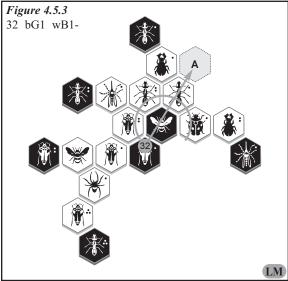
Secondly, moving a bug into an open pocket will quite often give one or more bugs the ability to move away. If you can control which bugs are freed by the formation of a pocket, it could be a good trade in terms of bug count or bug quality. If filling the pocket with one bug releases two of your own bugs and both of those bugs can be placed in position to attack, you could end up with a net gain of one attacker. Or, if you can trade a Spider or even an Ant for a Beetle, and that Beetle can then climb up and into a space that is not accessible to the Spider or Ant, that too, can be a beneficial trade.

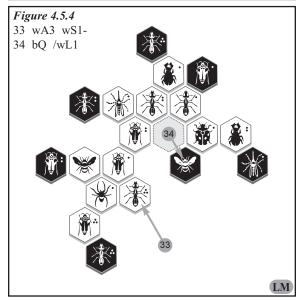
Figure 4.5.3 and Figure 4.5.4 show an example (HV-BlackMagic-ringersoll-2010-10-30-2043) in which a pocket formation allows the Black Queen to escape and leads directly to a victory for Black. By hopping out with Black Hopper #1 on turn 32, Black forms a closed pocket around the Black Queen and since no White bugs are available to keep the Black Queen in place, the Black Queen escapes on turn 34.

4.6 – Conclusion

In order to 'Play Hive' Like a Champion': one must recognize the formations that affect bug movement, understand the strengths and weaknesses of each, learn to create the formations that improve your position, and avoid the formations that harm your position.







Chapter 5 – Strategy in the Hive

The basic strategy is obvious: attack your opponent's Queen while defending your own. How to do this, however, may not be so obvious. This chapter discusses the three keys to victory and then applies those keys, first, to two important questions that arise during the game. And finally, they are applied to the opening, midgame, and endgame stages of a typical game of Hive®.

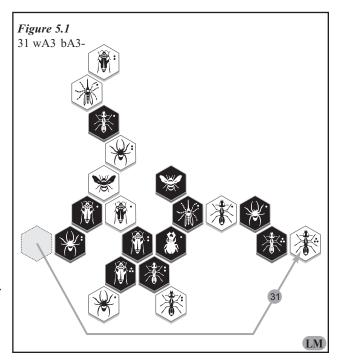
5.1 – Three Keys to Victory

A quote from a 19th century American Military General sums up the basic strategy. This general was reported to have said, "Get there first with the most." This statement highlights the three keys to successfully playing Hive. The three keys are: mobility, tempo, and strength; get there (mobility) first (tempo) with the most (strength).

Mobility in Hive® means maintaining your bugs' freedom of movement. Due to the One Hive and Freedom to Move rules, it is natural that bugs already in play and situated on the inside of the hive begin to lose their freedom to move. An immobile bug cannot be used for attack or defense. The goal, therefore, should be to control the outside of the hive, keeping your bugs mobile, while limiting the mobility of the opposing bugs.

Figure 5.1, from the game HV-ringersoll-BlackMagic-2010-11-04-2151, is a good example that contrasts good mobility with poor mobility. This game will be more thoroughly discussed in Chapter 8 – Beginners' Mistakes. Note how after turn 31, White has five mobile and potentially mobile bugs (with four more in reserve), while Black has only one (!) mobile bug other than the Queen. Needless to say, this advantage in mobility led to victory for White.

Tempo highlights the time aspect of Hive® and the importance of not wasting moves. Many games are won or lost by only one turn. Losing even a single tempo could change a won game into a lost one, while gaining just one tempo may salvage victory from the jaws of defeat. Since bugs can only be placed adjacent to friendly bugs, it typically takes at least two turns to get a bug into



position. Choosing the exact space to play a bug can be critical. The tempo lost by being forced to move a bug into a better position can make the difference between winning and losing.

Who will win the game (*U!HV-diogocrist-ringersoll-2010-12-02-0150*) depicted in *Figure 5.2*? Careful examination reveals that both players are only two moves from winning. White wins by moving Hopper #3 to space C, followed by Beetle #1 to space D. Black wins by moving Hopper #3 to space B, followed by the Ladybug to space A. Victory will go to the side leading in tempo. In this particular game, Black, with the move, won easily.

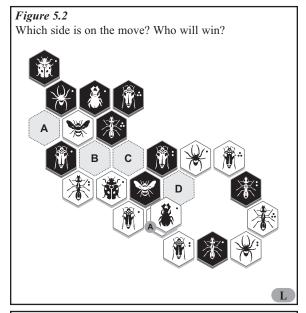
Strength refers to the number of bugs that are available for both attack and defense. It takes six bugs to achieve a victory by surrounding the opposing Queen. These bugs can be friendly or opposing. Care must be taken to keep enough bugs available to do the job. Offensively, if the number of bugs available to attack is less than the number of vacant spaces adjacent to the opposing Queen, you have a very serious problem. If there is no way to free up additional bugs, you may have no chance of winning whatsoever. Likewise, at the point that you reduce the number of opposing bugs available to attack to less than the number of vacant spaces adjacent to your Queen, you have an excellent chance of victory. If neither player has the strength necessary to produce a victory, it is likely that the game will end in a draw.

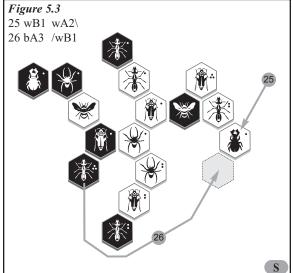
Figure 5.3 shows a critical point in the game HV-DEIBY-ringersoll-2011-06-12-1139 where White no longer has the strength to force a victory. With three spots to fill, only two bugs in reserve, and no prospect to free an additional bug, White has no chance. It is not surprising then, that this game was lost in 18 more moves.

Understand these three keys: Mobility, Tempo, and Strength, and you will open many doors to victory.

5.2 - Attack or Defend

In an American country western song it is said that one must "know when to hold 'em and know when to fold 'em." Translated into the game of Hive®, the question becomes:



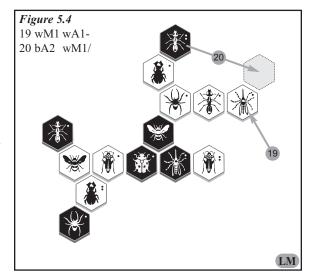


"Shall I attack or shall I defend?" Knowing when to attack and when to defend is critical to becoming a true Hive® champion.

In a typical game between players of equal ability, White, having the first move, will start on the attack. If Black can withstand this initial onslaught, there will come a point in the game when the momentum will shift. When this occurs, Black's counter attack will begin.

The critical point when the momentum shifts may not be as obvious as it may seem. The game *HV-Eucalyx-ringersoll-2011-03-26-1103*, in *Figure 5.4*, demonstrates this. In this game, Black is on the defensive, fighting hard to stop White's assault. Seemingly making an illogical move, Black releases the pin (Section 6.1.3 – The Pin – Releasing a Pin) on White Beetle #1. This may, at first glance, give White the victory, but having carefully examined the situation, Black realized that now was the perfect time to start the counter attack. In Section 7.4.3 – Counter Attack with Tempo, the continuation of this game will show the ultimate result of Black knowing when to begin the attack.

Knowing when to attack and when to defend is critical to becoming a Hive® Master. Accurately identifying the turning point, when switching from defense to attack and vice versa, will enable your victories to pile up.



5.3 – Place or Play

The three keys to victory are almost never to be considered in a vacuum. Each of the three must be examined in light of the other two. Nowhere is this better demonstrated than in the decision that must be made when answering the question: "Place or play?" Placing a new bug carries with it an increase in strength but also a potential loss of tempo.

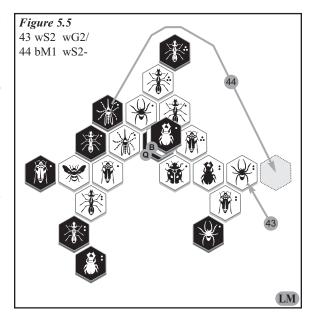
This delicate balance between placing new bugs and moving existing bugs helps make this game so enjoyable. Place too many and you may run out of bugs to place in the endgame. Place too few and you may get overwhelmed by a superior force before your bugs have even entered the game.

The side on the attack typically places more bugs. It is not unusual for White to have eight or nine bugs placed while Black still has only placed five or six. In *Figure 5.5*, from the game *HV-BlackMagic-ringersoll-2010-10-30-2103*, White is on the attack and has placed all 13 bugs. Black, on the other hand, is defending and has only placed nine bugs. Black has been forced to react, moving bugs to successfully defend the Oueen.

Tempo is critical when making this place or play decision. An early loss of tempo by an attacker may allow the defender to seize the initiative. A wasted move by the defender could result in a lost tempo and a quick loss. All moves by the Queen must be carefully weighed. This is particularly important in the opening. The defensibility of the new location must be carefully compared to that of the old location. Is it worth the loss of a tempo? Is there a balancing gain in mobility or strength?

"To place or not to place, that is the question."

If Shakespeare's Hamlet had played the game, he might have asked this question. Apply the three keys to this question and you will not have to "suffer the slings and arrows of outrageous fortune."



5.4 – Strategy and Bugs in the Hive

Each of the bugs in the hive has its strengths and weaknesses. Understanding the strategic implications of each will allow a Hive® player to play up to the maximum potential.

Bugs can be grouped into two basic categories: those that are limited to standard movement and cannot go up and over other bugs to reach an interior space and those that have special movement and can reach an interior space. The Queen, Ant, and Spider are in the first category. The Beetle, Hopper, Mosquito, and Ladybug fall into the second category.

The Ant is the most mobile bug in the hive. Its unlimited range gives it the ability to attack or defend anywhere around the outside of the hive. It is very important to keep the Ants mobile and available to respond to whatever circumstances are presented. Even with its superior movement, the Ant cannot get to every open space in the hive. The Freedom to Move rule will keep an Ant out of interior spaces as

demonstrated in *Figure 5.6* (from the game *U!HV-cheewee-ringersoll-2011-02-17-0147*). Black Ant #2 is mobile, but the gate protecting space A keeps it from winning the game.

Most players agree that the Spider is the weakest bug in the hive. But this does not mean that the Spider is useless. Early in the game, when the hive is still small, a Spider can quickly reach a nearby space. Late in the game, a properly placed Spider can be used both offensively and defensively (Chapter 7.11 – Using Your Spiders).

The bugs in the second category, those that can reach interior spaces, are very important. One must strategically plan to keep enough of these bugs on hand to reach interior spaces that may be blocked to the Ant and Spider (Chapter 6.3 – The Block). Looking back at *Figure 5.6*, we see that with proper strategic planning Black was able to bring in a Hopper to space B in order to attack space A. If none of these second category bugs were available, this space could not be filled and Black's game prospects would be dim.

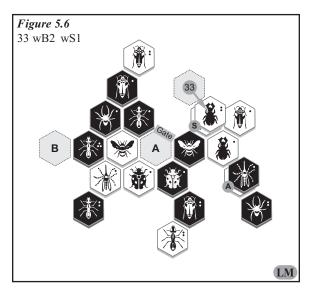
Consideration of tempo must also be taken with these second category bugs. The long range ability of a Hopper may allow it to jump into a distant space. The limited range of the Ladybug will require a closer placement, while the slow speed of a Beetle may require many moves to get into position to attack.

Strategy varies from bug to bug. Learn the strengths and weaknesses of each and you will be able to use them properly to count up victories.

5.5 – Opening Strategy for White

With the first move, White has the advantage of being the aggressor in the opening. To gain the most benefit from this inherent advantage, White must do three things. First, White must play the Queen early. Waiting until the fourth turn to play the Queen can seriously limit White's early mobility and jeopardize the outcome of the game.

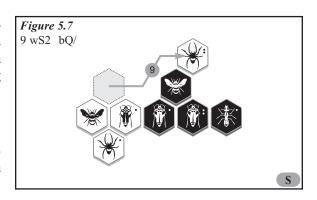
Second, White must play aggressively. The first turn does not automatically create an advantage. White must attack early to do so. And third, White must immobilize the Black Queen as quickly as possible. Failure to immobilize the opposing Queen may allow Black to easily stop the White attack. The quickest way to immobilize the opposing Queen is via a



pin (Chapter 6 – The Pin). If, however, the opposing Queen is on the far reaches of the hive and cannot improve her position by moving, she is, in effect, immobile. In this case, time can be invested in bringing in new bugs rather than moving existing bugs into an attacking position.

Figure 5.7 shows an opening position from the game *HV-ringersoll-Fumanchu-2010-09-23-1050* in which White has quickly accomplished all three opening goals. Notice how on turn nine, White pins the Black Queen.

Attack! Attack! Attack! To take full advantage of the tempo gained by having the first turn, White must attack quickly and decisively.

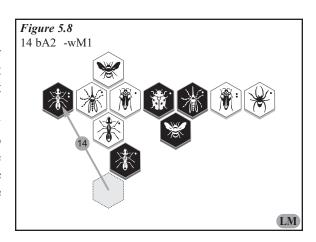


5.6 – Opening Strategy for Black

Moving second is a definite disadvantage for Black, but it does not have to be a fatal disadvantage. Black can, by applying three basic opening strategies, play a good game and possibly pull off a victory. Like White, Black must get the Queen played early. Games cannot be won in the opening, but they can definitely be lost in the opening. And one of the quickest ways to lose in the opening is to fail to get the Queen into play early.

The second opening strategy for Black is to set up a good defensive position. Just like Hoppers, Beetles, Ladybugs, and Mosquito can jump into surrounded spaces, they can also jump out. Keeping one or two of these bugs adjacent to the Queen may allow a properly timed exodus to thwart White's attack, start a counter attack, and possibly gain a victory. A more thorough discussion of this is in Chapter 7.2 – Defending Your Queen.

And finally, it is important for Black to get Ants into play quickly. As the best defenders, Ants can quickly scurry about the hive immobilizing opposing bugs and defending against impending attacks. The game *HV-ringersoll-Fumanchu-2010-11-21-1420*, in *Figure 5.8*, shows this exceptionally well. Notice how Black has two defending bugs adjacent to the Queen (a Ladybug and a Mosquito) and two of the three Ants are already in the hive. In addition, both Ants are mobile and being used beneficially (in this case pinning two valuable bugs).



An interesting side note here is that the type of opening played (Chapter 9.0 – Opening Theory) is usually decided by the player who places the Queen second. Since compact games with many bugs clustered together generally favor the attacker, many defenders set the goal to play an opening that results in the two Queens being in close proximity, or work to spread the game out by forming extended lines of single bugs. In either of these cases, Black may more easily play for a draw. For more on this subject, please see Chapter 7.7 – Playing for a Draw.

To win consistently with Black, it is important to set up a good defense. Use good defenders next to your Queen and get your Ants in play quickly.

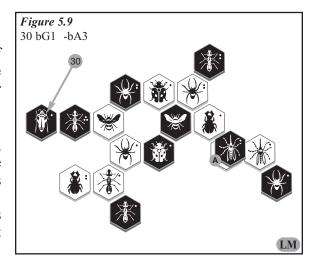
5.7 – Midgame Strategy

It has been mentioned that games cannot be won in the opening, but they can be lost. This is not the case in the midgame. Using good strategy and applying the tactics that will be discussed later in this book, many players will be able to force victory in the midgame.

Balancing the three keys to victory is nowhere more important than in this stage of the game. Mobility is probably the most important key. Mobility allows a player to make the best use of the force of bugs at his disposal. Mobile Ants, particularly, can be used to pin (Chapter 6.1 – The Pin) opposing bugs. These properly placed pins can reduce the opposing strength and mobility while maintaining one's own.

Understanding tempo is vital for knowing when to attack. *Figure 5.9* shows a midgame position from the game *U!HV-bird-ringersoll-2010-12-12-2109* in which proper counting of tempo allowed White to begin an unstoppable attack. More about this game will be discussed in Chapter 7.4 – Counter Attack.

The majority of games end in the midgame. But sometimes, neither player can force victory in the midgame and the game transitions into an endgame. Throughout the midgame it is important to plan ahead for the possibility of an endgame. Keeping the proper bugs available for late game placement is vital. Don't bring in a new bug unless one can be assured that it will perform a useful purpose.



More games are won and lost in the midgame than any other time. Learn to apply the three keys during this critical time and you will win.

5.8 – Endgame Strategy

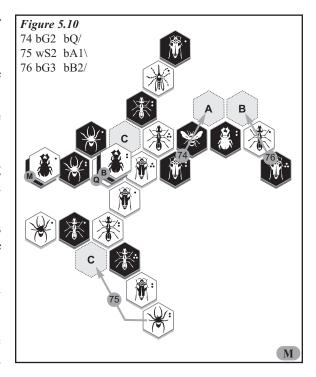
A game of Hive® is considered in the endgame when all, or almost all, of the bugs from each side have been placed. At this time, the most important consideration is strength. To force a victory, a player must have enough bugs available to surround the opposing Queen.

Not only must the number of bugs be considered, but the type of bugs must also be considered. As mentioned earlier, blocked spaces can only be reached by Beetles, Hoppers, Mosquitoes, and Ladybugs. Care must be taken when playing these bugs early. The failure to keep enough of these bugs in reserve can easily cost a victory.

Mobility is the second consideration. With all of the bugs played into the hive, the question becomes: "Which bugs are mobile?"

A good example of an endgame position is shown in *Figure 5.10* from the game *HV-humdeabril-ringersoll-2010-12-24-0303*. Here Black forces a victory because a 2-for-1 Fill (Section 6.4.3) allows Beetle #2 to be released. The Beetle atop the hive working together with Black Hopper #1, well positioned to jump into an attacking position in space C, forces a victory.

Bug count is the most critical key in the endgame. Make sure that you have enough bugs to gain your well deserved victory!



5.9 - Conclusion

Learning the basic strategy to playing Hive® will allow a new player to quickly progress from newbie to apprentice to master. Learn well these strategies and the tactics that follow and you will soon be playing Hive® like a champion!

Chapter 6.1 – The Pin

One of the first tactics that a new Hive® player learns is The Pin. There are many circumstances when an enemy bug can be easily rendered immobile by proper application of the One Hive rule. This is accomplished by moving one of your friendly bugs and placing it adjacent to the enemy bug. If moving the enemy bug would disconnect your newly moved bug from the hive, then the enemy bug cannot move.

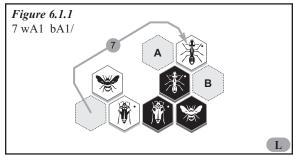
But, there is more to the pin then first meets the eye. Situations occur when a pin can be replaced or sometimes even released.

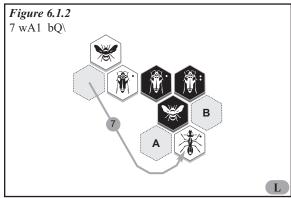
Not all pins are created equal so initial pin placements can be critical. A real Hive® Master recognizes the subtle differences in pin placement and plans ahead in order to most efficiently apply, not just this basic tactic, but the other interrelated tactics that will be discussed and learned later.

6.1.1 – Placing a Pin

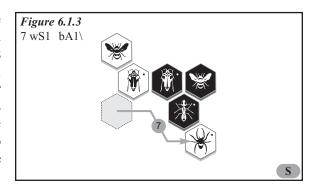
The first examination must be the pin itself and how a pin is placed. In *Figure 6.1.1*, from the game *U!HV-ringersoll-pirtscire-2010-10-23-1630*, White Ant #1 pins Black Ant #1 by moving as shown. Notice how that after this move by the White Ant, the Black Ant cannot move without disconnecting the White Ant from the hive and thus breaking the One Hive rule. The White Ant could just as easily move into space A and accomplished the same results. But now, compare space B. If the White Ant were moved into space B, either the Black Ant or the Black Queen could move without violating the One Hive rule. This example demonstrates the basic pin, around which much of the game of Hive® pivots.

This tactic is particularly powerful when used against the enemy Queen. By rendering the Queen immobile, it is much easier to plan and execute an attack. *Figure 6.1.2*, from the game *U!HV-diogocrist-ringersoll-2010-12-02-0150*, is very similar to *Figure 6.1.1* except for the fact that White Ant #1 is now pinning the Black Queen. The same comments regarding space A and space B in *Figure 6.1.1* also apply to the situation in this second figure.





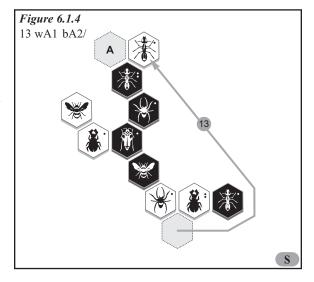
In other cases, a powerful bug like an Ant or Beetle can be pinned by a less powerful bug. Spiders are particularly useful in the opening when fewer movement or placement options are available to your opponent. Note that *Figure 6.1.3*, from the game *HV-ringersoll-albedo-2010-08-22-2137*, is similar to the two previous examples. There is a tremendous difference, however. In this case a less powerful piece (Spider) pins a more powerful piece (Ant). This example also highlights the difference in movement ability between the Spider and the Ant. The White Ant in *Figure 6.1.2* (page 33) has a choice. It can place the pin in either of two spaces. With its limited movement the White Spider in *Figure 6.1.3* does not have a choice; it must place the pin as shown.



You may be able to use a single bug to pin more than one opposing bug. In *Figure 6.1.4*, from the game *U!HV-Eucalyx-ringersoll-2010-08-29-1321*, White has just placed a pin with Ant #1. This is a double pin, pinning both Black Ant #2 and Black Spider #1. Not only does this double pin keep White Ant #1 mobile and free to be used elsewhere at the proper time, but it provides a net gain in strength available to attack.

This is a good time to introduce another concept that is important in understanding the pin. The pin placed in *Figure 6.1.4* will be referred to as an elbow pin. This is because the final position of the bug being pinned is inside an elbow (Section 4.4). If on the other hand, the White Ant had been placed in space A, the pin would be an inline pin because the pinning bug and the pinned bug are connected in a straight line.

Remembering the three important concepts: Strength, Mobility, and Tempo, the pin is a very good way to reduce your opponent's Mobility and available Strength.



6.1.2 – Replacing a Pin

Due to their mobility, Ants are the most common bug used to place a pin. The disadvantage with having an Ant pinning another piece is that the Ant, while being used as a pin, is unable to be used elsewhere. (If the Ant moves, the opposing, previously pinned piece, will be released.)

There is however a tactic that can be used to free a bug (particularly an Ant) that is being used to pin an opposing bug. A Hopper, Spider, Beetle, or Ladybug can be placed so that its next move also pins the enemy bug, thus releasing the previously pinning bug for more important use elsewhere.

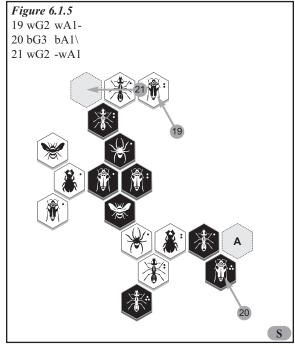
Continuing with the game *U!HV-Eucalyx-ringersoll-2010-08-29-1321*, just used in the previous section, we arrive at *Figure 6.1.5*. This demonstrates a classic Hopper pin replacement. With turns 19 and 20, both players are positioning themselves for pin replacements. Unfortunately for Black, the White pin replacement is completed first and when the White Ant is released it immediately moves to space A and pins Black Ant #1.

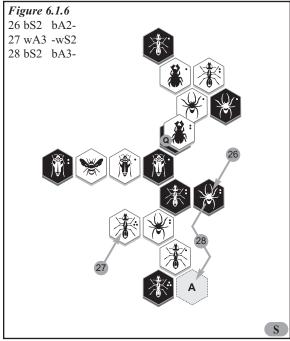
In this example both players were using Hoppers to perform the pin replacement, but a Spider will do the job just as well. The next example shows a not so classic pin replacement performed by a Spider.

Figure 6.1.6 shows this not so classic Spider pin replacement from the game *U!HV-Eucalyx-ringersoll-2010-08-30-2234*. Black Spider #2 enters the game on turn 26 and then on turn 28 performs the pin replacement by moving to space A.

It is important, of course, to take care to make sure that the new bug is placed in such a way that it can move to its intended target space. But that is not the only consideration. With a classic pin replacement there may also be a danger that an enemy bug can pin both your new bug and the original pinning bug. And finally, this tactic takes two moves so you must be sure that your gain by freeing your bug offsets the loss of tempo. For this last reason, this tactic does not usually occur in the early stages of a game when tempo is vitally important.

Be on the lookout for opportunities to replace pins and free valuable Ants for use elsewhere in the hive.





6.1.3 – Releasing a Pin

When an important bug is pinned, a player can be at a severe disadvantage. Therefore, a good player is always looking for situations which allow the pin to be released. A pinned bug in an elbow demonstrates how this can be done.

In the game *U!HV-DrRaven-ringersoll-2011-02-15-0139*, shown in *Figure 6.1.7*, Black places a Hopper on turn 26 and then on turn 28 the Hopper jumps into space A, inside the elbow. This releases the pin on Black Ant #1 and in this case is a good trade for Black since the Ant will be a better defender than the Hopper.

Figure 6.1.8 demonstrates another pin release, this time by way of a Spider. This specific example is from the game HV-ddyer-ringersoll-2010-09-18-0032. As Black Spider #1 moves into the inside of the elbow, Black Ant #1 is released from the outside of the elbow. And again, the more valuable Ant has been released and the less valuable Spider has been left behind.

Releasing a pin on an important bug can improve your situation. Watch for these chances.

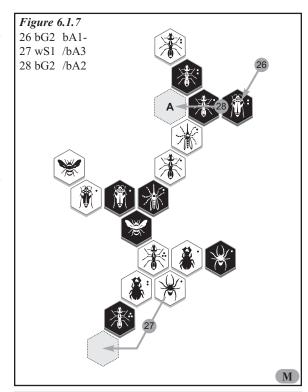
6.1.4 – Choosing Pin Placement

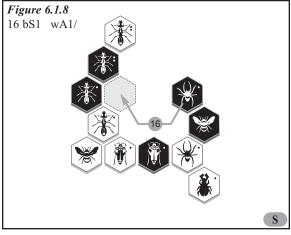
Not all pins are created equal. When using an Ant to place a pin you will probably have a choice of exact pin placement. The individual circumstances will help you decide where the best placement location is. Here are some questions to ask and answer before making your final decision:

Are there any enemy bugs that can immediately release your pin? If there are, you may want to consider not spending the tempo to initialize the pin.

Are there any enemy bugs that can subsequently repin your bug as well? Particularly dangerous is a Hopper inside the hive in position to hop out. If the Hopper is adjacent to your Queen and hopping out would not release your Queen, then the Hopper would not only pin your bug, but also continue to threaten your Queen.

Do you have bugs in reserve? If so, and later you need to execute a pin replacement, would the inline pin or elbow pin give you the best position after the execution of the pin replacement?





Are there pin positions that would block access to either your Queen or the enemy Queen? (See Chapter 6.3 – The Block.) If you do not have Beetles or Hoppers available, be very careful if your pin would block access to the enemy Queen. If your opponent does not have Beetles or Hoppers available, then blocking access to your Queen will provide protection in the endgame.

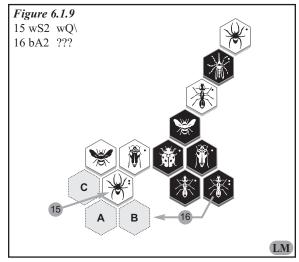
If your opponent has bugs in reserve, which spaces are available for new bug placement after your pin? In many cases, if your initial pin is an elbow pin and your opponent places a new bug adjacent to the pinned bug, you can then immediately move your bug to pin the newly placed bug and the originally pinned bug.

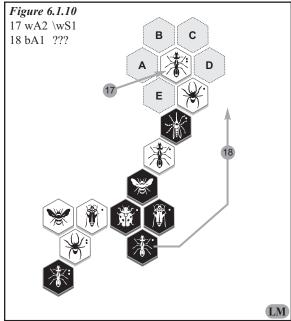
The foregoing gives some examples of the things to look for when deciding where to place a pin. With experience and the ability to look two, three, or more turns ahead, your pin placements will continue to improve. Conversely, this insight will help you prepare for and respond to pins placed by your opponent.

Now we are going to follow along in the game *U!HV-Eucalyx-ringersoll-2010-12-09-1213* and see how pin placement affected the results. In *Figure 6.1.9* White has just played Spider #2. If Black doesn't pin the Spider immediately, it will move toward the two Black Ants, pinning one of them. In order to keep Black Hopper #1 mobile, Black chooses to pin with Ant #2. Which space does he choose?

If Black is concerned about a new bug placement in space C, then Black will place the pin from space A. But if Black chooses to pin from space A, then when Black attacks by moving a bug into space C the pin on the White Spider will be released. On the other hand, if White elects to pin from space B, then space C will be left available for new White bug placement. Deciding that controlling White bug placement was more important, Black chose space A. Later we will see the consequences of this choice by Black.

White continued by bringing in Ant #2 as seen in *Figure 6.1.10*. Black elected to pin with Ant #1. But where should the pin be placed? The inline pin from space B minimizes the opportunity later for a pin release into an elbow and restricts White new bug placement in spaces A and C. But it does allow a new bug placement into space D.





The elbow pin into space C might allow a later pin release, but it has the advantage of restricting new White bug placement into space D. If a new bug is placed in space A, then the Black Ant could shift the pin and three White bugs would be pinned by just the one Black Ant. However, if a new bug is placed in space A and pinned by Black Ant #2, a White Bug moved into space E would free two White bugs.

There is much more to consider when placing a pin than might first meet the eye. In actual play, Black chose the inline placement in space B.

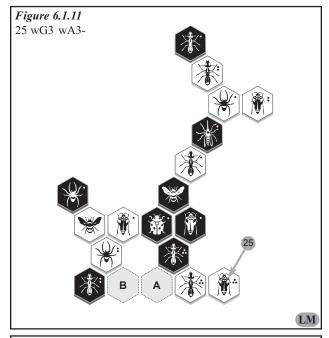
The game has progressed and in *Figure 6.1.11*, White is preparing for a pin replacement with Hopper #3. With the actual placement of Black Ant #2, White can successfully execute the pin replacement and free Ant #3. But if Black Ant #2 had been placed in space B instead of its actual location, the pin replacement attempt would have resulted in a ring (Section 4.3 – Ring) and Black could respond in such a way that the White Ant would still be pinned.

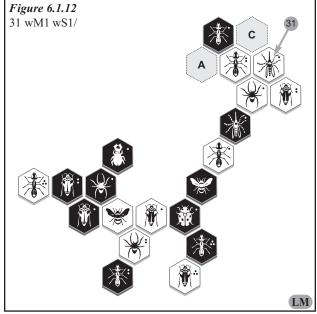
Note that the placement of the pin by Black Ant #2 on turn 16 has an effect nine moves later on the outcome of the game.

And finally, *Figure 6.1.12* shows the entrance of the White Mosquito on turn 31. The White Mosquito enters the game adjacent to White Ant #2 and therefore immediately has the Ant's superior mobility. Black can choose to keep the pin on White Ant #2 or shift the pin to the White Mosquito. Either way, one or the other of the White bugs will be mobile.

But if Black had placed the pin from space C, the White Mosquito could not have entered the game in the space shown. And if it had entered the game in space A, the Black Ant could shift the pin to the Mosquito and both the White Mosquito and White Ant #2 would have been pinned by the one Black Ant!

An expert player takes time to carefully choose his pin placements. If you do the same, then you will soon be an expert.



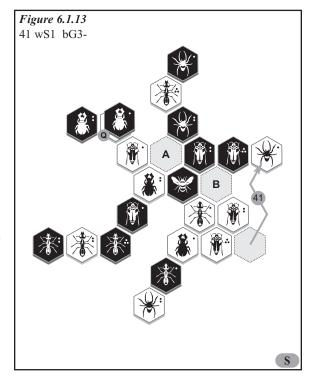


6.1.5 – The Bidirectional Pin

The concept of the bidirectional pin can be introduced in *Figure 6.1.13*, from the game *HV-seneca29-ringersoll-2011-09-17-1536*. Black Hopper #2 is the focus of the bidirectional pin. Notice how this bug is pinned from two different directions. From the upper left, the Hopper is pinned by Black Spider #2 and the bugs beyond it. From the right, it is pinned by Black Hopper #3 and the White Spider beyond it. This bidirectional pin is critical because Black Hopper #2 is in a defensive position adjacent to the Black Queen.

If it were only singly pinned, it would be free to move as soon as either space A or space B was filled. By vacating a space next to the Queen, Black would not be lost. But due to the bidirectional pin, White's attack will succeed before the Black Hopper has a chance to escape.

In some cases a second pin will be redundant and unnecessary. But when on the attack, watch for opportunities to keep an opposing defender in place by using this excellent tactic.



6.1.6 – Conclusion

The concept of The Pin is a basic one that beginning Hive® players learn very early. But as you can see, there are nuances to the basic pin that will only be learned by trial and error, experience, and study.

Chapter 6.2 – The Cover

Despite its slow moving ability, a Beetle is a very powerful bug. The power of the Beetle comes from its ability to climb atop the hive. (See Section 2.2 – Beetle.)

Part of the Beetle's power comes from the fact that climbing atop the hive allows a Beetle to reach an interior space that is inaccessible to bugs that move in a standard manner. But a large portion of the Beetle's power comes from what we will refer to as The Cover. The Beetle Cover refers to its ability to cover an opposing bug and render it immobile. Not only is an opposing bug covered in this manner unable to move, but for new bug placement purposes, the color of that space is changed to the color of the topmost Beetle.

6.2.1 – Immobilize the Queen

The Beetle Cover is a particularly dangerous weapon when the bug covered is the opposing Queen. Because she cannot escape, it is now much easier to surround the Queen.

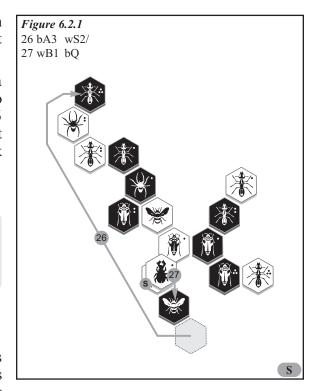
Let's look at *HV-lukiejro-ringersoll-2010-07-29-2049*, a game in which the immobilization of Black's Queen leads to a well earned victory for White. *Figure 6.2.1* shows turns 26 and 27. The Black Ant pins the two White bugs at the farthest reach of the hive and then White Beetle #1 covers the Black Queen.

The Black Queen can not escape.

A Beetle cover is an excellent way to immobilize your opponent's Queen, render her escape impossible, and thus prepare for the final attack.

6.2.2 – Direct Drop

When the Queen is covered, it is quite likely that new bugs will be able to be placed directly adjacent to the Queen! This is called a Direct Drop and is a very serious threat. Typically speaking, a new bug takes at least two turns to attack the Queen. On the first turn the new bug is placed and on the second turn it is moved into position against the opposing Queen. But when a Queen is covered and new bugs can be dropped in adjacent spaces, a tempo is gained by each



bug dropped immediately adjacent to the Queen. Realizing that many games are won or lost by only one tempo, it is easy to see the value of a Beetle cover of the enemy Queen.

Now let's examine *Figure 6.2.2*, a continuation of the game *HV-lukiejro-ringersoll-2010-07-29-2049* from the previous section. Here, as in the previous figure, the Black Queen is covered. Of the five empty spaces around the Queen only two of them have adjacent Black bugs. Spaces A, B, and C are all out of touch with any Black bugs and are, therefore, in danger of direct drop placement of new White bugs.

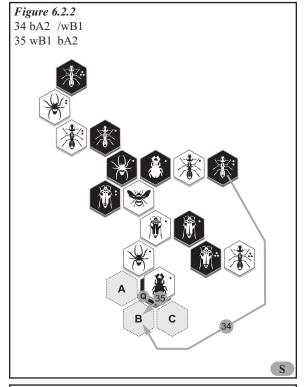
This threat virtually forces Black to respond as shown in turn 34. Of course, White shifts the Beetle Cover to the newly moved Black Ant. This cover of the Black Ant has a triply negative effect on Black's game. The Black Queen remains pinned. The Black Ant is now permanently removed from play. And by moving away, the Black Ant has released the pin on White Ant #1. This Ant is now free to join the attack or to be used for defense.

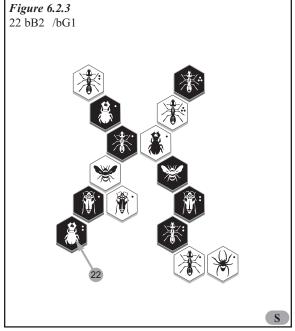
Another game in which a Beetle cover is used very effectively is *HV-ringersoll-Fumanchu-2011-02-18-1224*. *Figure 6.2.3* shows turn 22. Black brings in Beetle #2 to begin an assault on the White Queen.

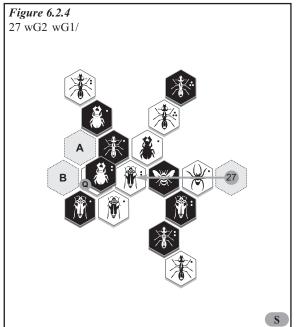
Five turns later, *Figure 6.2.4* (page 43) shows White's vain attempt to defend. Notice how the Beetle Cover opens up both space A and space B for direct bug placement adjacent to the White Queen! Even though White has two Hoppers that can hop out and vacate spaces around the Queen, White has no chance.

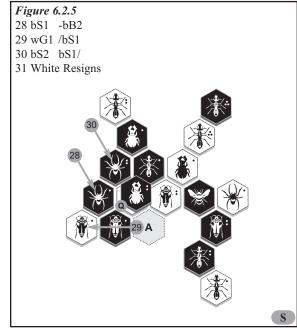
On turns 28 and 30, Black brings in two bugs and White is defenseless, resigning on turn 31 (*Figure 6.2.5* on page 43). Note, too, that when White Hopper #2 jumps out, space A is opened up for a direct bug placement next to the Queen.

All in all, this game is an excellent example of how the Beetle Cover can lead to a devastating attack.









6.2.3 – Beetle Pin Replacement

The third aspect of the Beetle Cover is the Beetle as a Pin Replacement. This will be demonstrated in the game *HV-lukiejro-ringersoll-2010-07-29-2049*, which was also used in the earlier discussion regarding immobilizing the Queen.

In the moves leading up to *Figure 6.2.6*, White has forced Black into an unfavorable ring. On turn 47, White Ant #3 breaks the ring and pins Black Ant #3. Black cannot gain the elusive victory, even though he is only one turn away. There are no Black bugs available to complete the victory.

White has as much time as needed for Beetle #2 to climb atop the hive and move in to cover Black Ant #3. As soon as this occurs, White Ant #3 is relieved of the pinning duty and is free to move about and attack the Black Queen.

Although in this case it was not necessary, please notice that after the Beetle Cover of Black Ant #3, a new bug could be dropped into a pinning position on this Black Ant. And then the White Beetle would also be free to move its way across the hive and join the attack.

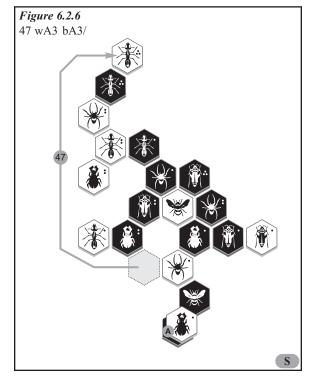


Figure 6.2.7 shows the game some sixteen moves later. White Beetle #2 has covered Black Ant #3, White Ant #3 has joined the attack, and Black is just a few moves away from certain defeat.

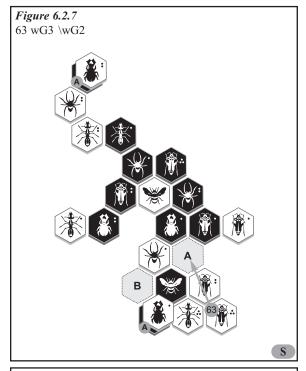
With no productive way to either complete the victory or defend the oncoming White onslaught, Black stands by helplessly and can only making time wasting moves. White, meanwhile, attacks with Ant #3 and Hopper #2, and then brings in the final Hopper, jumps into space A, and wins easily when White Beetle #1 comes down from atop the hive into space B.

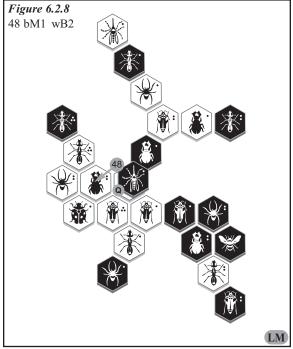
This game shows another victory produced in large part by the Beetle Cover.

6.2.4 – Covering a Defender

The final aspect of the Beetle Cover applies to bugs defending the Queen. By moving out at an opportune moment, a defending bug can vacate a space adjacent to the friendly Queen. (See Chapter 7.2 – Defending the Queen.) If properly positioned, the same bug can be used to pin an attacking bug, block access to a vital space, or actually attack the opposing Queen. By covering a defending bug, a Beetle can prevent this exodus from happening while simultaneously staying in position to complete the encirclement of the opposing Queen and, thereby, bring victory.

A good example of this is the following game, HV-humdeabril-ringersoll-2010-11-29-0410. In Figure 6.2.8 we see that Black is on the attack, already having successfully executed a cover of the White Queen, this time by a Mosquito moving like a Beetle. But White has three well placed defenders. Hopper #1, Hopper #3, and Beetle #2 are all in position to move out if given the right opportunity. On turn 48, Black elects to shift the cover from the Queen to the defending Beetle. This Mosquito move serves multiple purposes. It keeps the White Beetle from vacating an important space adjacent to the White Queen. It stops the Beetle from defending by covering a Black attacker. And it keeps the Black Mosquito within striking range of other spaces adjacent to the White Queen.





In *Figure 6.2.9* we see a second Beetle attacker approach and cover White Hopper #1. These two covers are vital to the success of Black's attack. Without the cover, White Hopper #1 would be free to move as soon as space B is occupied. But with the cover, Black can occupy space B without any negative consequences. The same is true with spaces A and C. In this figure there is a ring (Section 4.3) that would allow the White Beetle to move if it were not for the Black Mosquito cover. Soon, White Ant #1 will break the ring and move on to better uses elsewhere. (See the pin in *Figure 6.2.10*.)

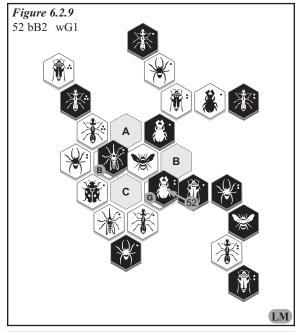
With the ring broken, however, the White Beetle would still be able to move as soon as either space A or space C is occupied.

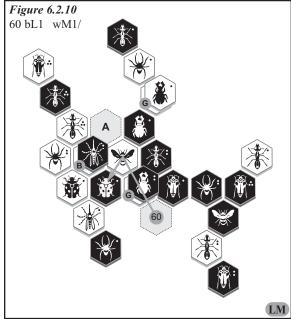
But with the two covers (one by Beetle #2 and the other by the Mosquito) keeping the White defenders in place, we see in *Figure 6.2.10*, Black safely moving in. In this figure, Black Ant #2 has already moved into space B, on turn 60, the Ladybug moves into space C, and finally, on the next move, one of the Black bugs will complete the victory with a move into space A.

This game has shown an excellent win for Black, proving again the power of the Beetle, in this case covering a defender.

6.2.5 – Conclusion

The Cover is a very powerful weapon in the hive. Become proficient at its use and you will see the victories pile up.





Chapter 6.3 – The Block

The previous two tactics have been primarily tactics used on offense. Now we will discuss an important defensive one, The Block. Based on the Freedom to Move rule, standard bugs cannot move through a gate (Section 4.1). This is very important when placing and moving bugs. Moving a bug into a gate position denies opposing bugs access to the area behind the gate.

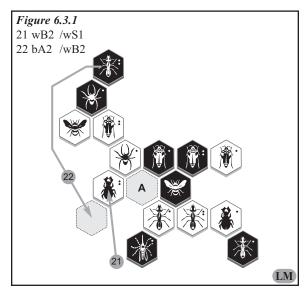
The use of a block is extremely important when protecting your Queen. Ants, Spiders, and the opposing Queen cannot move through a gate. If a vacant space adjacent to your Queen is blocked by a gate, your Queen is immune to attack into these spaces from these bugs.

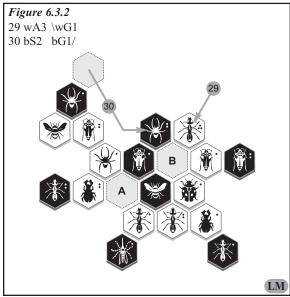
6.3.1 – Placing the Block

Let's look at an example (*HV-bird-ringersoll-2010-12-26-2049*) of two good blocks leading to victory in a game with Mosquito and Ladybug. *Figure 6.3.1* shows turn 22 by Black. Four of the six spaces around the Black Queen are already occupied. White has just placed Beetle #2 in position to move into space A. Black responds with the move depicted, pinning the White Beetle, but more importantly, setting up the block. Notice how the pinned White Beetle prohibits any Ant, Spider, or Queen move into space A.

A few turns later we come across the position in *Figure 6.3.2*. Again, White has just placed another bug (White Ant #3) into a threatening position. From its initial position White Ant #3 can easily move into space B. But, Black has other plans. The defensive maneuver as shown does create a ring, but it also places a block to protect space B.

Figure 6.3.3 (page 48) shows the position following the placement of Black Ant #3 on turn 34. Notice how both space A and space B are continuing to be protected by the blocks. Space A is now completely surrounded and space B is protected by Black Spider #2. Another interesting positional note: Black has carefully placed bugs to control where White can place additional bugs from the reserve. Even though White has a Hopper and a Mosquito in reserve, neither of these bugs can be placed into a position to threaten either of the two critical spaces. (For more information about this, see Chapter 7.3 – Controlling Bug Placement.)





With three Ants and a Mosquito mobile on the outside of the hive and four additional bugs in reserve, Black had no problem in winning the game in only seven more turns. All in all, this is an excellent example of using blocks to protect access to one's Queen.

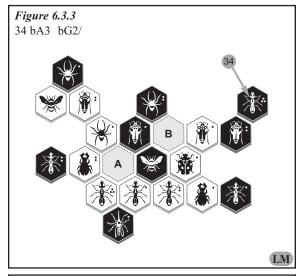
As an interesting side note, let's go back to turn 25 as shown in *Figure 6.3.4*. White has just jumped the Ladybug to the location shown. This forms a ring, freeing White Beetle #2 to move. Even though the White Beetle cannot move from its current location directly into space A; it can, in two moves, go up and over either the White Ladybug or the White Spider. In this particular game, this Beetle's ability to go up and over a block did not play a role in the outcome of the game. But, a Beetle's ability to climb over a block must be considered when predicting the value and potential outcome of placing a block.

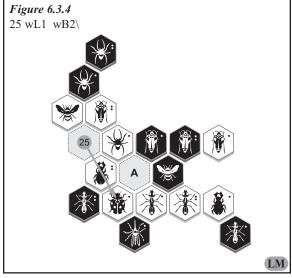
Because of the excellent positioning of the two Black Hoppers, this game will be considered again in Chapter 7.2 – Defending the Queen.

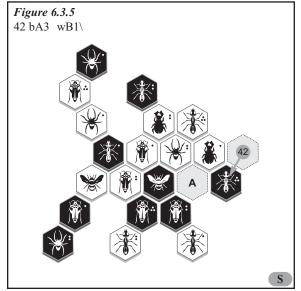
The next example is from an interesting game (*HV-antros-ringersoll-2011-01-16-1258*) in which a well placed block by Black results in a win, even though White has all three Ants mobile and on the outside of the hive. *Figure 6.3.5* shows Black turn #42, a subtle shift by Black Ant #3, which keeps the pin on White Beetle #1 and at the same time blocks access to space A.

Because of this well timed and placed block, Black was able to stop White's attack. White tried hard to free one of the two Beetles to move in for the victory, but Black Ants #2 and #3 kept both White Beetles pinned. If one follows the play of the game, it becomes apparent that White could have easily taken a draw. But instead, White continued to play on for a victory and in the end Black won. Two Beetles in reserve and two well placed defending Hoppers finally brought Black the victory.

Good defensive players learn early in their Hive® careers how to see and place effective blocks.







6.3.2 – Removing the Block

Under some circumstances, the block and gate formation can be a somewhat permanent position and must be kept in place to the very end. In other games, a block can be temporary, either safely removed when the threat no longer exists, shifted to another more advantageous blocking position, or in some cases, in an endgame race, removed when victory can be achieved before the opponent can take full advantage of the removed block.

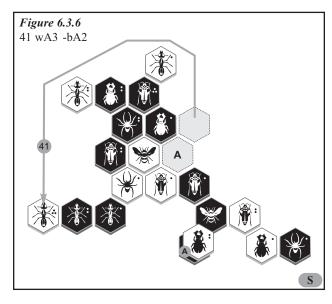
Note the point depicted in *Figure 6.3.6* from the game *HV-ringersoll-Dragonfly-2010-11-23-0313*, when White Ant #3 can safely remove the block. In this case, the White Ant leaves the blocking position protecting space A and instead, takes up a pinning position on two Black Ants! With all three Black Ants rendered immobile and Black Spider #1 out of position to move into space A, White Ant #3 could safely abandon the block.

As is often the case in Hive®, once White has successfully defended against Black's attack, the momentum and attack shift. When this happens, both in this particular game and in many games, the counter attacker easily wins the game.

Knowing when it is safe to remove a block will free mobile bugs for better use throughout the hive.

6.3.3 – Converting a Gate

A bug moving into a gate converts the gate into a ring. Whenever there is a possibility of this, you must carefully plan a response. Because of the inherent danger in forming a ring, closing a gate in this manner is not a very common occurrence. But watch for the possibility and plan your response. The next game demonstrates how a gate formed by a block can become a ring. The situation in *Figure 6.3.7* occurred in the game *U!HV-FLX-ringersoll-2011-03-23-2215* after Black's 24th turn, the placement of Black Hopper #3. In this situation, Black actually has blocks set up protecting both space A and space B.



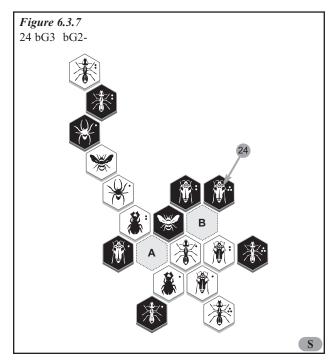


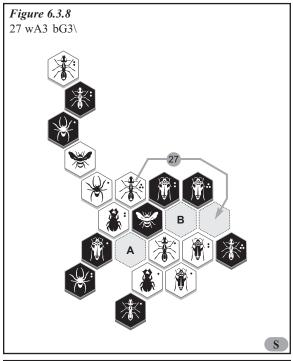
Figure 6.3.8 shows the situation a few turns later when White converts the block into a ring. The natural response to the formation of a ring is, when possible, to move out with a friendly bug, leaving a string of pinned bugs behind. In most cases, this is the best response; again highlighting the danger of forming a ring. But in this case, it would be a mistake for Black to do so. Moving Black Hopper #3 would open space B to White Ant #3. Whereas, moving Black Hopper #2 would leave no Black defenders adjacent the Black Queen. So in this case, Black allowed the ring to remain. Later, when White Hopper #2 jumped into space A, the block remained on space B and White Ant #3 was pinned.

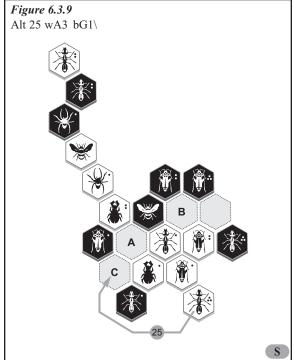
If White were intent on trying to force the situation by making a ring, *Figure 6.3.9* goes back a few turns and shows a potentially better ring. White forms a ring by moving Ant #3 into space C. This ring actually forces the freedom of White Beetle #1 or the release of the block protecting space A. If Black Hopper #1 were to break the ring, White Ant #3 could then slip into space A. If Black does not break the ring by moving Black Hopper #1, then White Beetle #1 climbs up, over, and into an attacking position.

Converting a gate into a game-winning ring is a skill that is developed through study and practice.

6.3.4 – Conclusion

Successful Hive® players watch for potential blocking positions. While attacking, an experienced player will minimize the opportunity for the opponent to set a defensive block. The same player while defending, however, will always be on the lookout for a productive defensive block.





Chapter 6.4 – The Fill

In two previous sections, The Pin and The Block have been introduced as successful defensive tactics. The question becomes, when facing a solid defensive position, one in which all open spaces around the Queen are blocked and all Hoppers, Beetles, and Ladybugs are prevented from gaining access to the opposing Queen, how can a Hive® player free a bug and win the game?

The answer is The Fill, a common winning offensive tactic. A fill is a method in which a player on the attack can force the release and ultimate freedom of a bug by creating a pocket (Section 4.5) around it. This pocket provides alternate connections to the hive for the pinning bugs. The bug in the pocket can then be used to attack the opposing Queen and, in many cases, win the game.

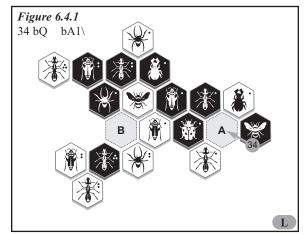
6.4.1 – **Basic Fill**

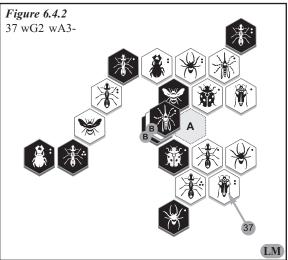
Our first example (*T!HV-Loizz-ringersoll-2011-06-13-2356*) of a basic fill comes from the 2011 BoardSpace Online Tournament, a quarterfinal game between the author and another Hive® Master, Loizz. The critical, game-winning move is shown in *Figure 6.4.1*.

By slipping the Black Queen into space A, an alternate connection to the hive was provided to White Ant #1. Because of this alternate connection, the White Ant no longer held the Black Ladybug in a pin. The Black Ladybug was free to move and easily won the game on Black's next move by jumping into space B. This is a classic use of a fill to force freedom for a vital bug.

The next game also comes from the 2011 tournament. This game between two Hive® Masters shows a rather unique fill. In *T!HV-ringersoll-Fumanchu-2011-07-03-1957*, the author uses a Hopper fill to release an Ant to deliver the winning blow. *Figure 6.4.2* shows the Hopper fill on turn 37. Interestingly, both White Hopper #2 and White Ant #1 can move into space A. Black can pin the White Hopper. But with the fill and release of the White Ant, the game was won.

The Basic Fill is an important tool for a top notch Hive® player's offensive arsenal. Many games can be won with its proper use.





6.4.2 – **Double Fill**

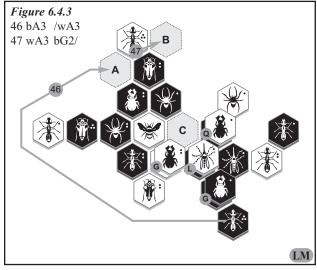
Figure 6.4.3 shows the position late in the game *U!HV-ringersoll-DrRaven-2011-02-07-2318*. Black is on the attack and searching for a way to get a bug into space C. With two Beetles and a Mosquito atop the hive, White is well positioned to defend against Black Beetle #1. Neither the Black Ladybug nor the Black Mosquito is in position to move into the final space. The Ladybug is covered by the White Mosquito and the Mosquito is adequately pinned. The only option is to attempt to force one of the Black Hoppers into the critical space. DrRaven accomplishes this with an elegant demonstration of a double fill.

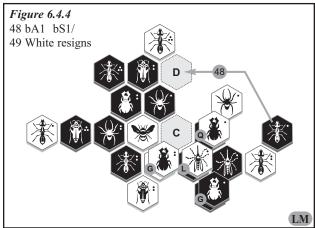
The plan is to release Black Hopper #2 by using the two mobile Black Ants. DrRaven first moves Ant #3 into space A. This provides an alternate connection to the hive for White Ant #3, thus freeing Black Hopper #2 to move. White's only counter is for Ant #3 to shift to space B to maintain its pin on the Black Hopper.

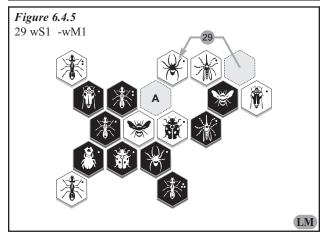
Figure 6.4.4 shows DrRaven delivering the coup de grace by moving Black Ant #1 into space D. This again provides an alternative connection to the hive for White Ant #3. Safely tucked inside a pocket, Black Hopper #2 cannot be pinned. White has no defense and is forced to resign.

A second instructive example of a double fill is shown in *Figure 6.4.5* through *Figure 6.4.7*. This example comes from the game *U!HV-DrRaven-ringersoll-2011-02-08-0123*, in which DrRaven is on the receiving end of a double fill from the author.

The position after turn 29 is shown in *Figure 6.4.5*. White Spider #1 has just set a block (Chapter 6.3) to protect space A. The plan for Black must be to use a fill to release Hopper #1, which will then hop into space A and win the game. Again, just as in the previous example, two bugs are needed to execute this maneuver.







First Black places Spider #2 directly adjacent to the target Hopper as shown in *Figure 6.4.6*.

Then, in *Figure 6.4.7*, following White's placement of the third Ant, Black completes the double fill with **32 bA3 bG1**/.

The Black Hopper is now safely tucked inside a pocket and cannot be pinned. The game ends on turn 34 when the Black Hopper jumps into space A.

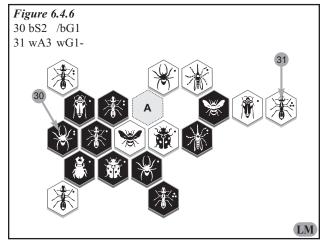
When a basic fill is not enough, a good player looks beyond the basic fill and is prepared to find a double fill when circumstances require it.

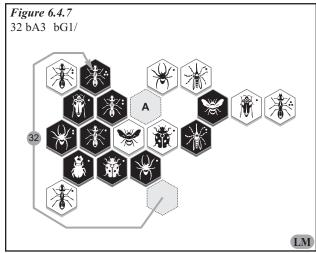
6.4.3 - 2-for-1 Fill

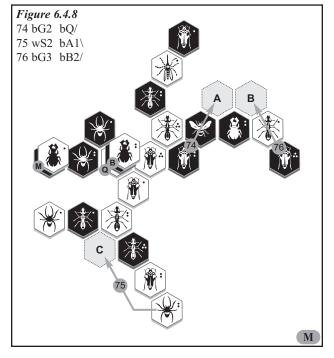
As demonstrated by the two previous examples, the most common use of the fill is to release a Hopper, Ladybug, or Beetle to move in for the victory. But that is not the only use of this valuable offensive tactic. It can also be used to sacrifice two bugs to free a different, situationally more useful one.

As seen in *Figure 6.4.8*, *HV-humdeabril-ringersoll-2010-12-24-0303* will give us an example of a 2-for-1 fill. In this case Black sacrifices two Hoppers to release one Beetle. First, on turn 74, Black moves Hopper #2 to space A. And after White moved Spider #2 into space C on turn 75, Black Hopper #3 is moved to space B on turn 76. The pocket formed around Black Beetle #2 frees it to climb atop the hive and join the attack. The more versatile and dangerous Beetle helps Black finally win on turn 100.

When bug count is not an issue, a 2-for-1 fill can quite often be used to release a more valuable bug. Use this tactic and win!



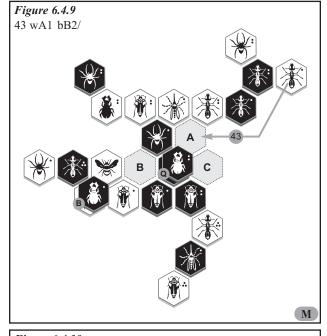




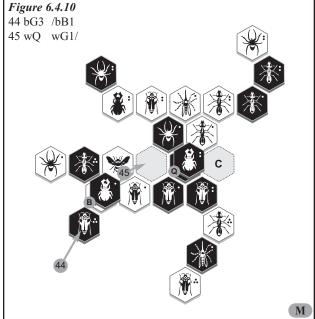
6.4.4 – Battle of Fills

The next game (*HV-humdeabril-ringersoll-2011-01-31-2303*) illustrates how a game can evolve into a battle of fills. First one side then the other uses a fill to release an attacking bug. Games such as this test a player's ability to visualize positions many moves into the future.

As illustrated in *Figure 6.4.9*, White first releases the Mosquito by a well timed attacking fill by Ant #1.



Black responds by placing Hopper #3 as shown in *Figure 6.4.10*. This Hopper placement serves two purposes. First, the newly placed Hopper threatens to attack the White Queen. If the White Queen moves away, the Black Hopper stays in place and frees Black Beetle #1 from its cover of White Beetle #1. In the game, White elected to move the Queen, parrying the threat by the Black Hopper and threatening to win immediately by virtue of the White Mosquito previously freed by a fill when the White Ant moved, back on turn 43.



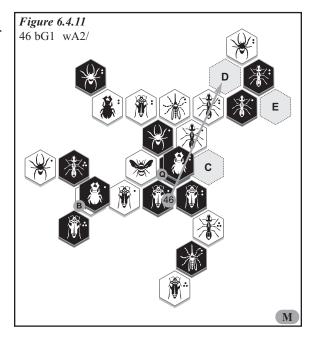
And then in *Figure 6.4.11*, Black jumps out with Hopper #1 into space D, the pocket formed by four bugs. With the fill of this pocket, not one, but two Black Ants are potentially freed! White is forced to respond by sending White Spider #2 to space E to keep one of the two Ants pinned. But the exchange, in this instance, of a now pinned Hopper for a freely mobile Ant is an excellent trade off.

With two Beetles atop the hive and a Hopper in reserve, Black had a long, hard fight ahead, but was able to continue on to win on turn 92.

Learn to examine complex situations in depth and many opportunities to use The Fill will become apparent. Victories, too, will pile up.

6.4.5 – Conclusion

When on the attack and facing a determined defense, an experienced Hive® player makes use of The Fill to free bugs for the final, victorious assault.



6.5 – Bug Placement

The first decision that a Hive® player must make is one regarding bug placement. Which bug should be used as a starting bug? And then, from that point on, the questions are asked again and again, "What bug should I play?" and "Where should I play it?" The quality of the answers to these questions directly relates to the quality of one's play.

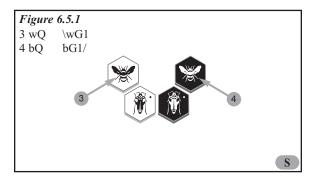
No bug should be randomly placed. There must be a plan behind every new bug placed. What is its goal? Why is it being brought into the game? How many different ways can the opposing player counter this placement? And, what will I do after each of these different counters?

6.5.1 – The Opening

Right from the start, bug placement is a concern. Which bug should be played first? As we have seen in Section 5.4 – Strategy and Bugs in the Hive, bugs can be grouped into two groups: those that can get into and out of interior spaces and those that cannot. Because the first bug placed is immediately pinned by one's second bug, it is most common for one of the first category bugs to be played first. In the basic game, this means a Hopper or a Beetle. If the Ladybug and/or Mosquito are used, either of these are acceptable alternatives. Some players choose to start with a Pillbug, if available, not because of its ability to move out of enclosed spaces, but because of its ability to extract the pieces around it from enclosed spaces.

By rule, the Queen may not be placed on turn one* and even though the Ant can be the initial bug placed, it is foolhardy to do so. (See Section 8.1.1 – Beginners' Mistakes – Starting with an Ant.)

In *Figure 6.5.1* from the game *U!HV-Sutured-ringersoll-2013-07-27-1636*, we can see how both players have started with a Hopper and continued with the Queen.



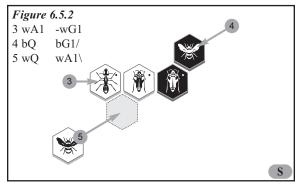
^{*} See the footnote on page 5 referencing the tournament rules regarding Queen placement on turn one.

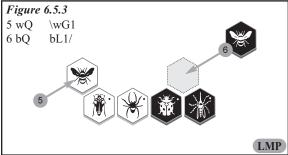
The second decision that must be made early in the opening is when and where to place the Queen. By rule the Queen must be placed no later than turn four. But typically, the Queen is placed on either turn two or turn three. The format of the opening is completely decided only after the second Queen is placed. The first player to play the Queen can eliminate some of the possible variations but the second player makes the final decision. (More about this is discussed in Chapter 9 – Opening Theory.)

Comparing *Figure 6.5.1* (page 57) and *Figure 6.5.2* (from the game *HV-guest-ringersoll-2012-04-13-2347*) we see that in the first, after White had already played the Queen, Black chose to play a C-opening. Where in the second, White chose to play an Ant on turn three. This was followed by Black playing the Queen and then, White chose to play a Z-opening by playing the Queen on turn five as shown.

Our third example in *Figure 6.5.3* comes from the game *T!HV-ringersoll-stepanzo-2013-06-15-0955*. In this game from the 2013 BoardSpace tournament, White sacrificed a tempo by starting with a Spider. This was done to add one space between the Queens to counteract stepanzo's aggressive play with the Pillbug.

Carefully plan your placements from the opening move. A well planned opening will lead to a more successful result.

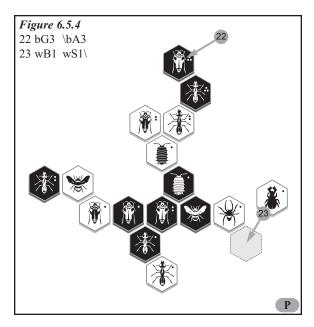


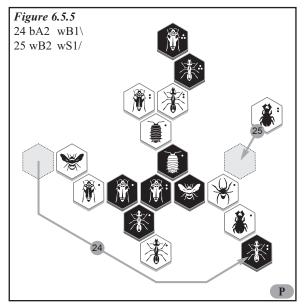


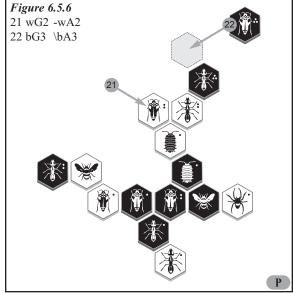
6.5.2 – Beetle Placement

Even though the Beetle is a slow moving bug, it can be very powerful both on offense and on defense. Good placement, however, is vital if one is to get good use from this piece.

We will begin on offense because most beginning players see the Beetle as primarily an offensive bug. Tempo is the most important aspect of the game to remember in offensive Beetle placement. When placing a Beetle to attack, it must be placed in such a way so that it can get into attacking position quickly, without an unnecessary loss of tempo.







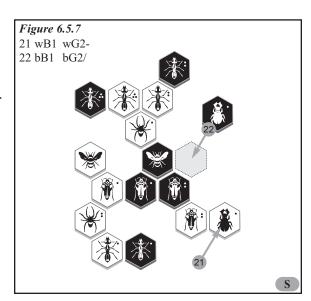
In the game *HV-ringersoll-blefinjo-2013-08-03-1154*, both White Beetles are placed just two spaces away from the Black Queen. On turn 23, in *Figure 6.5.4* on page 58, White Beetle #1 enters as shown. Even though this Beetle is immediately pinned (turn 24 in *Figure 6.5.5*), White follows with Beetle #2 being placed on turn 25. This Beetle cannot be pinned and will advance, cover the Black Queen, and negate the power of the adjacent Pillbug.

This game also demonstrates another very important placement tactic regarding your Beetles. When your game strategy requires a Beetle atop the hive, it is important that at least one of your Beetles be held out until you can be assured that this can happen. *Figure 6.5.6* shows the moves leading up to the Beetle placements in *Figure 6.5.4* and *Figure 6.5.5*.

When Black, planning to execute a pin replacement, self pins Ant #3 on turn 22, White realizes that with only one Black Ant mobile, a White Beetle can be forced atop the hive. This prompts White to begin the Beetle assault.

From the standpoint of Black, the lesson learned is that self pinning a mobile Ant may give your opponent the opportunity to bring in a Beetle and force it up. If your opponent has unplaced Beetles, you must, consider this possibility at all times.

Now let's contrast the successful Beetle attacking placement in the previous game with an unsuccessful Beetle attack in the game *U!HV-Sutured-ringersoll-2013-07-27-1636*.



In *Figure 6.5.7* (page 59) White Beetle #1 enters the game on turn 21, but is a full three spaces away from the Black Queen. This allows Black to place Beetle #1 in a good defensive position, one which allows the Black Beetle to intercept the White Beetle before it can cover the Black Queen.

Going back a few turns to the position in *Figure 6.5.8*, we see that when the third, and final, White Ant enters the game, Black immediately pins it as shown. Now, with all three White Ants pinned, the Black Beetles can safely enter the game. Black Beetle #1 enters in a defensive position as we have already seen. And then much later in the game, Black Beetle #2 enters and attacks the White Queen. With all three White Ants pinned, the Black Beetles could not be stopped.

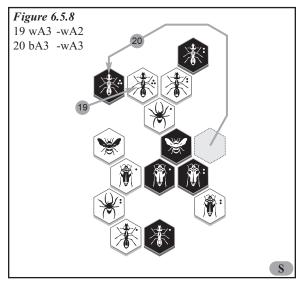
These two previous games are excellent to contrast effective and successful Beetle placement with ineffective and unsuccessful Beetle placement. After review it is easy to see why White won the first game, but lost the second!

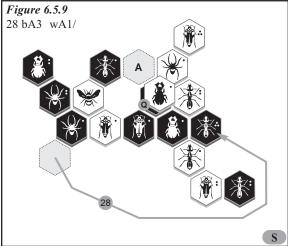
A well placed Beetle can defend in a number of different ways. We saw in the previous example that a defending Beetle can intercept an approaching enemy bug before it covers your Queen. In other situations your Beetle may not be able to stop the opposing Beetle from covering your Queen, but by covering the opposing Beetle atop your Queen the damage done is greatly reduced. Your opponent can neither use a direct drop nor climb down to fill a space next to your Queen.

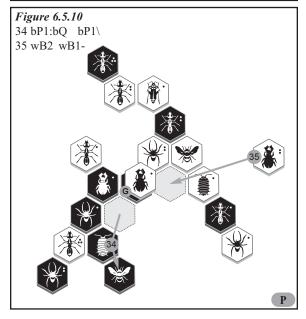
Another good defensive placement of a Beetle is demonstrated in *Figure 6.5.9* from the game *U!HV-Sutured-ringersoll-2013-07-27-1617*. Because Beetle #1 was placed adjacent to the Black Queen very early in the game, it is in good defensive position, here later in the game. When Ant #3 creates a fill position, the Black Beetle is free to move, threatening to vacate a spot next to the Queen and/or cover the White Beetle atop the hive. Good Beetle placement early saved the game for Black.

Before moving on there is one more point that needs to be made regarding Beetle placement. Sometimes there occurs an opportunity for a Beetle to be placed inside a pocket. When this occurs, the newly placed Beetle cannot be pinned and therefore, cannot be stopped from climbing atop the hive!

Notice how Beetle #2 is placed inside the pocket in *Figure 6.5.10* from the game *U!HV-ringersoll-reh191-2013-05-12-1739*. With both Beetles soon to be atop the hive,







White won easily, even though the Black Pillbug helped the Black Queen to escape to the outer reaches of the hive.

Careful Beetle placement is a vital skill that must be learned before one can be considered a true Hive® Master. Learn how to place this powerful bug, both on offense and on defense.

6.5.3 – Spider and Hopper Placement

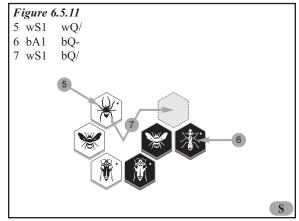
Due to their limited movement patterns, the Spider and the Hopper pose different problems than the Beetle. They can move greater distances each turn, but are severely limited by their movement rules.

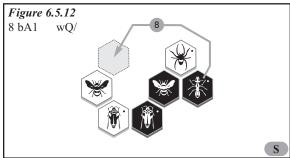
Initial placement is particularly important for the Spider. The game *U!HV-Sutured-ringersoll-2013-07-27-1617* between the author and a beginner is an exceptional example of this. This game evolves into a C-opening, and as we will learn in Section 9.2.1, these openings typically revolve around two critical spaces. (See *Figure 9.2.1* on page 224.)

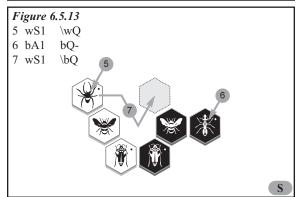
White's Spider placement on turn five and subsequent attack on turn seven (*Figure 6.5.11*) leaves both critical spaces empty. Black immediately takes one of the critical spaces on turn 8 in *Figure 6.5.12*.

Now let's see the next game after Sutured has been shown the difference one space can make when a Spider's initial placement is involved. *Figure 6.5.13* shows the same series of turns five through seven from the game *U!HV-Sutured-ringersoll-2013-07-27-1636*.

What a huge difference in these two games. Very early in this second game, Sutured takes one of the two critical spaces. This subtle difference in the placement of a Spider meant a huge difference in the game. Even though ringersoll's experience ultimately led to him winning both games, the first lasted only 34 moves, while the second lasted almost twice as long, 64 moves. This difference can be primarily attributed to the initial placement of the White Spider.







Initial placement is also critical for the Hopper. It must be aimed toward its final destination space, either directly or indirectly by means of a hop around. If it is not, then it may never be able to reach its ultimate destination.

The following three figures from the game *HV-ringersoll-river-2012-04-07-1405* show four Hopper placements, two good ones from White, followed by two poor ones from Black. Watch how this happens!

White begins by bringing in Hopper #1 in *Figure 6.5.14*. With this Hopper in position to attack the Queen, Black's reply is almost forced. On turn 18 Black pins the newly placed Hopper with the Mosquito. This drastically reduces the effectiveness of Black's most powerful bug! A moment ago, it had the power of an Ant and could go anywhere in the hive. Now it is relegated to the movement of a mere Hopper, doomed to this spot for the remainder of the game.

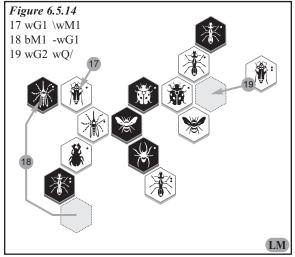
The second White Hopper immediately enters on turn 19 in a good offensive/defensive position, ready to attack the Black Queen and vacate a space next to the White Queen.

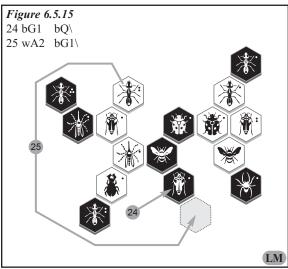
Now let's compare the first two Black Hoppers. Hopper #1 enters on turn 24 in *Figure 6.5.15*. Note that it is placed adjacent to the Black Queen and promptly pinned. It will never leave this spot!

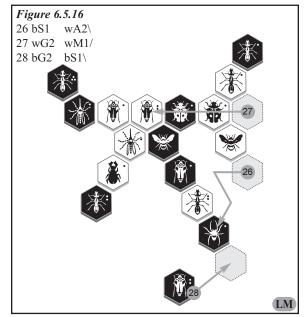
A short while later, Black Hopper #2 enters on turn 28 in *Figure 6.5.16*. Where is it going? It has no good attacking or defending purpose.

The end result was a victory for White.

Initial placement is important for all bugs, but vitally important for Spiders and Hoppers! There must be a plan for each of these bugs. Where is it going and what is it going to do? Place these bugs in position to fully accomplish their purpose.







6.5.4 – Pinning the Elbow

By placement rules, each new bug placed must be adjacent to a friendly bug. It may not touch any opposing bugs. In most cases this means that the bug just placed automatically pins another friendly bug. These next three sections cover some of the situations that must be considered when making placement decisions.

The first of these situations will be referred to as 'pinning the elbow.' The sample again comes from the game *U!HV-Sutured-ringersoll-2013-07-27-1636*. In *Figure 6.5.17* Black brings in Ant #2. White follows by placing Spider #2.

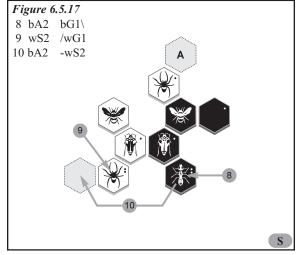
Black then pins the White Spider as shown. This, in turn, pins the White Hopper. Until this elbow pin is relieved, the defending Hopper cannot jump out and save the Queen. This weakness remains for the entire game. White never can force freedom for the defending Hopper.

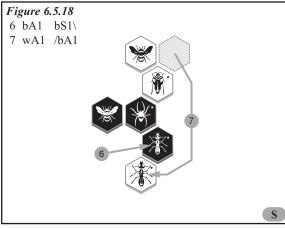
A potentially better placement for White Spider #2 would be space A. From this position, the newly placed spider threatens to pin Black Ant #1. If the Ant moves then the Spider would threaten to attack the Black Queen.

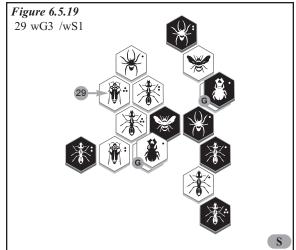
A second example comes from the game *U!HV-ringersoll-gierek-2012-02-04-1949*. *Figure 6.5.18* shows the placement of Black Ant #1, which is then pinned by White Ant #1. The Black spider, pinned in the elbow, never moves again.

In *Figure 6.5.19* we see the game as it draws to a conclusion with both the Black bugs still hopelessly pinned.

Be very careful about self pinning an elbow. The pinned bug may never be able to gain its freedom. An elbow pinned defender may be no defender at all!







6.5.5 – Placement on the Queen

When a new bug is placed adjacent to one's Queen, there exists the possibility that it will be pinned against the Queen. Not only is this bug now pinned and immobile, but worse yet, it fills one of the six spaces needed for one's opponent to win! If this is a Beetle or a Hopper, it may later be able to exit the spot. But if it is a Spider or an Ant, it may be stuck there long term, possibly even until the end of the game.

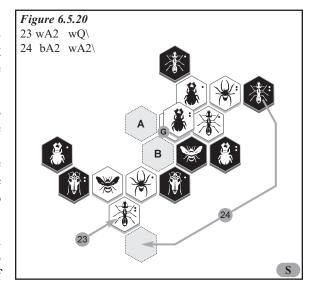
This is demonstrated in *Figure 6.5.20* from the game *U!HV-OlegT-ringersoll-2012-03-31-1858*. When White Ant #2 is brought into the game adjacent to the White Queen, Black jumps at the chance and pins the White Ant against the Queen.

Even after this series of moves it may seem that White is ahead. Comparing the situations of the two Queens we see that four spaces around the Black Queen are occupied as compared to only three around the White Queen. White already has a Beetle atop the hive and in position to cover the Black Queen. But the major difference, the one that leads to the Black victory, is the type of bugs adjacent the two Queens.

The two White bugs (Spider #1 and Ant #2) that are pinned against the Queen will never be able to escape. While the two Black bugs (Hopper #1 and Beetle #2) are both capable of escaping when necessary. If you review the entire game, you will see that neither of these two White bugs moves throughout the rest of the game.

A better placement for White Ant #2 would have been space A. Even though it places a block on space B, it allows the White Ant to enter the game without being pinned against the Queen.

You may be forced to let a bug be pinned against your Queen. But if at all possible don't let it happen. An Ant or Spider in this position may not be able to move for the remainder of the game! And if this is the case, it might cost you a victory!



6.5.6 – **Double Pin**

When your opponent has mobile bugs, particularly mobile Ants, it is very important that your bug placement does not allow the opportunity for the Double Pin.

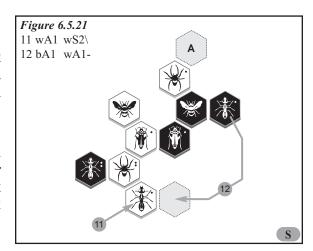
Remembering that one of the three keys to victory is strength, it is easy to see the danger of a double pin. By allowing one of your opponent's bugs to pin two of yours, you have given your opponent an edge in this vital area.

Look at *Figure 6.5.21*, another example from the game *U!HV-Sutured-ringersoll-2013-07-27-1636*. White Ant #1 is placed adjacent to the already pinned White Spider #2. Black takes advantage of the situation by pinning the newly placed Ant with Black Ant #1. This relieves Black Ant #2 to be used elsewhere while the two White bugs continue to be pinned.

There are better choices for the placement of White Ant #1; space A for example. While it is true that Black could still perform what looks like a double pin, there is a major difference! White Spider #1 is already attacking the Black Queen. It does not matter if it gets pinned. And also, Black Ant #2 would not be freed from its duty to pin White Spider #2.

The placement of the White Ant which allowed the double pin was just one small mistake that led to White's eventual defeat.

If other placements are available, don't place a new bug in the position to be immediately double pinned. Look for other, more promising placement options!



6.5.7 – Conclusion

In order to become proficient at playing this game, it is vital that one learns good bug placement skills. Learn when and where to place new bugs and your win percentage will climb.

This concludes the five chapters that make up Section 6 – Elementary Tactics. Study, practice, and perfect these five basic tactics and your win percentage will no doubt rise.

As you play, however, you will notice other more subtle tactics that arise. This brings us to the following section: Section 7 – Advanced Tactics.

In these seventeen chapters you will progress from beginner to novice to expert, and you will truly 'Play Hive Like a Champion.'

Chapter 7.1 – Counting Bugs

One of the three keys to victory is Strength. Are there enough bugs on either side to force a victory? Bug counting is most critical when on the defensive. One must continually ask, "Does my opponent have enough bugs to force a win?" If the answer is no, then there is a good chance that you can withstand the attack.

Of course when asking this question, you must examine three areas. The first is bugs currently in play: count bugs that are already attacking your Queen and bugs that are already in position to attack. Secondly, count bugs that are still in the opponent's reserve. How many bugs are in reserve and can these bugs be introduced to the hive in such a way that they can join the attack? And finally, are there any opposing bugs that are in play and not available to attack but currently placed in such a way that they could be brought into the attack?

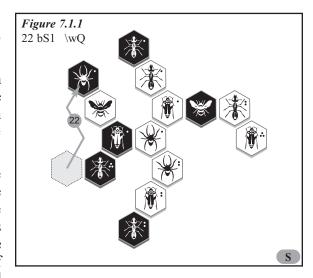
7.1.1 – Defensive Bug Counting

Since accurate bug counting is most critical on defense, this is where we will start. Having the first move, White typically is the aggressor in the opening stages. Let's examine a few games from Black's perspective and see how we can benefit from counting bugs.

To begin, we will consider *Figure 7.1.1*, from the game *HV-DEIBY-ringersoll-2011-06-12-1139*. It is White's turn to move. Should Black be concerned? Let's count bugs.

First, White has two bugs already attacking the Black Queen and a third (Hopper #3) in position to attack. In addition to the bugs already in play, White has one Ant and two Beetles in reserve. With four empty spaces to fill and four available bugs, it would seem that White has enough to win.

As Black, we need to consider the defensive options. Ants are the best defenders so let's look at them first. Of the three Black Ants in play, Ant #1 and Ant #2 are already in use pinning White bugs. Either of these two pinned White bugs could immediately attack the Black Queen if the pins were released. Ant #3, however, is available for defense. Also, if given enough time, a pin replacement (Section 6.1.2) could possibly be executed on either or both of the two Black Ants currently serving pin placement duty. All in all, Black is in a good defensive position.



A few moves on each side bring us to the position in *Figure 7.1.2*. Black has successfully pinned White Beetle #1 before it has had the opportunity to move in and attack the Black Queen. Now White has three spaces to fill and only the two bugs in reserve remaining. Black should, and in fact did, stop the attack by White.

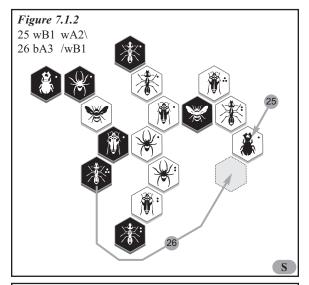
Our second example of good defensive bug counting is from the game *HV-Antin-ringersoll-2011-05-29-1110*. A quick bug count will show why Black shifted Spider #1 from attack to defense as illustrated in *Figure 7.1.3*.

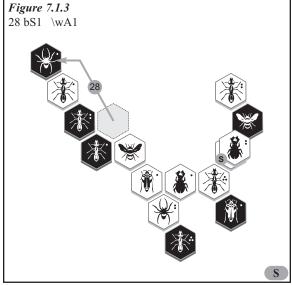
White Beetle #2 is in position to execute a Beetle cover (Chapter 6.2) on the Black Queen. The two bugs in reserve for White can then be placed immediately into attacking position. With the Beetle poised to move into attacking position, all White needs to force a victory is one more bug! When looking about the hive, Black realizes that the only real threat to be that final bug is White Ant #1. And the only hope to prevent this Ant from entering the fray is to pin it immediately. And that is what Black did.

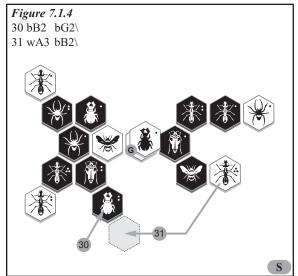
With two of the three White Ants pinned and five bugs in reserve, Black had no problem winning the game. Accurate bug counting by Black paid off with a victory.

One final example will wrap up this discussion. It is a very early game in the author's Hive® playing career. He is playing Black against his mentor, Eucalyx (*U!HV-Eucalyx-ringersoll-2010-08-22-1100*). Black has taken the initiative early and has a strong attack brewing. But unfortunately, he is also running out of bugs. He needs two bugs and has two bugs in reserve. The upcoming bug placements are critical! *Figure 7.1.4* shows the position as Black places his last Beetle on turn 30 and White proceeds to pin it on turn 31.

Black's bug count has now been reduced below what is needed to win. But relieving the pin on the Black Queen has given Black an alternate source for another bug. With Black Ant #2 pinned inside an elbow (Section 6.1.3 – The Pin – Releasing a Pin) the Black Queen can set it free.







In *Figure 7.1.5*, we see the Black Queen sliding into the elbow on turn 32. On turn 33, White counters by using Beetle #1 to place a block (Chapter 6.3). And then on turn 34, Black Beetle #1 climbs atop the White Queen. This move by Black is particularly threatening because it potentially allows a direct drop (Section 6.2.2) by Black's last bug.

As we continue in *Figure 7.1.6*, White slides the pin by Ant #1 to prevent the direct drop and Black moves to pin the White Ant. On turn 37, White places Beetle #2 to bring in another defender and Black follows by bringing in his last bug.

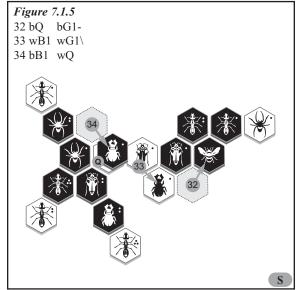
If counting bugs were all that there were to analyze a position, we would conclude that Black needs three bugs to win and has three bugs available. But that is not the case. We will continue the discussion of this game in Chapter 7.7 – Playing for a Draw. Even though White has pinned the Black Queen, has two Beetles and two Ants free, and has three bugs in reserve, this game ends in a draw.

When being attacked, keep track of your opponent's available force. Accurate bug counting shows the way to good defense and lets a good Hive® player know when to switch from defending to attacking.

7.1.2 – Offensive Bug Counting

Now let's examine bug counting from an offensive viewpoint. When on the attack, you must continually ask yourself a series of questions. First, do I currently have enough bugs in play to force a win? Second, how many bugs are in reserve and can these bugs be brought into play in such a way that they too join the attack? And finally, are there bugs that are currently in play but pinned or blocked and therefore unable to assist? Can these bugs be freed?

As an example, let's go back to the game *HV-DEIBY-ringersoll-2011-06-12-1139* in *Figure 7.1.2* (page 68) and count Black bugs. Black already has two bugs in attacking position. Four bugs are already in play and can be brought in to attack. Unfortunately, however, the three Black Ants are all holding crucial pins and therefore do not count. But Black has no problems because there are four bugs in reserve (one Beetle, one Spider, and two Hoppers).



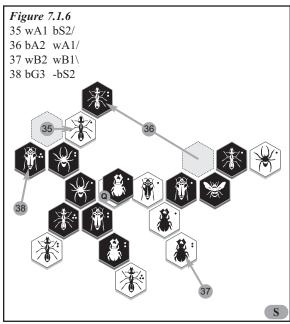
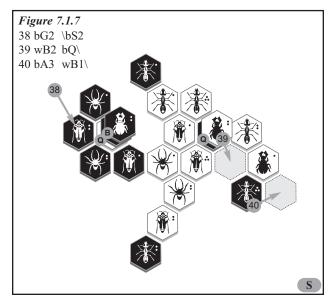


Figure 7.1.7 shows the situation a few moves later. Black has just brought in Hopper #2 and in a last ditch effort to free another bug, White has moved Beetle #2 into a fill position (Chapter 6.4), hoping to free Beetle #1. But it doesn't matter. Black can shift the pin by Ant #3 to keep White Beetle #1 under control or can just go for the all out attack.

Reexamining *Figure 7.1.3* (page 68) from the game *HV-Antin-ringersoll-2011-05-29-1110*, we can take our second offensive bug count. Black only has six bugs in play. That means that there are still five bugs in reserve. Those bugs are two Beetles, two Hoppers, and one Spider. With one Ant free and these five bugs ready to be brought in, Black has no problems in forcing a win.

White, too, recognized this and immediately switched from offense to defense. But with two of his three Ants pinned, White's defense was futile. Black won easily on turn 48.

Keeping an accurate bug count while attacking is very important; just as it is while defending.



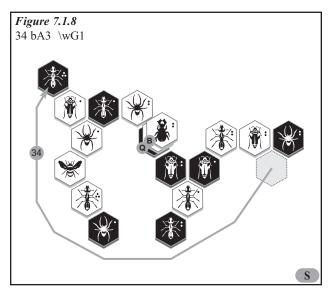
7.1.3 – Complex Bug Counting

In most cases, bug counting is not as cut and dried as in the previous examples. Each of those examples clearly had an attacker (White) and a defender (Black). Black first had to count bugs to determine if White's attack could be stopped. And then, after the attack was stopped, attention was turned to the Black bug count and the Black offense.

Generally speaking, however, bug counting is more complex than that as each of the following two examples will show. Bugs must be accurately counted on both sides.

For the first example, please refer to *Figure 7.1.8*, a game of standard Hive® (*U!HV-DrRaven-ringersoll-2011-01-19-0226*) between two good opponents. At first glance, White may seem to be in an excellent position because of the two Beetles atop the Black Queen. But let's count bugs and see what we discover.

Except for the two Beetles and one Hopper in reserve, all of White's bugs are pinned. Does White have enough bugs to win? No, there are four spaces to fill adjacent to the Black Queen. Counting the Hopper in reserve, there are



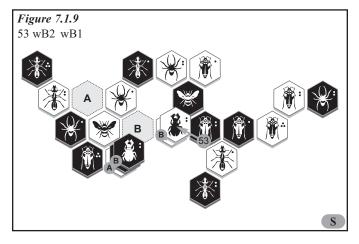
only three bugs to fill them. The only bugs that might be available to add to this total are Hopper #1 and Ant #1. But, unfortunately for White, both of these bugs are currently pinned. In addition, there are no potential ways to force an additional bug free. So, for all practical purposes, even though White is on the move, White cannot win.

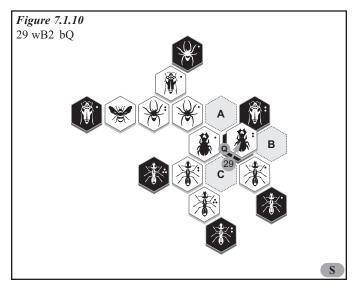
Now let's count bugs for Black. Black has three bugs in reserve, one Hopper and two Beetles. But with four spaces to fill, Black needs one more bug. Fortunately, Black has three bugs in position to attack the White Queen. These bugs are Spider #1, Ant #2, and Ant #3.

Black must play very carefully, however. Each of these additional bugs is currently being used to pin a bug that if released at the wrong time could result in victory being given to White.

A few turns for each side have passed and the game has progressed as shown in *Figure 7.1.9*. Black has successfully brought both Beetles into the game. Black may choose from either of two paths to gain victory. One path would take Beetle #2 to space A and then Beetle #1 would climb down into space B. This would take three moves by Black. The other path is quicker. Either Ant #2 or Ant #3 moves into space A and then Beetle #2 slips into space B. This path, the one actually chosen by Black, takes only two moves. Note that Black's timing is important because either Ant move releases an opposing White Ant which can immediately attack the Black Queen. But, White's attack falls one tempo short and Black wins.

One more example should suffice to drive home this concept. Take a look at *Figure 7.1.10* from another standard game without any optional bugs (*U!HV-guest-ringersoll-2011-01-28-2345*). White is on the attack with a Beetle covering the Black Queen and two Hoppers in reserve. At first glance it may seem that White's attack will succeed. There are three empty spaces to fill and three White bugs to fill them. But this is not the case. Black has strategically left Black Hopper #2 in an excellent defensive position. As soon as it has the necessity and opportunity to do so, the Black Hopper will hop out leaving White one bug short of victory.





On the other hand, let's examine Black's position. The White Queen is pinned with four empty spaces. Black has a Spider, two Beetles, and a Hopper in reserve, AND three mobile Ants. Counting available bugs shows that Black has more than enough force to gain the victory. And, in fact, Black won rather handily.

Figure 7.1.11 shows the position a few turns later. White has brought in Hopper #2 immediately next to the Black Queen. Then, on turn 32, Black Hopper #2 hopped out as shown. This had the dual advantages of clearing a space next to the Black Queen and replacing the pin on White Ant #3.

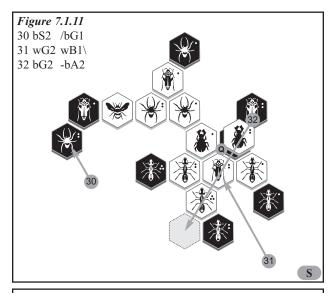
Then as soon as White Hopper #3 entered the game (turn 35), the newly freed Black Ant places the pin (turn 36), leading to the position in *Figure 7.1.12*. Black can easily finish the game by bringing in the third Hopper and the two Beetles while White mindlessly moves his Beetle back and forth. But Black elects to win with a quicker plan using the three Ants to fill the final three spaces to victory.

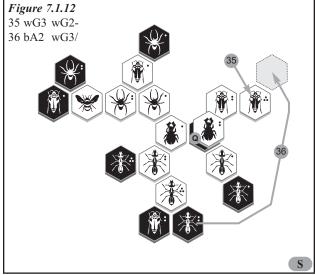
The final outcome will be discussed in Chapter 7.12 – Counting Tempo.

Situations that appear complex can quite often be easily analyzed by counting bugs. Make sure you are on the right side of the bug counts and victories will come to you in droves!

7.1.4 – **Conclusion**

Count bugs to help plan your game. Learn to accurately count bugs both offensively and defensively and your skill level and victory count will continue to climb.





Chapter 7.2 – Defending the Queen

The entire premise of the game Hive® centers on the Queen. A player must attack the opponent's Queen while at the same time defending one's own. Attacking comes naturally to most beginning players. Defense, on the other hand, must be learned. Let's examine five ways that one can defend the Queen.

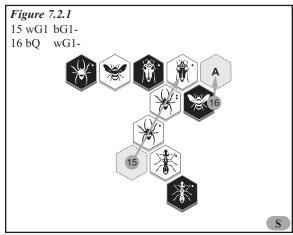
7.2.1 – Moving Out of Harm's Way

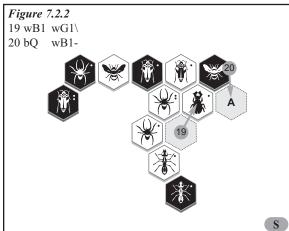
The easiest and most obvious defense is to move your Queen when she is attacked. Typically, you will move her toward the outer reaches of the hive. A Queen in contact with the hive on only one side will require five more bugs to surround her. If your opponent does not have five bugs available, this may guarantee that you do not lose. This may not, however, mean that you are assured of a victory. If you do not have a strong enough force at your disposal to force a victory (Chapter 7.1 – Counting Bugs), you may have to settle for a draw.

If your opponent has an available attacking force of at least five bugs that are able to reach your Queen, moving may not be the best defensive option. Later we will learn why keeping in contact with friendly, defending bugs is sometimes a better option.

In the game *HV-xenotime-ringersoll-2010-11-23-2326*, Black repeatedly moves the Queen toward the edge of the hive, each time reducing the force at White's disposal by leaving another bug pinned. White jumps in with Hopper #1 in *Figure 7.2.1* and it is immediately pinned as the Black Queen escapes.

Two turns later, as shown in *Figure 7.2.2*, White Beetle #1 approaches, and again, the Black Queen moves toward the outside of the hive, this time leaving the White Beetle pinned.

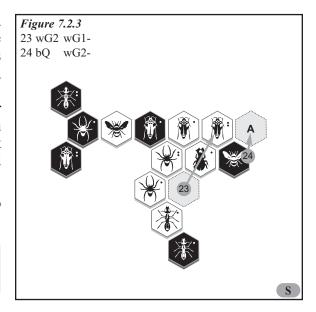




And finally, in *Figure 7.2.3*, another White bug is added to a string of already pinned bugs as Hopper #2 attacks and the Black Queen escapes. Note how each time White's force is reduced, it becomes easier for Black to defend. After turn 24, White needs five more bugs to surround the Black Queen. Of the bugs currently in play, only one of them is available for this task, the others are all pinned. With only four bugs in reserve, White barely has enough to do the job. But all Black will need to do is pin one more bug as it comes into play and it will be impossible for Black to lose!

Of course, Black's attack is so strong that it will never get to that point. Black won easily on turn 42.

Watch for opportunities for your Queen to escape and defending her will be much easier.

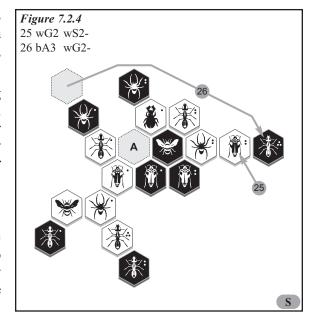


7.2.2 – Pin the Attackers

Another relatively obvious defense is to pin opposing bugs before they have the opportunity to attack your Queen. When you are able to pin more than one bug with just one of yours, you are effectively reducing your opponents attacking force.

You should also look for opportunities to pin a valuable bug like an Ant or Beetle with a less valuable bug like a Spider. Doing so leaves your own Ants and Beetles for other defensive maneuvers, or better yet, for attacking your opponent's Queen when the tide turns and you can counter attack.

In *Figure 7.2.4*, from the game of standard Hive® *HV-DrRaven-ringersoll-2011-01-02-0157*, note how White Hopper #2 was just placed from the reserve in such a way to threaten victory by hopping into space A. Black responded by moving Black Ant #3 to pin the White Hopper and thwart the White attack.

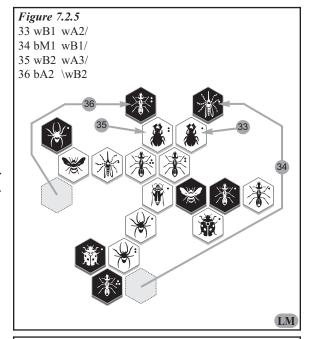


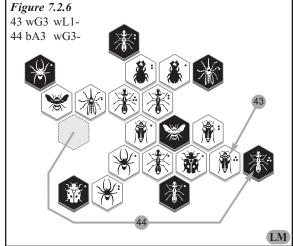
In the previous example, the Queen defense occurred late in the attack. Pinning the attacker can, and in most cases will, occur long before the final threat is made. Follow along with the next game (*U!HV-bird-ringersoll-2010-12-11-1848*) as Black defends with a series of pins.

In *Figure 7.2.5* White brings in both White Beetles hoping to get one of them into attacking position. Black has other plans, however, as each Beetle gets pinned immediately upon its arrival. First the Black Mosquito pins White Beetle #1 and then Black Ant #2 pins White Beetle #2. The availability of the Black bugs to execute these pins shows the importance of mobility! In this game Black is in control of the outside of the hive and is able to defend.

The next figure shows a few turns later as the last White bug is introduced into the game. White Hopper #3 is promptly pinned by Black Ant #3 as shown in *Figure 7.2.6*. White is out of bugs and the Black Queen has been successfully defended. Black's counter attack will now begin and Black will win easily.

Keep mobile and pin the attackers to defend your Queen.





7.2.3 – Place a Block

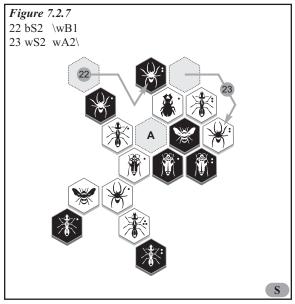
A very effective tactic to protect against your opponent's Queen, Ants, and Spiders is a block (Chapter 6.3). When you can move a bug and create a gate formation that is blocking access to a space adjacent to your Queen, you have blocked that space from your opponent's Queen, Ants, and Spiders. Only Hoppers, Beetles, Ladybugs, and Mosquitoes can reach the space behind the gate.

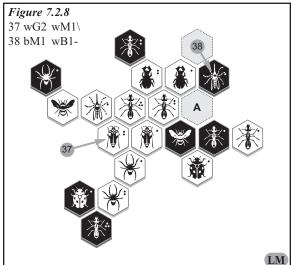
In *Figure 7.2.7*, from the game *HV-DrRaven-ringersoll-2011-01-02-0157*, Black Spider #2 moves as indicated, forming a gate between the two Black Spiders. This gate blocks access to space A. In addition, if White had elected to move Beetle #1 atop the Black Queen, the space vacated by the White Beetle is also protected by the gate. In the actual game, White chose to move Spider #2 and fill the fifth space around the Black Queen. You might recognize this position as one leading up to the discussion in Section 7.2.2 – Pin the Attackers.

Also a continuation from the previous section is *Figure 7.2.8*, from the game *U!HV-bird-ringersoll-2010-12-11-1848*. As White brings in Hopper #2, Black makes a subtle but very important shift in the positioning of the Black Mosquito. By sliding over one space, the Black Mosquito has now placed a block protecting space A. White Ant #1 can no longer gain access to this space. This is very important because White Hopper #2 is now posed to either pin Black Ant #1 if White Ant #1 were to move or to replace Black Ant #1 if it were to move away. In either case, White Hopper #2 would be able to join the attack on the Black Queen.

But as it is, the well placed block not only prevents the attack by White Ant #1 but, in effect, blunts the effectiveness of White Hopper #2.

Learn to use a block to defend your Queen and she will be happy and safe.





7.2.4 – Adjacent Friendly Defenders

It is virtually impossible to keep all enemy bugs away from your Queen. Inevitably, your opponent will move bugs into attacking position adjacent to your Queen. If, however, there are friendly bugs adjacent to your Queen, these bugs can move away, vacating one of the six spaces required to surround your Queen. If she is not otherwise pinned, she may actually be able to escape.

Hoppers, Beetles, Ladybugs, and Mosquitoes are the bugs of choice to fill this role. Even if your Queen is pinned and unable to move, these bugs (if they are not covered by a Beetle or prohibited from moving by the One Hive rule) can vacate the space by moving out. This may also free these bugs for other tasks and this vacated space may be very difficult for an attacking bug to occupy, if it protected by a block. Or better yet, your Queen may now be free to escape.

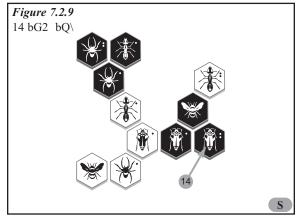
Due to the Freedom to Move rule, Ants and Spiders are less valuable defenders in this type of situation because it is too easy to block these bugs and render them unable to move away.

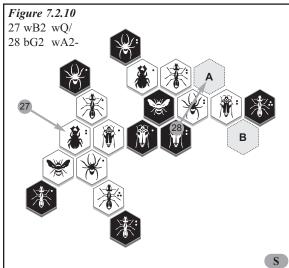
Please take a look at *Figure 7.2.9* and *Figure 7.2.10* (*HV-DrRaven-ringersoll-2011-01-02-0157*). The first figure shows turn 14 when Black places Hopper #2 in an excellent defensive position adjacent to the Black Queen. This formation with two friendly Hoppers adjacent to each other and adjacent to the Queen typically creates an easily defended formation.

The second figure shows some time later when Black Hopper #2 hops out and vacates a second space next to the Black Queen. By vacating this second space, White can no longer threaten to win in just one move. This relieves much of the immediate pressure that White could apply.

Also note that after hopping to space A, the Black Hopper is also in position to perform a pin replacement (Section 6.1.2) on White Hopper #2. By moving to space B, the pin replacement is performed and Black Ant #3 will be free to be used in attack or defense elsewhere in the hive.

Adjacent friendly defenders are the cornerstone to a successful Queen defense. Learn how to use them and your win percentage will rise!





7.2.5 – The Beetle Defense

The Beetle Cover discussed in Chapter 6.2 is a very strong offensive tactic, one that must be defended whenever possible. An excellent defense to use against approaching enemy Beetles is the Beetle Defense.

Placing a friendly Beetle atop the hive and in close proximity to your Queen is the key. When an opposing Beetle approaches, your Beetle can climb up, cover the enemy Beetle, and stop its attack.

A warning, however, is appropriate. Essentially, your Beetle is now permanently relegated to this position. Unless the position opens up and the covered Beetle is prohibited from moving, it will be in position to immediately cover your Beetle if it should move. Depending on the situation, it may then be in position to attack your Queen.

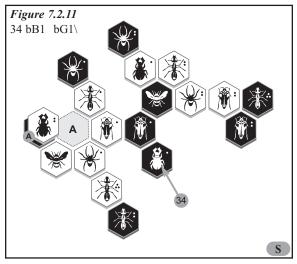
Continuing with *HV-DrRaven-ringersoll-2011-01-02-0157* from the previous paragraphs, let's look at *Figure 7.2.11*. White needs to fill two spaces to win. He has one Beetle atop the hive and one Hopper in reserve, so he has the necessary force to do this. Let's examine the possibilities.

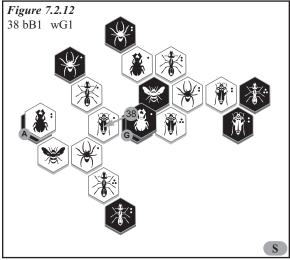
With an Ant free (Black Ant #3 freed by the Pin Replacement by Hopper #2), White must be very careful in placing the White Hopper from the reserve. Fortunately for White, this Hopper can be place into the pocket (space A) that will allow it to attack the Black Queen. In fact, from space A, it is impossible to stop the Hopper!

So Black must concentrate on stopping White Beetle #2. This is done with a Beetle defense.

The next figure (*Figure 7.2.12*) shows the situation four moves later as Black moves Beetle #1 into position between the White Beetle and the final space required for White to win. As you can see, the Black Beetle is properly positioned to defend against the opposing Beetle. If the White Beetle tries to approach the Black Queen, the Black Beetle will cover it. And with no more bugs in reserve, White will not be able to force a victory.

This game has demonstrated an excellent example of a properly applied Beetle defense.





The next game (*U!HV-ringersoll-cesc-2010-09-18-1355*) shows how a properly placed Beetle can not only defend as in the previous example, but can climb out to vacate a space adjacent to the friendly Queen.

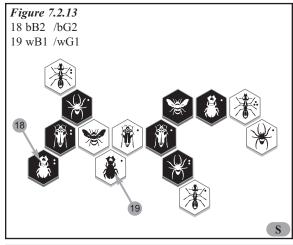
In *Figure 7.2.13* Black has just placed Beetle #2 in position to attack the White Queen. White responded with a Beetle of his own, placed into a good defensive position. Now if the Black Beetle moves in and covers the White Queen, it will in turn be covered by the White Beetle. This would negate much of the advantage created by the Beetle Cover.

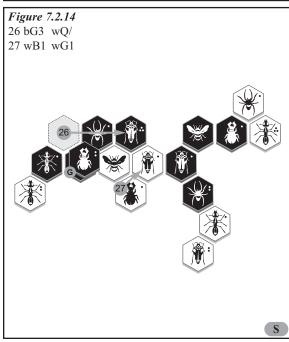
As the game progressed, Black continued the assault. In *Figure 7.2.14* we see Black threatening to win. But the White Beetle climbs up and out, vacating another space adjacent to the White Queen, and at the same time providing an escape route for the White Queen. Black must spend a tempo to keep the White Queen from escaping and in so doing, White Ant #1 will be freed by a pin replacement by Hopper #2.

With two Ants free to move, White will have no problem stopping the two Ants in Black's reserve and denying Black a victory. Then, with three bugs in reserve, all three Ants mobile, and a Beetle atop the hive, White will have no problem winning the game.

Here we have another example of a good defense; in this case a defense centered on the Beetle Defense.

The best defense against an approaching enemy Beetle is a nearby friendly Beetle. Keep your eyes open to the opportunities for this defense and your Queen will continue to be well protected and safe.





7.2.6 – Conclusion

To 'Play Hive" Like a Champion' one must study, learn, and apply all the aspects of defending the Queen.

Chapter 7.3 – Controlling Bug Placement

Games can be won or lost based on the placement, or misplacement, of just one bug! Learning to effectively place your bugs is vitally important. But equally important can be learning how and when to control the bug placement of your opponent.

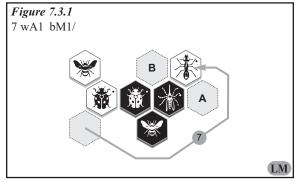
7.3.1 - In the Opening

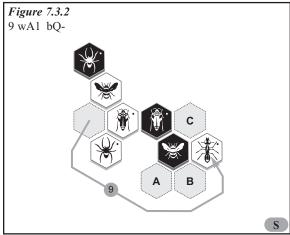
Controlling your opponent's bug placement and the benefits derived there from begin in the opening few moves as demonstrated in the opening situation shown in *Figure 7.3.1*. This is a very common position from a popular Ladybug/Mosquito opening for Black.

White has elected to pin the Black Mosquito and makes the proper choice as shown. It is potentially a mistake to place the pin in space A. Placing the pin as shown denies Black space B for new bug placement, forcing Black to place the next bug and self pin the Black Queen. If, however, the pin is placed in space A, then Black can bring the next bug into space B, leaving the Queen free from the self pin and still able to maneuver if necessary.

Another commonly seen position is demonstrated in *Figure 7.3.2*. Here White pins the Black Queen and at the same time denies Black new bug placement in space C. This is important because space C is an excellent spot for a defensive Beetle or Hopper in standard Hive® or a Ladybug or Mosquito if playing with the expansion bugs. Please refer to Section 7.2.4 – Defending the Queen – Adjacent Friendly Defenders for more information on this subject.

In this latter case, care must be taken because if a bug does move into space C before space A is occupied, then the Black Queen may be free to escape. This is a decision that an experienced Hive® player must make. Does one gain the control over the opponent's bug placement at the risk of a Queen escape? Or does one forego the control of bug placement and ensure the pin on the opponent's Queen? Again, we have another example of the depth of the game that makes it so enjoyable to play!





These two examples repeat in many games but here are the two specific games that the above examples were taken from: T!HV-fumanchu-ringersoll-2011-07-02-1918 and HV-lukiejro-ringersoll-2010-07-29-2049.

Start looking to control your opponent's new bug placement right from the beginning and undoubtedly your results will improve.

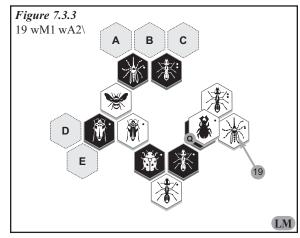
7.3.2 – Leads to Double Pin

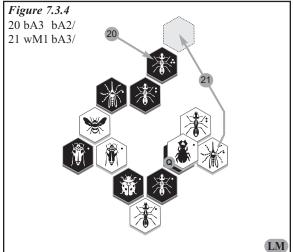
The player who can pin two opposing bugs with just one of his own has created a net gain in strength, one of the three keys to winning. Each time this is done, the player has taken another step closer to a successful ending. Watch how a Hive® champion controls his opponent's bug placement in the game *HV-EddyMarlo-peter20-2011-05-23-0417*.

Starting with *Figure 7.3.3*, notice how White uses the Beetle Cover of the Black Queen as an effective springboard to bring in new bugs. On turn 19 White brings in the Mosquito adjacent to an already played Ant in order to make sure that the Mosquito has the Ant movement ability right from its initial entry into the game. Black is already limited to just five choices for new bug placement (the five spaces identified by letter in this figure). Each of these spaces allows an immediate double pin by White.

In *Figure 7.3.4* Black makes a less than optimal choice for Ant #3 and White pins with the Mosquito.

Allowing this triple pin of the Mosquito, Ant #2, and Ant #3 was a serious mistake by Black. With just one bug, White has rendered immobile and virtually useless three of the most powerful Black bugs!

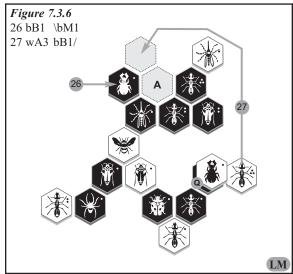




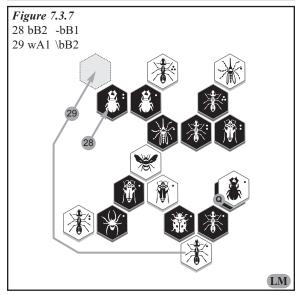
The next Black bug coming into play is Spider #1, brought in on turn 22 as shown in *Figure 7.3.5*. Again, this new Black bug is instantly pinned, this time by White Ant #2. Take notice of how space A is left open for new Black bug placement. But if it is used for a new bug, White just shifts the pin from a double pin to a triple pin. If, however, White had pinned the Spider in space B, then a new Black bug could be placed in space C without the danger of the triple pin.

Figure 7.3.5
22 bS1 /bG1
23 wA2 -bS1

Figure 7.3.6 shows the position two turns later after Black has brought in Hopper #2 and White has added Ant #3 to the game. Turn 26 in this figure shows Black Beetle #1's initial placement and the subsequent pin by White Ant #3. Again, notice how White continues to control the spaces available for Black bug placement. This time it is space A, inside the pocket, that is controlled. This space is important because a bug brought into space A will free Black Ant #2.



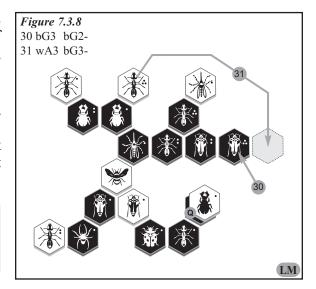
The next Black bug to enter the game is Beetle #2. Black chooses one of the three available spaces as shown in *Figure 7.3.7*. And, as expected, White immediately responds with a pin by Ant #1. The placement and subsequent pin of Black Beetle #2 also has the added effect of releasing the need for the pin of Black Beetle #1 by White Ant #3.



Black Hopper #3 is brought into play on turn 30. And, as expected, White Ant #3, freed by the previous series of moves, is immediately used to pin it. These moves are shown in *Figure 7.3.8*.

Black has no mobile bugs and only one bug in reserve, a Spider. White, on the other hand, has three Ants and a Mosquito mobile, a Beetle atop the hive covering the Black Queen, and six (!) bugs in reserve. The White attack when it begins shortly will be unstoppable and quick!

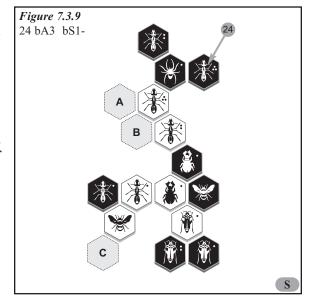
Force your opponent into positions where you can place double and triple pins, they usually lead to winning positions.



7.3.3 – Leads to a Shutout

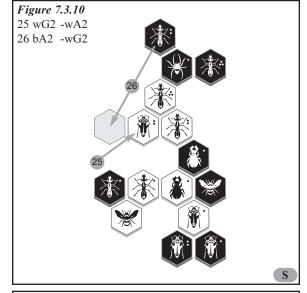
When properly executed, the control of your opponent's bug placement can easily lead to a Shutout (Chapter 7.5) and then on to a relatively easy win. A good example of this comes from the game *U!HV-weronika-ringersoll-2010-12-04-2229*.

In *Figure 7.3.9* we see Black bringing in Ant #3. Note how all three of Black's Ants are on the outside of the hive and mobile. This again highlights the importance of mobility in a successful Hive® game. Note also the limited mobility of White (only the White Queen can move) and how few spots there are in which White can bring in a new bug (only three: spaces A, B, and C).



White brings in Hopper #2 into space B. Black's reply, as depicted in *Figure 7.3.10*, is to pin with Ant #2.

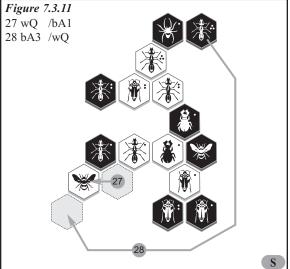
An instructive side point is demonstrated here. Typically, one of the early goals in the game of Hive® is the immobilization of the opposing Queen. In most cases this is accomplished by a well placed pin. Here, however, Black is ignoring the White Queen and instead concentrating on the other White bugs. Remembering the lessons taught in Chapter 7.1 – Counting Bugs, a good player will sometimes choose to follow this example in order to reduce the forces available to the opponent.



As depicted in *Figure 7.3.11*, the White Queen moves on turn 27 and when Black pins with Ant #3, the shutout has been put in place. All of White's bugs have been rendered immobile and even though White has four bugs in reserve, there is no place to put them.

Now, finally, with the White Queen isolated and pinned, Black has no problem bringing in the last three bugs and winning in just a few more moves.

The shutout is a powerful tactic which is, in many cases, brought on by one player controlling the other player's new bug placement. Be that player and you can control your destiny to 'Play Hive® Like a Champion' and win!



7.3.4 – Used on Defense

As we have seen, an important key to controlling your opponent's bug placement is controlling the outside of the hive. Control the outside of the hive and you can dictate when and where new bugs are introduced. Nowhere is this more vitally important than when on the defense against a concerted attack. Watch the game *HV-BlackMagic-ringersoll-2010-10-30-2103* as Black thwarts the White attack with excellent bug placement control.

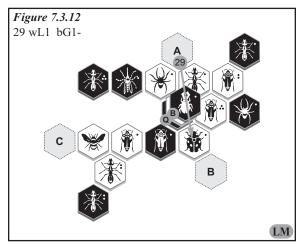
In *Figure 7.3.12* we see the White Ladybug filling the fifth space next to the Black Queen. Only one more bug is needed and White will win.

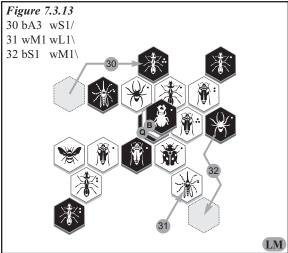
There are four bugs still in reserve for White: a Mosquito, an Ant, a Beetle, and a Spider. With a block (Chapter 6.3 – The Block) placed to protect the sixth space from both the Ant and the Spider, the battle will pivot around the Mosquito and the Beetle. Notice how Black has limited White's new bug placement to only three spaces, labeled A, B, and C. Not content, however, Black moves Ant #3 as depicted in *Figure 7.3.13* in order to limit a newly placed White bug's access to the critical winning space.

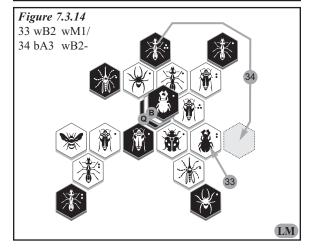
White brings in the Mosquito on turn 31 and then the Beetle on turn 33, as shown in *Figure 7.3.14*. But each time Black has a counter. First, Black Spider #1 pins the White Mosquito and then Black Ant #3 does the same to White Beetle #2.

With the immediate threat from Black stopped, White now goes on the offensive. This game will be discussed again in Chapter 7.4 – Counter Attack.

This game has provided an excellent example of how superior mobility and the control of the outside of the hive allow White to control Black's bug placement and secure a well earned victory.

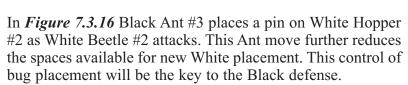


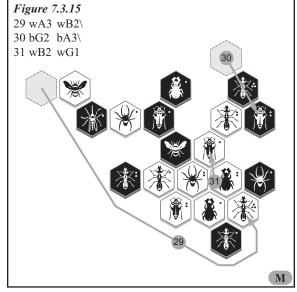




The same theme can be seen in the game *U!HV-isearch12-ringersoll-2010-09-19-0157*: control the outside of the hive and control the opponent's bug placement.

In *Figure 7.3.15* White is executing an Ant fill (Chapter 6.4 – The Fill) to release one of the two Beetles which will move in and continue the attack on the Black Queen. This Beetle will occupy the critical fifth space around the Queen, leaving only one more space to secure victory. Meanwhile, Black continues with the pin replacement (Section 6.1.2), freeing Ant #3.





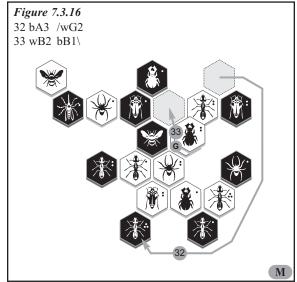


Figure 7.3.17 shows as Black covers White Beetle #2 and now Black's defense is completely in place. White has two excellent attacking bugs in reserve. One is the third and final Hopper and the other is the ever powerful Mosquito. The problem, however, is that there are only three spaces available to place new bugs. These are the spaces labeled A, B, and C in this figure.

The final figure (*Figure 7.3.18*), shows as the last White bug enters the game and promptly get pinned by Black Ant #1.

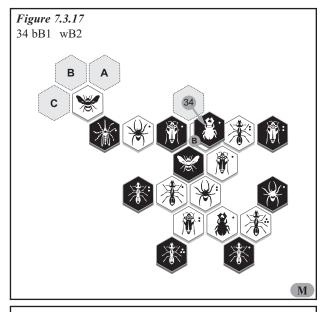
With no White threats to worry about, a Beetle in reserve, and complete control of the outside of the hive, Black had no problems. Black began an unstoppable counter attack and won on turn 59.

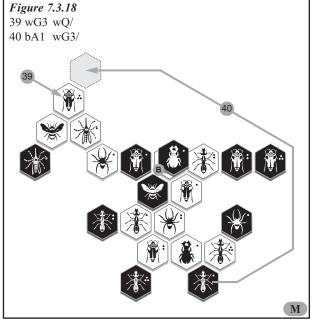
Would you like to become a master defender? If you do, then you must learn how to control your opponent's bug placement.

7.3.5 – Conclusion

One of the most important skills for any new Hive® player is the ability to control one's opponent's new bug placement. From the opening, through the midgame, and continuing into the endgame this skill pays dividends over and over.

Learn how to control the outside of the hive and control your opponent and you will win, win, win.





Chapter 7.4 – Counter Attack

In the course of most games of Hive® one player is typically on the attack with the other player defending. Usually, due to the advantage of first move, White is the attacker with Black defending. If the defender is successful and withstands the initial attack, there comes a critical time in the game where the opportunity for a shift of momentum occurs. Knowing when and how to switch from defense to offense is the sign of a good Hive® player.

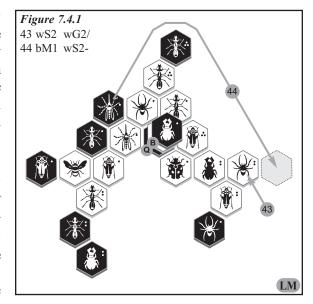
A successful counter attack typically hinges on one of the three keys to victory mentioned early on in Section 5.1 – Strategy in the Hive – Three Keys to Victory. In order to counter attack and win, the defender must maintain enough *Strength* in reserve to insure that the counter attack will be strong enough, and/or maintain enough *Mobility* to bring enough bugs into the attack, and/or have the *Tempo* to win the race to the end. Each of these will now be considered individually.

7.4.1 – Counter Attack with Strength

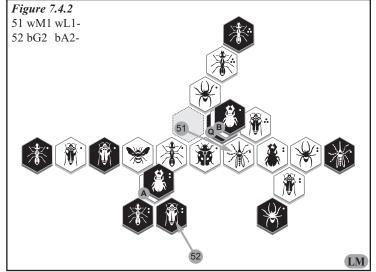
When a player on the defense is successful in completely stopping the opponent's attack, it is only natural that the defender begins an attack of his own. In order to successfully counter attack and win, the defender must maintain enough *Strength* in reserve to insure that the counter attack will be strong enough to deliver the win. The next two examples will show successful counter attacks brought about by good defense, followed by bugs brought in from the reserve.

Example number one is *HV-BlackMagic-ringersoll-2010-10-30-2103*, which was discussed earlier in Chapter 7.3 – Controlling Bug Placement. The game picks up in *Figure 7.4.1* with the placement and pin of White's final bug.

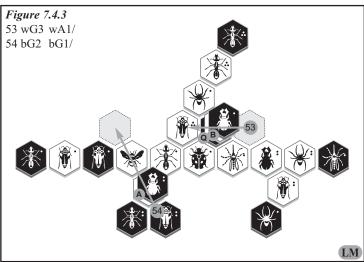
Black has defended well and is now in position to begin the counter attack. With four bugs in reserve Black has more force than necessary to bring in the victory. Care must be taken, however, because with just one vacant space next to the Black Queen, one wrong move and White can easily win.



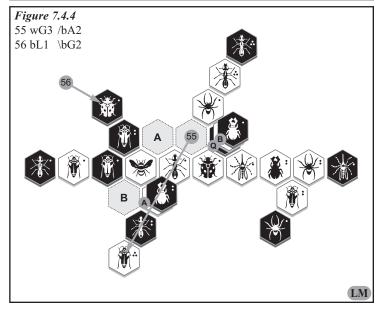
White's movement options are limited. None of White's options offer a chance to free an additional bug for the final attack. *Figure 7.4.2* shows the position a few moves later as Black Hopper #2 enters the game.



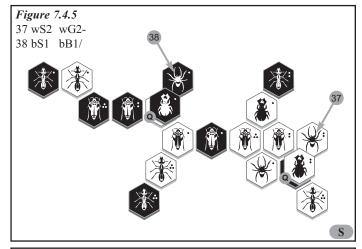
The newly arrived Black Hopper attacks on turn 54 as depicted in *Figure 7.4.3*.



And then, in *Figure 7.4.4*, the Black Ladybug enters. With no defense available, White will continue to make meaningless moves while the Black Ladybug occupies space A followed by any of a group of Black bugs winning by moving into space B.

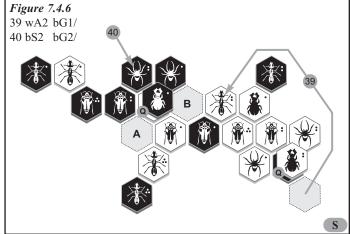


The same theme appears in the game *U!HV-weronika-ringersoll-2010-12-04-2247* where, in *Figure 7.4.5*, the final White bug (Spider #2) has just been placed. Black brings in Spider #1 as shown and with two more bugs in reserve, Black has no problem winning.



White's helpless attempt to defend and the entry of Black Spider #2 are shown in *Figure 7.4.6*. Black could easily bring in the second Beetle from the reserve and win with the two Beetles but quicker is one of the Black Ants into space A followed by Black Beetle #1 into space B.

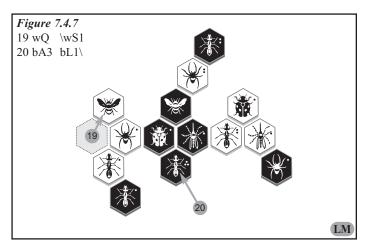
Whenever possible, when defending, keep bugs in reserve for the counter attack. Wins will follow as sure as spring follows winter.

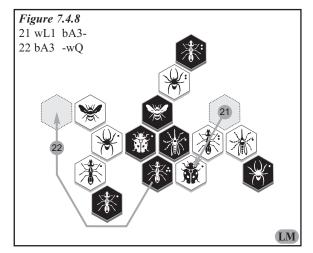


7.4.2 – Counter Attack with Mobility

A successful counter attack can also be based around superior *Mobility*. Watch in the game *U!HV-bird-ringersoll-2010-12-12-2109* as Black exploits superior mobility and wins the game.

Notice the advantage in mobility that Black has established in *Figure 7.4.7*. Black has just brought in Ant #3 and now has three mobile Ants. The only bugs mobile for White, on the other hand, are the Ladybug and the Queen. Black will soon exploit this significant difference in mobility!





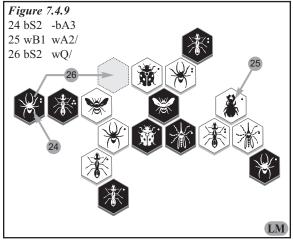
When the White Ladybug moves into position to attack, Black Ant #3 starts the counter attack with a pin placed on the White Queen (*Figure 7.4.8*).

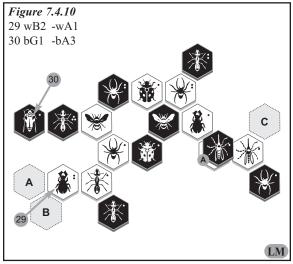
With the White Queen now immobilized, the Black bugs begin to enter the game and attack. Black Spider #2 enters on turn 24 and attacks on turn 26 (*Figure 7.4.9*).

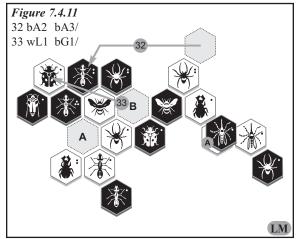
When Black Hopper #1 enters on turn 30 (*Figure 7.4.10*), the game is virtually over. Due to a serious lack of mobility, there are no White bugs in position to defend against the Hopper's attack. It is interesting to note that the only placements available for the White Ant in reserve are spaces A, B, and C. If White brings in Ant #3, Black has bugs available to immediately pin! Again, this shows the superiority of Black's mobility.

The game finally comes to a conclusion as shown in *Figure 7.4.11*. Black attacks with Ant #2 on turn 32 and nothing can stop Hopper #1 from going into space B and when that occurs, the Black Ladybug is now free to finish the game by jumping into space A.

Stay mobile on defense and watch for the opening to turn your superior mobility into a successful counter attack.







7.4.3 – Counter Attack with Tempo

The third key to victory is *Tempo* and is exemplified in a timed counter attack.

A good example of this is *HV-Desire-ringersoll-2010-08-17-2054*. As this game is reviewed, notice how Black ignores White's attack plan and counter attacks to victory.

White's chance for victory centers around space A in *Figure 7.4.12*. The plan is to execute a 2-for-1 fill (Section 6.4.3) by moving the White Mosquito into the pocket formed around this space. This will free both White Hopper #2 and White Hopper #3. White Hopper #2 will jump into space D and free White Beetle #2. Then White Hopper #3 will be threatening to jump into space B and White Beetle #2 will be threatening to move into space C. Given time, White will execute this plan and win. But with a careful counting of tempo, Black realizes that a victory is available with a timed counter attack starting with a Beetle cover of the White Queen on turn 38.

White continues the march of the White Mosquito toward space A in *Figure 7.4.13*. Black meanwhile is exploiting the Beetle Cover. Watch how the Beetle Cover allows three consecutive new bug placements directly into attacking position, starting with the second Black Beetle on turn 40.

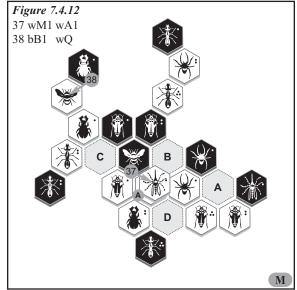
With the 2-for-1 fill successfully completed on turn 41, White Hopper #3 begins the execution of the White assault in *Figure 7.4.14* (page 94). Unfortunately, Black's timed counter attack wins the day.

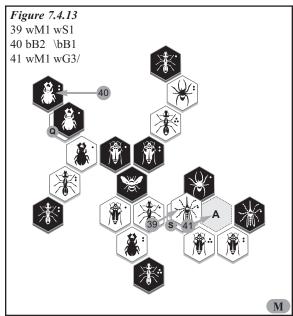
Looking at *Figure 7.4.15* (page 94), a quick count shows that White wins by one tempo!

Black's count is three. Hopper #3 comes in from the reserve, being placed in space A. Black Ant #3 moves into space C and then Black Ant #1 or Beetle #1 moves into space B.

White's count is also three. White Hopper #3 hops into space E and White Beetle #2 takes two moves to get into space D.

With the counts equal, the player with the move has a one tempo advantage. In this case, Black wins.





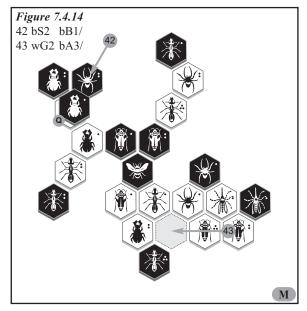
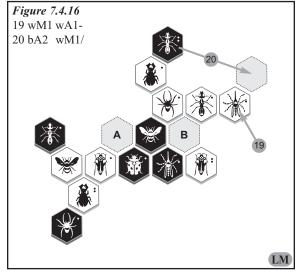


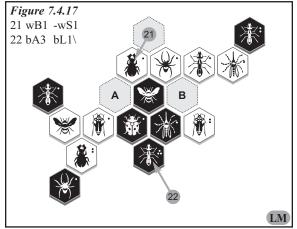
Figure 7.4.15
Black to move

The second example of a timed counter attack comes from *HV-Eucalyx-ringersoll-2011-03-26-1103* between two Hive® Masters. In this game, Black starts the counter attack with an unexpected defensive move, releasing a pin on a Beetle in order to place a double pin on an Ant-Mosquito string. Follow the counter attack starting with *Figure 7.4.16*.

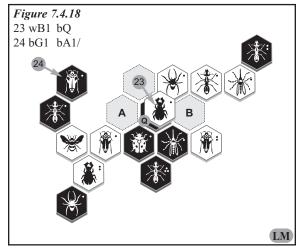
The White Mosquito enters the game on turn 19 and Black takes the opportunity to place the previously mentioned double pin. Even though this releases White Beetle #1 to move into place and execute a cover on the Black Queen, this maneuver leads to the timed counter attack and a win for Black. One of the keys to the upcoming counter attack is the excellent defensive placement of the Black Ladybug and Black Mosquito. Note that when White attacks into either space A or space B, one of the defending bugs will be released. And in either case, the defending bug can immediately switch roles and attack the White Queen!

While White moves in and executes the cover with Beetle #1, Black brings in additional attackers. First Black Ant #3 enters on turn 22 in *Figure 7.4.17*.





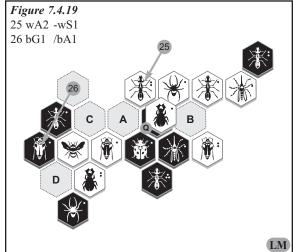
And then Hopper #1 comes in as depicted in *Figure 7.4.18*.



Even though the cover allows White Ant #2 to direct drop adjacent to the Black Queen on turn 25, the game is lost for White. When examining *Figure 7.4.19*, White's dire situation is easy to see. Black only needs to fill two spaces, C and D, has two mobile Ants, plenty of bugs in reserve, and an excellent defensive position around the Black Queen.

White tried in vain to defend, but Black won easily in just six more moves.

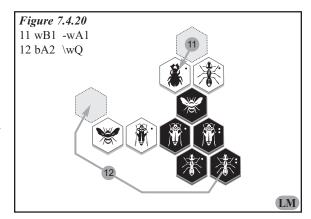
A good Hive® player is constantly on the lookout for opportunities to counter attack. With accurate counting of tempo, wins are available with the timed counter attack.



7.4.4 – Counter Attack Too Early

There is a danger however. Counter attack too early and you may lose! Watch the game *HV-guest-ringersoll-2010-12-07-1154* in which the author, as Black, attacks too early, and White, Eucalyx playing incognito ©, wins in the end.

With only a few bugs already brought into the hive, White Beetle #1 advances toward the Black Queen on turn 11 and a possible cover. Rather than defending, Black counter attacks, first with Ant #2 as shown in *Figure 7.4.20* and then Hopper #2 as depicted in *Figure 7.4.21* (page 96).



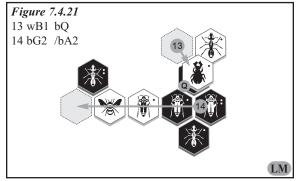
White quickly shows the shortcomings in Black's decision. *Figure 7.4.22* shows as each side brings in two more bugs and White gains a valuable tempo with each bug. Both of the White Spiders (turns 15 and 17) enter the game in attacking position. Meanwhile the Black Mosquito and Black Ant #3 enter the game but not in attacking position. Each of the Black bugs needs another move to attack the White Queen.

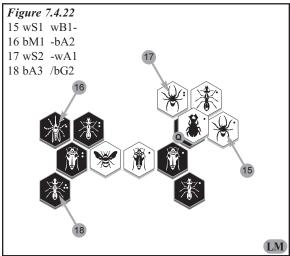
When White brings in Hopper #2 as shown in *Figure 7.4.23*, Black realizes the mistake and switches to defense. But it is too late, with all three Ants and a Mosquito in the game and available for defense, Black was able to extend the game for twelve more turns, but White won easily in the end.

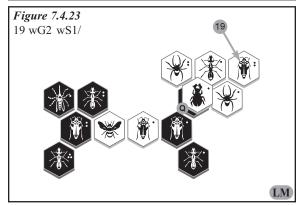
In addition to highlighting the power of the cover, this game teaches a valuable lesson against the dangers of counter attacking too early!

7.4.5 – Conclusion

A master Hive® player knows the value of a well planned counter attack. Watch for opportunities to counter attack using an advantage in Strength, Mobility, or Tempo and victories will pile up.







Chapter 7.5 – The Shutout

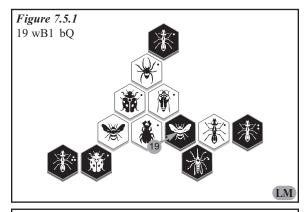
Mobility, one of the three keys to victory (Section 5.1 – Strategy in the Hive – Three Keys to Victory) is critical in the game of Hive. Decreased mobility usually results in a lessened chance of victory. The Shutout occurs when this decrease in mobility has been taken to the extreme and one player can no longer make any legal moves. When this occurs, defeat is almost inevitable for the player who cannot move.

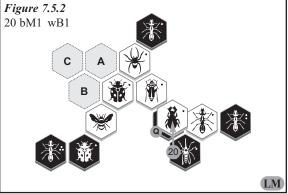
7.5.1 – Complete Shutout

Look at the series of moves depicted in *Figure 7.5.1* through *Figure 7.5.5*. This game with both Mosquito and Ladybug (*U!HV-bird-ringersoll-2011-01-08-1517*) is between a relatively new Hive® player playing White and the author playing Black. *Figure 7.5.1* depicts turn 19 by White. Not realizing the tenuous position that he is in, White moves Beetle #1 atop the Black Queen.

Black immediately responds by covering the White Beetle with the Black Mosquito (*Figure 7.5.2*). Now all the White bugs in play are either pinned or covered and White must place a new bug. Even though White has seven bugs in reserve, only spaces A and B are available for placement. No matter which space is chosen for the new bug, Black moves Ant #3 to space C. This not only pins the newly placed bug, but denies White any additional space to bring in a new bug.

Figure 7.5.3 shows this series of moves, leaving White on the move, but with no legal move or placement. Black then brings bugs into the game while White can do nothing but sit, watch, and pass.





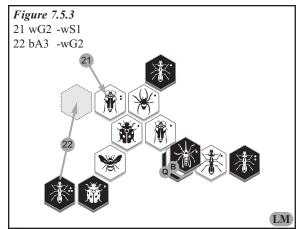


Figure 7.5.4 shows the position as Black Beetle #2 prepares for the 'coup de grace.' Realizing the inevitability of defeat, White falls on his own sword and finishes the game by hopping into the final space himself.

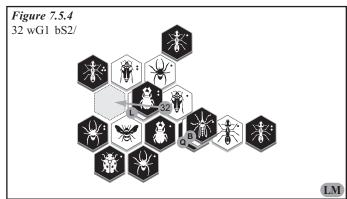
Let's now go back a few moves and look at the position as it existed in Figure 7.5.5. Black has executed the shutout and with White unable to move or place a new bug, Black has brought in both Beetles and moved each of them into attacking position atop the White Queen. Black must now carefully fill the spaces adjacent to the White Queen in the proper order. Spaces A and B should be the first two spaces filled. They can be filled by bugs coming in from the reserve and can safely be done in either order. But care must now be taken before filling space C or space D. The reason is that as soon as either of these spaces is filled, the White Ladybug can move. (It is interesting to note that when space D is filled, White Hopper #1 is also free to move. But moving the White Hopper does not interfere at all with the attack of the White Queen.)

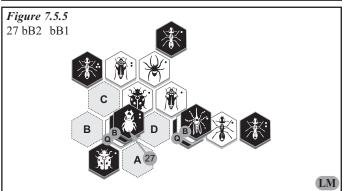
Since the White Ladybug is adjacent to the White Queen, moving it will create a problem. In this scenario, with two Beetles atop the hive, a Mosquito nearby, Hoppers in reserve, and an opponent with limited movement options, White will still win easily. But in another game in which your opponent is also threatening or you have a limited number of bugs available to attack, correctly choosing the order of attack could be critical.

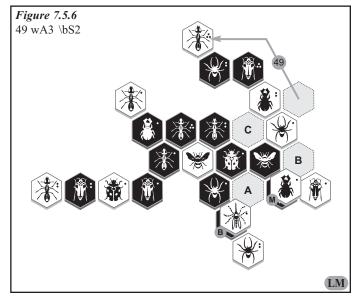
Watch for opportunities to execute a shutout and when you do, wins should easily follow!

7.5.2 – Partial Shutout

A shutout does not have to be complete in order to force a victory. *Figure 7.5.6* shows the position close to the end of a well fought game between two excellent players (*HV-Fumanchu-ringersoll-2011-01-11-0056*). Black Ants #2 and #3 are free and White has no practical way to pin either one of them. None the less, White won relatively easily.



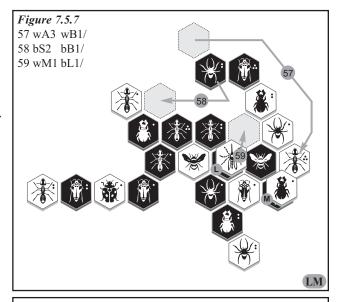


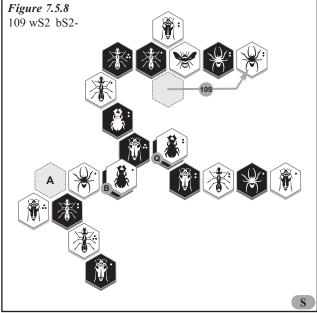


Having three free Ants, a Beetle and a Mosquito atop the hive, and two Hoppers in reserve, it may seem that White has no potential problems, but that is not the case. Black has two defenders adjacent to the Queen, the Ladybug between the two Queens, and the Mosquito under White Beetle #1. Given the right circumstances, either of them could escape. Care must be taken to neutralize both of these bugs and to fill the remaining spaces in the correct order.

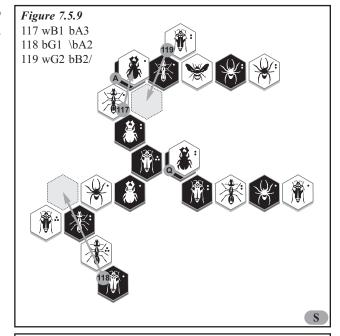
Since the Black Mosquito is already covered, the successful plan for White starts with using the White Mosquito to cover the Black Ladybug. Following this, Hopper #1 will jump into space A. One of the free Ants (NOT White Ant #2 because releasing the pin on Black Hopper #2 will allow Black to win) moves into space B and then finally the Mosquito will move into space C. While this is going on, White's Partial Shutout limits Black to making meaningless moves with the two Ants. As depicted in *Figure 7.5.7*, White executed the plan perfectly and was rewarded with a well earned victory.

A second example of a partial shutout is from the game *HV-ringersoll-chornyi-2011-02-26-1124*. *Figure 7.5.8* shows the situation on turn 109. White has executed a partial shutout. The only Black bug that can move is Hopper #1 and the only thing that it can do is jump back and forth between its current location and space A. Space A is safe because if White Ant #3 moves, then Black Ant #2 is no longer pinned. But moving to any other space other than back to its original space leads directly to a complete shutout.



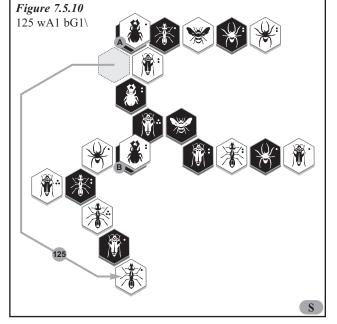


Next, notice how White uses Beetle #1 and Hopper #2 to free Ant #1. In *Figure 7.5.9* White covers Black Ant #3, jumps Hopper #2 into the open pocket, and White Ant #1 is free.



A few moves later (while Black is continuing to do nothing but jump Hopper #1 back and forth) we come to *Figure 7.5.10* where White finally executes the shutout. We will continue with this game in the next section as White demonstrates how to effectively release a shutout.

A shutout is great, but a partial shutout can also provide a path to victory. Learn to recognize the potential of the partial shutout and your victories will continue to pile up.



7.5.3 – Shutout Release

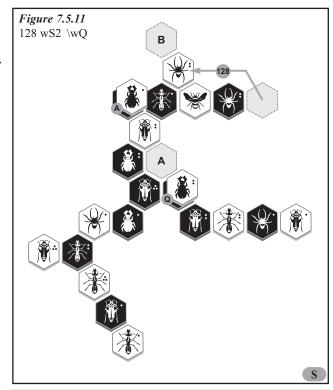
In many cases a shutout leads directly to victory for the controlling side without the opponent ever getting another opportunity to place a bug or make a move. Or, recognizing the futility of continuing, the victim of the shutout may resign. But in some cases, victory cannot be attained without ending the shutout and allowing the opponent to move.

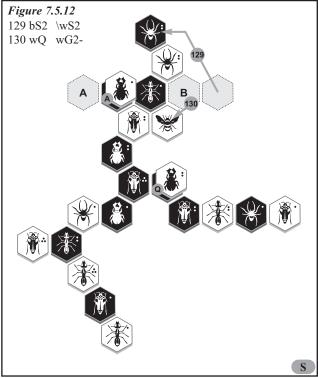
In those cases, identifying the most opportune time to execute the shutout release is critical. Releasing the shutout too early may provide your opponent with the chance to put up a defense, make it more difficult to win, or even force a draw. In the worse case (Section 7.5.4 – Overconfidence) it may actually result in a loss.

Continuing with the example from the previous section, *HV-ringersoll-chornyi-2011-02-26-1124*, let's look again at *Figure 7.5.10* (page 100). White has executed the shutout, but a quick bug count seems to come up short. White needs four bugs to win but other than White Beetle #2, all the other mobile White bugs are currently being used defensively. White Beetle #1 is tied down covering Black Ant # 3. White Spider #2 is currently pinning Black Spider #2. And White Hopper #1 is pinning Black Spider #1. We have seen from the previous section that Black Hopper #1 is not a threat, so even though White Ant #1 is pinning the Black Hopper it is free to move. Watch how opportune use of a shutout release produces the winning bugs.

On turn 128 (*Figure 7.5.11*), White releases Black Spider #2. The two choices for the newly released Spider are to move to space A or to space B. Moving to space A has the advantage that it may release Black Beetle #2, but has the disadvantage that it fills a space next to the Black Queen. Therefore, Black chooses to move to space B.

White frees his Queen (*Figure 7.5.12*) and again, Black has two choices. Neither of them is very good! If the Black Spider moves to space A, White reinstitutes the shutout by covering with Beetle #1. Next, White shifts the Queen back to space B to pin Black Ant #1, pins Black Spider #2 with White Spider #2, and White Beetle #1 is free to attack.





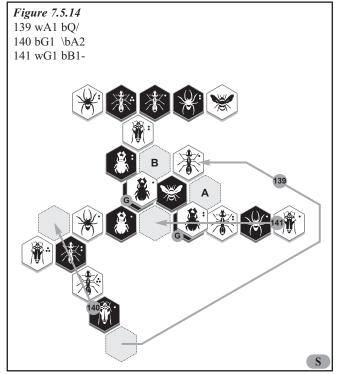
Space B is no better. When the Black Spider moves into space B, White pins it with the Queen (turn 132 in *Figure 7.5.13*). With the shutout in place again, White Spider #2 pins Black Ant #3 (turn 134) and another White Beetle is free to join the attack! Note how White took an extra move (turn 133) to clear the White Queen so that when filling space A, a ring would not be created because in most cases "Rings are bad" (Section 8.3 – Beginners' Mistakes – Making a Ring).

White has smartly used this series of moves to release a White bug (Beetle #1) which can now join the attack on the Black Queen.

Figure 7.5.13

131 bS2 wQ/
132 wQ bS2\
b pass
133 wQ bS2b pass
134 wS2 -wB1

White does it again on turn 139 (*Figure 7.5.14*), by attacking with White Ant #1. Black Hopper #1 is released but has only one, non-productive move. White releases yet another bug as the attack continues with Hopper #1 (turn 141). But Black Spider #1, too, has no productive move to make.

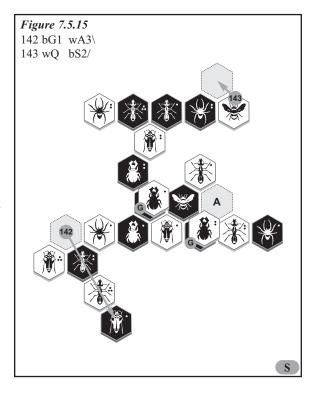


White is looking to get an Ant into space A, followed by Beetle #1 winning by going into space B. But in *Figure 7.5.15*, Black counters by pinning White Ant #3 with Hopper #1.

White makes a waiting move on turn 143 to waste a tempo, and now Black is in Zugzwang. Two bugs can move, but moving either releases a White Ant and White wins in just two more moves. (An instructional side note is that the excellent placement of two Black Hoppers adjacent to the Black Queen keeps both White Beetles busy. White must carefully plan the attack in order to not release these Black defenders.)

This game has provided an excellent example of the Shutout Release used in such a way to bring about a well earned victory. (As a side note, this game lasted 147 turns and took almost 1 1/2 hours (!) to play.)

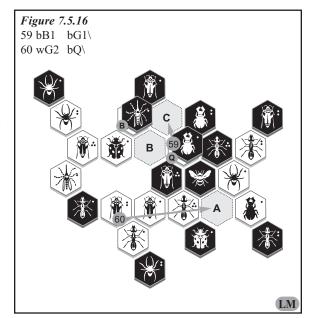
Time your shutout release properly and victory will be yours!



7.5.4 – Overconfidence

A word of warning in an offensive shutout position: Beware of overconfidence. In *Figure 7.5.16* the author, in a game (*HV-humdeabril-ringersoll-2010-12-25-0431*) against a strong opponent, had the game in hand with a shutout position, the opposing Queen covered, and three bugs atop the hive. A win should have been a foregone conclusion, but overconfidence and a failure to pay close attention cost him the game.

The important point that was overlooked was that with the occupation of either space B or space C, a ring would be formed. With the formation of the ring, both White Hopper #1 and White Hopper #2 would be free to move. One of them would jump into space A and White would win.



The proper plan would have entailed using two of the bugs atop the hive to cover the two Hoppers, form the ring, and force White to move one of the mobile bugs in the ring. With the ring no longer a threat, Black could maneuver back into position and force the victory. Black, however, overlooked the ring, moved Beetle #1 into space C, and White won with Hopper #2.

Don't become overconfident. A wrong move in a shutout situation can quickly turn a victory into a defeat.

7.5.5 – Conclusion

Always be on the lookout for opportunities to take complete control of the hive. And even more importantly, protect your mobility. Carefully guard against allowing yourself to be shutout by your opponent.

Chapter 7.6 – Making a Ring

"Rings are bad!" is a maxim that most beginning Hive® players learn very early on. But as your skill level increases you will begin to see positions in which making a ring is actually a good thing. Both offensively and defensively, a ring can be a tactical tool when used correctly.

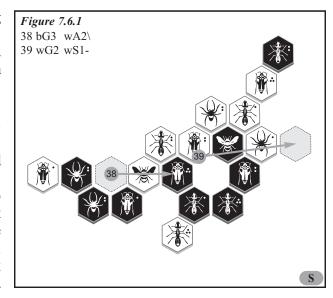
Bad rings are discussed in Section 8.3 – Beginners' Mistakes – Making a Ring. So there is no need to discuss them here. This chapter is about good rings and how to identify and use them.

The two common themes throughout these game-winning ring making positions are: 1) a friendly bug is in position to move because of the ring and 2) enemy bugs are properly pinned, covered, or blocked and therefore cannot move. If either of these two themes is not present, think carefully. Odds are that the upcoming ring will be a bad one, not a good one.

7.6.1 – On Defense, Freeing the Queen

The opportunity to free one's Queen with a defensive ring rarely occurs, but when it does it usually changes the outcome of the game. When a Queen is under attack and a well placed ring frees her to escape, the momentum shifts dramatically.

The first game to examine is *HV-jimbly-ringersoll-2010-11-28-1500*. White has a very strong attack in the works. In fact, in each of the past three turns White has threatened to win and has forced Black into a very defensive role. *Figure 7.6.1* shows the position as the tide prepares to turn on a well placed defensive ring. On turn 38 Black jumps in with Hopper #3 forming the ring. To break the ring and keep Black Ant #3 and Black Hopper #2 pinned, White jumps out with Hopper #2. But now, the Black Queen is free to move. She will slide over and form a second ring!



This second ring is shown in *Figure 7.6.2*. There is, however, a major difference between the two positions. In the first figure, the Black Queen is surrounded by five bugs, one more and the game is over. But now, she is only surrounded by three bugs. Even though a fourth bug will soon attack, this difference of only one bug means the difference between victory and defeat.

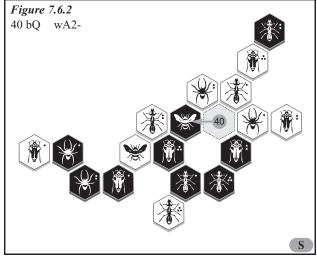
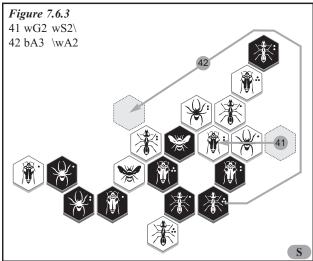


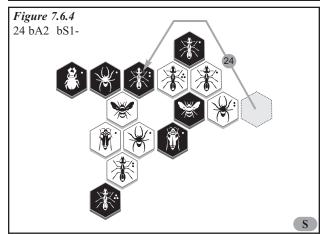
Figure 7.6.3 shows White Hopper #2 jumping back into attacking position. But the damage has already been done.

Now freed by the ring, Black Ant #3 swings around the hive and pins White Ant #2. Black can now safely begin bringing in the two Beetles from the reserve, and with two Ants free and the two Beetles coming in, Black won fairly easily in just a few more moves.

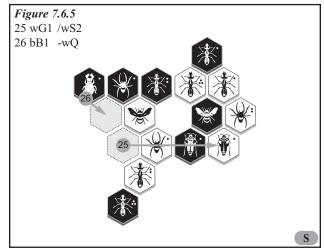


The next example of a good defensive ring leading to a Queen escape is *U!HV-robodino-ringersoll-2011-01-02-0110*. In this game the escaping Black Queen actually delivers the game ending blow! Follow along with the next few diagrams.

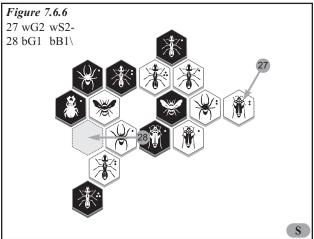
Black makes the ring in *Figure 7.6.4*. The Black Queen is not freed by the ring, but she will be shortly. The only bug actually freed by the ring is Black Hopper #1, but Black has no need to hurry and jump out with this defending bug.



White chooses to attack with Hopper #1 (*Figure 7.6.5*). In order to keep the White Queen from escaping, Black advances with Beetle #1 on turn 26.

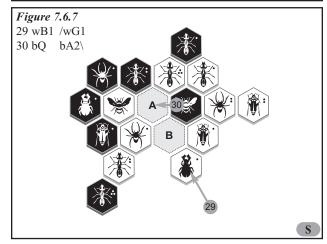


Still on the attack, White places Hopper #2 on turn 27 as shown in *Figure 7.6.6* and Black finally breaks the ring by moving Hopper #1 on turn 28.



As can be seen in *Figure 7.6.7*, White Hopper #2 is now useless. The only space that Hopper #2 can get to is space A but moving into space A would be suicide. In the actual game, White chose to bring a Beetle in from the reserve, totally missing the Black Queen sliding over into space A for the win!

Watch for positions where a well executed ring will force a Queen escape. These positions are rare in games between experienced Hive® players, but when they do occur, they usually result in victory for the ring maker!



7.6.2 – On Defense, Freeing a Defender

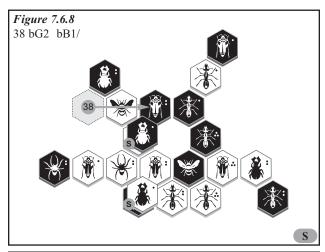
More common than a ring that frees a Queen to escape, is a ring releasing a defender of the Queen. The following three examples show how this can be done.

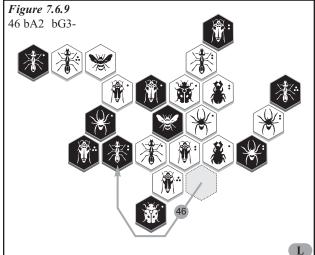
Due to the fact that they can easily be blocked, Ants typically make very poor defenders. This means that an Ant release by a ring is even rarer than a Queen release by a ring. But in the game *HV-roman65-ringersoll-2010-11-08-1128* Black Ant #3 is released by a well played ring. In *Figure 7.6.8* Black Hopper #2 jumps over the White Queen into a ring.

The only way that the Black Ant can be kept in place is by a block by either of the two White Ants. But doing this removes a White attacker and gives Black a valuable tempo. Black Spider #2, Black Ant #2, and Black Beetle #1 are all poised to attack the White Queen. The result was an easy win for Black.

In the game *U!HV-DrRaven-ringersoll-2011-05-29-1857*, White is on the verge of victory, needing only one more bug to win. Black makes the ring shown in *Figure 7.6.9* and nothing can stop the release of Black Hopper #1.

Just like the previous example, the well placed ring forces the release of an otherwise pinned defending bug and the ring maker, in this case Black, defends successfully. With two bugs in reserve, Black will soon counter attack (Chapter 7.4 – Counter Attack) and eventually win.



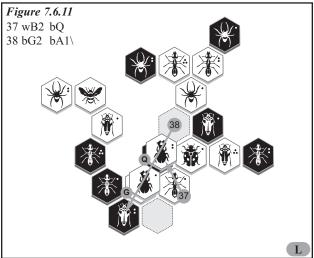


Another game between DrRaven and the author showing a ring release is *U!HV-DrRaven-ringersoll-2011-04-30-0238*. In this game, Black releases not one, but two, defending Hoppers. *Figure 7.6.10* shows the gamewinning ring.

Black Ant #1 moves in on turn 34 to make the ring. White Beetle #1, released when the Black Ant left its pinning position, advances toward the attack. But Black Hopper #1 has been freed and jumps out on turn 36.

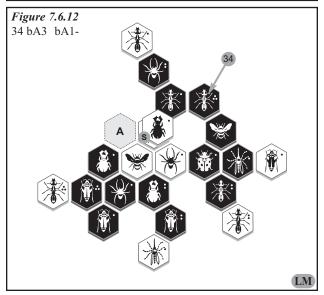
Figure 7.6.10
34 bA1 bA3\
35 wB1 wG2
36 bG1 wL1/

Black Hopper #1, jumping into a fill position, has now freed Hopper #2, which then hops out on turn 38 (*Figure 7.6.11*). As is often the case, the attacker, White in this game, is on the verge of winning. White Beetle #2, already up on the hive, is the potential game winner. But the ring made by Black Ant #1 freed first one Hopper and then the other and Black went on to win.



Ladybugs are particularly well suited for this type of defense and release by ring. *Figure 7.6.12* shows the position late in the game *HV-DrRaven-ringersoll-2011-01-18-0249*. Black has just brought in Ant #3 from the reserve, directly into a ring making position. The newly formed ring frees the defending Ladybug which not only jumps out, but heads toward space A and a Black victory.

Ring making when used in conjunction with well placed Queen defenders is a game-winning tactic. Learn to recognize these opportunities and win!



7.6.3 – On Offense

The prime reason that ring making is dangerous lies in the fact that the player making a ring usually frees many of the bugs in the ring. A bug that was pinned before the ring was formed could easily now be in a position to move without violating the One Hive rule.

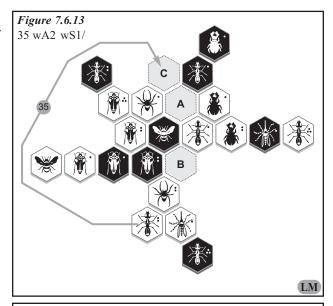
Please look at *Figure 7.6.13*, in order to see an example where making a ring leads to a forced win.

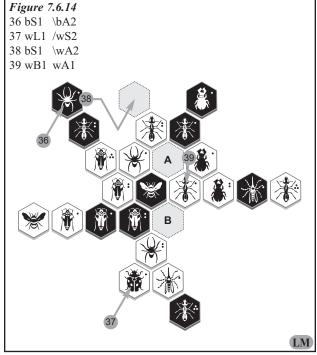
This position is from the game *U!HV-ringersoll-humdeabril-2011-01-04-1137*, played between two experienced players using both Ladybug and Mosquito. White is on the attack with only two spaces left to fill to gain victory (space A and space B). With two free Ants and an unplayed Ladybug, White definitely has a strong attack, but Black's defense seems to be solid. Black Ant #1 has pinned White Beetle #1 and at the same time set up a gate protecting space A. Even though access to space B is wide open, it seems that Black has a defensible position. And with five bugs yet to play, Black has solid counter attack options if White's attack fails to deliver the win.

In actuality, White delivered the knockout blow by forming a ring! Moving White Ant #2 into space C, White forms a ring freeing White Beetle #1.

The newly freed Beetle will soon climb atop White Ant #1 and there is no way to stop it from moving down into space A. White continued by placing the Ladybug in the space vacated by White Ant #2 and there was no defense (*Figure 7.6.14*).

Note also that if Black Beetle #1 had not been placed, Black Ant #1 could swing around and pin White Beetle #1 and stop its advance. But in so doing, the Black Ant would have opened the gate to space A and the White Ant would be able to move right in.



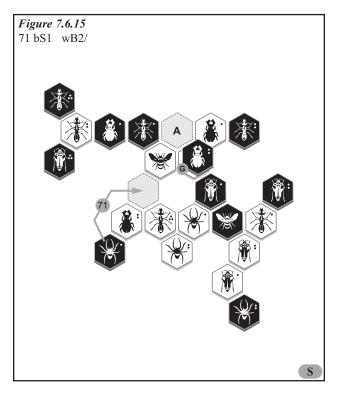


Once in a while one comes across the opportunity for a ring that prompts a single move that is both offensive and defensive! The game *HV-albedo-ringersoll-2010-09-14-2230* demonstrates this in *Figure 7.6.15*.

With the move 71 bS1 wB2/ Black accomplishes three very important things. First, another space is filled attacking the White Queen. Second, the White Queen is now surrounded and cannot escape. And third, this move forms a ring and releases Black Hopper #1. Soon now, Black Hopper #1 will jump into space A, clearing a space next to the Black Queen (defense) while filling a space next to the White Queen (offense).

This was truly an offensive/defensive ring formation. And it led to a well earned victory for Black.

When circumstances are right, an offensive ring can be a very strong attacking tactic. Watch for these circumstances and you can continue your winning ways.

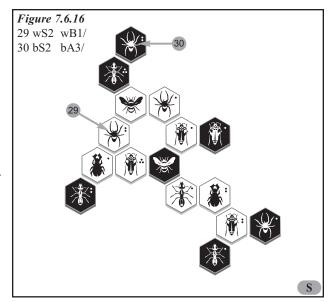


7.6.4 – Neutral Rings

One of the strengths of properly planned rings is that in most cases your opponent is forced to react. The player being forced to react is no longer in control. It is natural, then, that when your opponent makes a ring, you react and break the ring.

This however is not always the case. In the game *U!HV-cesc-ringersoll-2010-10-03-1513*, pictured in the next two figures, White forms what will be called a Neutral Ring. It is not bad like most rings, nor is it good like the rings discussed earlier. It is neutral. The danger with this type of ring is that when presented with it, the natural tendency is to automatically respond. This will usually result in an unnecessary loss of tempo.

In *Figure 7.6.16* White Spider #2 comes in from the reserve and immediately forms a ring. Black does not panic and react to the ring. But instead just brings in another bug, Black Spider #2.

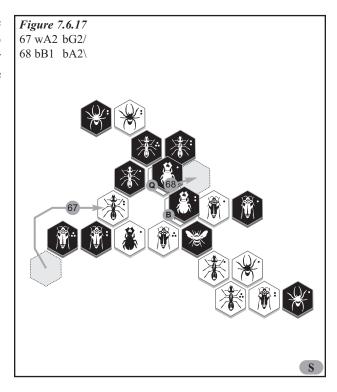


In *Figure 7.6.17* White is desperately trying to save the game. The ring formed by White Ant #2 threatens to releases White Beetle #1. But this Beetle is too far away to affect the outcome. Because of this, Black ignores the ring and continues with the winning assault.

Not all rings require an immediate response. Plan carefully when presented with any ring. It may prove to be a neutral ring; if so, it can be ignored.

7.6.5 – **Conclusion**

"Rings are bad" should always be your primary thought. But as discussed in this chapter, some rings are beneficial. Study these examples, replay other games, watch for rings, both good and bad, and your Hive® skills will continue to improve.



Chapter 7.7 – Playing for a Draw

"A half of a loaf is better than no loaf at all" says an old proverb, and that also applies in the game of Hive. There are times when a player may be happy for a draw and other times when a player actively seeks out a draw. A lower rated player playing in a ranked game against a higher rated player might seek the draw knowing that a draw will increase his rating. Or playing Black in a tournament game against an equally matched player, one might be content to play for a draw. But more commonly, during a game, when the opposing player has an extremely strong attack going and a loss looks inevitable, a draw might be a preferable conclusion.

Referring back to the basic rules, a draw occurs in one of three circumstances. The first is when neither player has the strength necessary to bring about a win. The second situation is when a player on the defense can thwart each attack by his opponent but cannot seize the initiative himself, resulting in a repetition of position. And finally, a draw results when the Queens are in close proximity and the final move surrounds both Queens simultaneously.

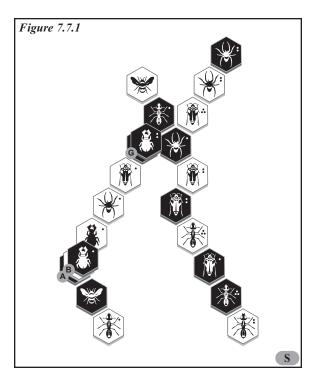
When playing face to face, the players can agree to a draw at any time. But when playing online at BoardSpace, the players must repeat the position three times to have the program recognize the draw.

Let's see what tactics one might use when playing for a draw.

7.7.1 – Stretching the Hive

It takes six bugs to surround the Queen. When a player no longer has enough mobile bugs to do the job, victory is more than likely out of reach. When both players find themselves in this same predicament a draw is the inevitable conclusion.

An example of this is in *Figure 7.7.1*, showing the final position in a game (*HV-cesc-ringersoll-2010-10-09-2205*) in which the hive was stretched to the point where a draw was the only possible result. Notice two things that led to this draw. There are long strings of pinned bugs with very few mobile bugs on either side and both Queens are safely positioned along the outer reaches of the hive.



Let's examine two points in the game where the hive was stretched. In *Figure 7.7.2* we see early in the game when the placement of White Beetle #1 allowed Black Ant #2 to pin a string of three White bugs. At this point both Queens are still mobile and both players have strings of three bugs pinned by the opponent!

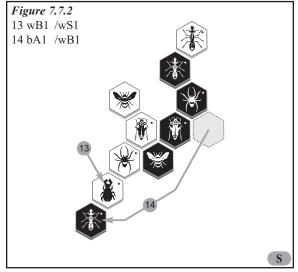
On turn 35 (in *Figure 7.7.3*), White moves Hopper #2 into position to go to space A, possibly executing a pin replacement to free Ant #3. If Ant #3 were to become free to move, all three of the White Ants would be free and White would have winning chances. Black does not have much choice. He must hop out with Hopper #1 and pin White Ant #3. At the same time, this creates a string of pinned bugs.

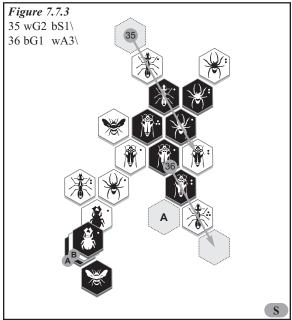
If you are playing for a draw, learn to stretch the hive and maximize the chances to earn half a point.

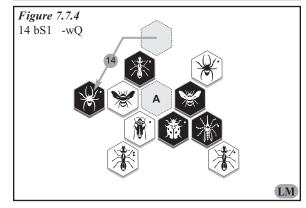
7.7.2 - Compact Queens

The second clue to a likely drawn position is the close proximity of the opposing Queens. When the Queens are close enough (either adjacent or just one space apart) that the final move surrounding one Queen also surrounds the other, a draw occurs. We will now examine a game between two Hive® Masters that ends in a draw due to a compact Queen formation. This game (*U!HV-Eucalyx-ringersoll-2011-02-13-2216*) is very instructional for its thrust-counter thrust, attack-defend series of moves leading up to the draw.

Take a look at *Figure 7.7.4* as Black sets the mood for the game by deciding on turn 14 to aggressively attack rather than to attempt to defend. And as we shall soon see, the game is going to pivot around space A, the space between the two Oueens.







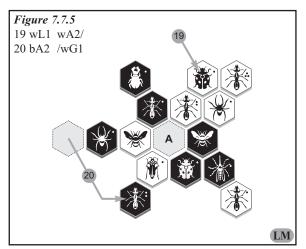
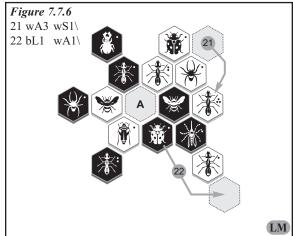


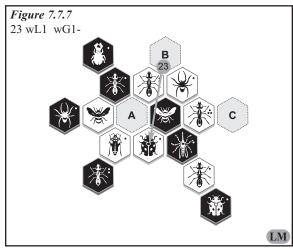
Figure 7.7.5 shows a few moves later with White continuing to bring in more attacking bugs. Now Black has little choice but to play some defense. Turn 20 is important for Black because it pins the well placed defensive White Hopper #1.

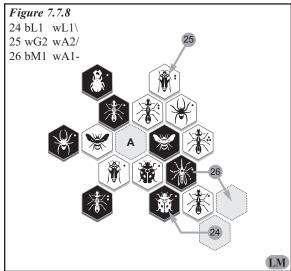
After attacking with Ant #3 on turn 21 (*Figure 7.7.6*), White's Ladybug threatens to win immediately by moving into the critical space A. This forces one of the Black defenders to jump out. In this case the Black Ladybug is the only one of the two defenders that is free to move.

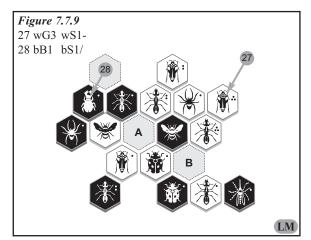
In *Figure 7.7.7* White forces the Ladybug into attacking position and now, with two Hoppers in reserve, White is in a strong position to win. A White Hopper brought into either space B or space C will be in position to win with a hop into space A.

Black's defense on turn 24, depicted in *Figure 7.7.8*, is to use a fill (Chapter 6.4) to free the Black Mosquito, the remaining defender. White brings in Hopper #2 in position to attack and the Black Mosquito jumps out (turn 26). In jumping out, it opens a space adjacent to the Black Queen, pins White Ant #1, and converts (Chapter 7.13 – Mosquito Conversion) its own movement to that of an Ant!







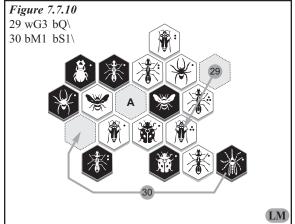


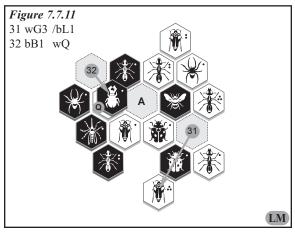
When, in *Figure 7.7.9*, the third White Hopper enters the game on turn 27, it is also immediately in threatening position; this time threatening space B. Black aggressively moves in with Beetle #1 on turn 28. And now both players are attacking!

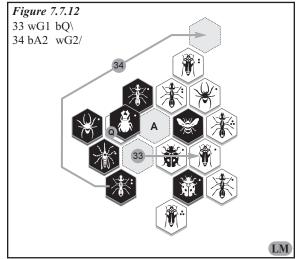
In *Figure 7.7.10* White completes the plan with White Hopper #3 attacking the Black Queen. Black counters the White threat by moving the Black Mosquito as shown. Now, if White Hopper #2 jumps into space A, the game is a draw.

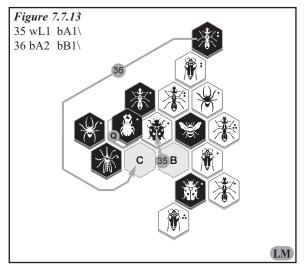
Not yet satisfied with a draw, White Hopper #3 pins the Black Ladybug on turn 31 (*Figure 7.7.11*) and at the same time free a spot for White Ant #1 to attack if need be. Now that there is no White threat to win, Black can execute a Beetle cover (Chapter 6.2). This now frees a space for a direct drop of a new Black bug adjacent to the White Queen.

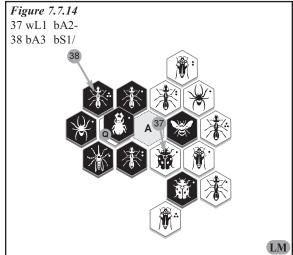
White Hopper #1, the only White defender, now converts to attack and White is again threatening to win. This forces Black back into defensive mode as Ant #2 pins White Hopper #2 (*Figure 7.7.12*).











A bug finally occupies space A in *Figure 7.7.13*. White's next threat to win is Ant #1 moving into space B. Now that space A is occupied and White Hopper #2 is no longer a danger, Black Ant #2 moves into space C. With this move, Black places a block on space B and finally threatens to win himself.

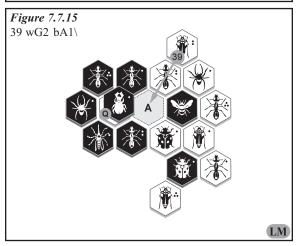
In *Figure 7.7.14*, the White Ladybug moves back to space B, Black Ant #3 enters the game adjacent to the Beetle covered White Queen, and a draw is inevitable. Neither of the two players has a defending bug that could vacate a space and both players have bugs in position to move into space A. The only possibility of a victory is if either player can execute a squeeze (Chapter 7.8). But as soon as one player makes a viable threat to begin a squeeze, the other will end the game by occupying space A and taking the draw.

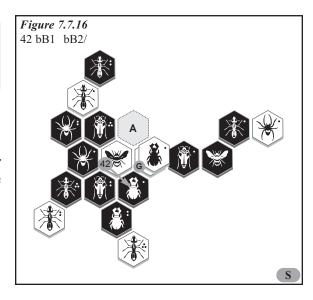
With the draw virtually certain, White ends it with Hopper #2 moving into space A (*Figure 7.7.15*).

What an exciting game of attack, defense, and counter attack this was! A classic draw brought about by compact Queens.

7.7.3 – Forced Draw

Sometimes a player has no choice. It's "take the draw or lose." This may occur even in a situation where without the immediate threat by the opponent the game is won.





The game used as an example (*U!HV-Eucalyx-ringersoll-2010-08-22-1100*) was previously discussed in Chapter 7.1 – Counting Bugs. Now we will look at the final few moves where the only choice that Black has is to take the draw.

In *Figure 7.7.16* (page 117), Black Beetle #1 climbs off the White Queen into position for Black to threaten to win by moving Ant #2 into space A. This moved was forced because if Black does anything else, White Beetle #1 will cover the Black Beetle and Black would not have enough bugs to even threaten to win.

White's response in *Figure 7.7.17* is also forced. The only other way to stop Black Ant #2 is a pin by White Ant #2. But this would release Black Ant #3!

Black counters by hopping Hopper #2 as shown on turn 44. Now Black threatens to win with Beetle #2 moving into space B! And again, White has only one response, pinning the Black Beetle with Ant #3. Black Ant #3 is also in position to move into space B. And just like before, White Ant #2 must be left in place.

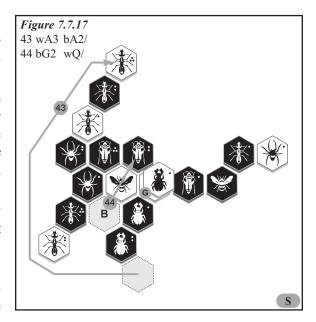
Black has nothing better to do than repeat the same threat. White has nothing better to do than repeat the same defense, and the result is a draw.

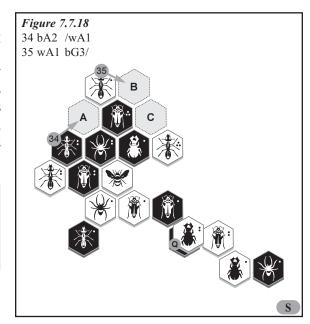
Another example comes from the game *HV-ringersoll-Dragonfly-2010-11-23-0313*. In *Figure 7.7.18* by moving Ant #2 into space A, Black releases Hopper #3 with a fill. White is forced to shift the pin to space B (turn 35). And now Black can force the draw by moving Ant #2 to space C. This continual threat of releasing Black Hopper #3 by a fill, forces a repetition of positions and therefore a draw. Unfortunately, Black declined the sure draw, continued to play for a win, and ended up losing!

When on defense, there are times when all you can hope for is a draw. Watch for these opportunities to force the draw because after all, "a half loaf is better than no loaf!"

7.7.4 – **Conclusion**

In some circumstances a Hive® player will be happy with just a draw. A true Hive® Master knows how to recognize these circumstances, 'Play for a Draw,' and earn a half point.





Chapter 7.8 – The Squeeze

According to the rules, if a player has a legal move, he must make it. This rule applies even if making a move would immediately end the game in the favor of the opponent, place the opponent in a position to win, or free your opponent's Queen to escape.

When a player forces his opponent into making a move that is damaging to his own cause, this is called the Squeeze. A player is squeezed into making a move that he would rather not make.

7.8.1 – Winning a Drawn Game

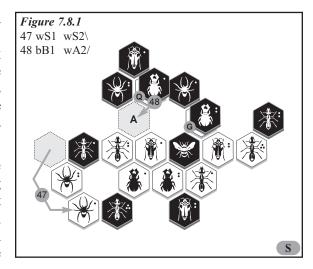
This tactic is most commonly seen when the two Queens are in close proximity and the final move by either player would force a draw by simultaneously surrounding both Queens.

In many cases, a player may be happy with a draw (Chapter 7.7 – Playing for a Draw). For example, a lower rated player may be happy for a draw against a higher rated one. After fighting a strong defensive struggle a player may willingly take a draw. Or, finally, a player may be satisfied with a draw when playing Black.

An experienced Hive® player, however, will look for the opportunity to use a squeeze and pull out the win. Follow along in game *HV-meche5-ringersoll-2010-09-20-2243* as we show the attack/defense/counter attack that culminates in the Squeeze and a win for Black.

Let's start with *Figure 7.8.1* and review the situation in a game of Standard Hive®, with no optional bugs. White has pressed the attack and has five bugs around the Black Queen. The only real candidate to fill the final spot is White Beetle #1, but it is currently pinned by Black Ant #3. It is interesting to note that Black also has a strong attack. The White Queen is covered by Black Beetle #1, has three spots occupied, and no defenders. Quite an offensive game!

As we pick up with turn 47, White, attempting to win the game by forcing the Beetle free, has formed an offensive ring (Section 7.6.3 – Making a Ring – On Offense). Realizing that there is no way to stop White Beetle #1 from being freed, Black counters in turn 48 by moving Beetle #1 into space A to defend against the impending approach of the White Beetle.

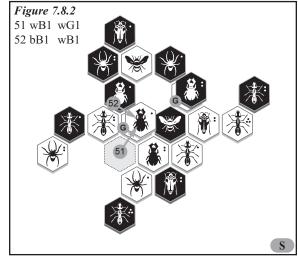


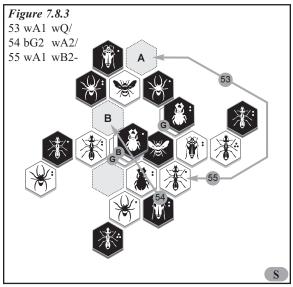
A few turns later, *Figure 7.8.2* shows as White Beetle #1 approaches and moves into position for the possible victory. Unfortunately for White, with both Black Beetles well placed for defense, it doesn't matter whether White Beetle #1 goes straight for the final space as shown or takes the longer, more circuitous route over White Beetle #2 and the Black Queen. In either case, a Black Beetle stands ready to defend. On turn 52 (also in *Figure 7.8.2*) Black Beetle #1 covers White Beetle #1.

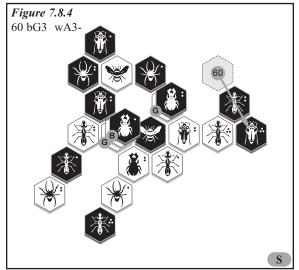
At this point, baring a colossal mistake by Black, the best White can aim for is a draw. There are not enough White bugs in position to force a victory. But the close proximity of the two Queens makes a draw highly possible.

On turn 53 in *Figure 7.8.3*, White attempts to provide an escape for the White Queen by moving Ant #1 to space A, but Black counters by blocking with Black Hopper #2 moving into space B. At the same time, this Hopper move is creating a threat for Black to win. This forces White to move Ant #1 back from where it came (turn 55).

In moves 56 through 60, Black performs a pin replacement (Section 6.1.2 – The Pin – Replacing a Pin) while White unsuccessfully attempts to free a second Ant. *Figure 7.8.4* shows the position after Black's 60th move. Black Ant #2 is now free!



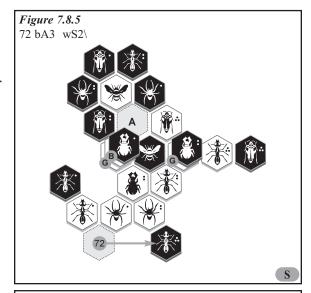


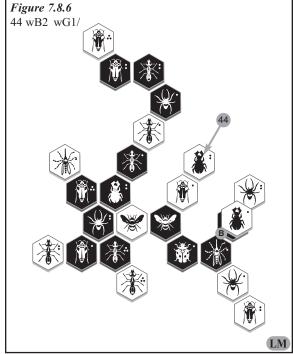


The two players continue to spar back and forth, finally leading to a squeeze as shown in *Figure 7.8.5*. Black's turn 72 pins White Spider #2 and now White is in the Squeeze. There are three White bugs that are free to move. All three mobile bugs are adjacent to the Black Queen; moving any of them opens a space and allows Black to win. If Ant #2 or Hopper #3 moves, Beetle #1 jumps down into Space A and Black wins. The only defense against Black Beetle #1 is a cover by White Beetle #2. But, if White chooses that defense, Black Beetle #2 will win in two moves.

By effectively using a squeeze, Black has turned a potential draw into a well fought victory.

A second example should suffice to get across the basic concept of a squeeze. In *Figure 7.8.6* we have a situation late in the game *U!HV-ringersoll-DrRaven-2011-02-07-2248* that should be, at first glance, an easy win for White. Black is shutout (Chapter 7.5) and White only needs three bugs to win. With two attacking Beetles (one already atop the hive and the other ready to climb up), a Hopper in position to attack, and a Ladybug in reserve, it would seem that White will have an easy time of it. But with the Queens occupying adjacent spaces and the White Queen partially surrounded, a draw will occur unless White can use a squeeze.





White proceeds carefully in turns 45 through 49, moving both Beetles and Hopper #2 into position, culminating in turn 50 in *Figure 7.8.7*. By this move, White accomplishes two things. First, the fifth space around the Black Queen is occupied, but more importantly, Black Beetle #2 is now free to move. By Hive® rules, Black is squeezed and must make a move.

By moving Black Beetle #2, one of the spaces adjacent to the White Queen will be vacated. With an open space adjacent to his Queen, White safely wins the game with White Beetle #1 coming down into space A!

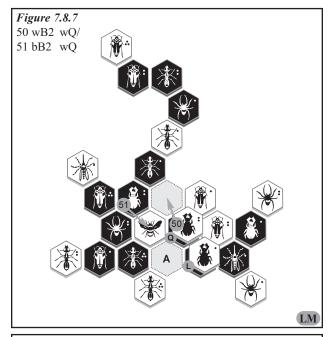
These two games demonstrate good examples of a squeeze turning a drawn position into a victory.

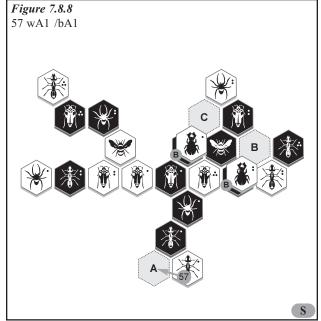
7.8.2 – Opening a Gate

Another useful use of a squeeze is to force open a gate, thereby defeating a defending block. *Figure 7.8.8* illustrates just such a use in the game *HV-Fumanchuringersoll-2010-10-07-2321*. Black Ant #3 has placed a block defending space B. Neither of the two White Beetles can successfully attack this space because they are both tied down covering the two defending Black Beetles. To win, White must open the gate and uses a squeeze to do so.

Turn 57 is a waiting move by Ant #1. Having only one mobile bug, Black must move Ant #3 and the gate is open! White brings in either of the two mobile Ants and then wins with White Beetle #1 delivering the final stroke into space C.

Learn to use the Squeeze, it can and will be your friend.





7.8.3 – Releasing a Pin

In an endgame position when a valuable bug is pinned, it may be possible to release the pin by using a squeeze. Here is an example from the game *U!HV-weronika-ringersoll-2010-12-08-2255*.

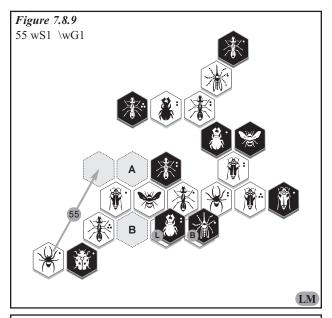
With only Spider #1 free to move, White did not have much choice. He moved as shown in *Figure 7.8.9*. This freed the Black Ladybug and Black won easily. The Black Ladybug attacks into space A and Black Beetle #2 finishes the game with an attack into space B.

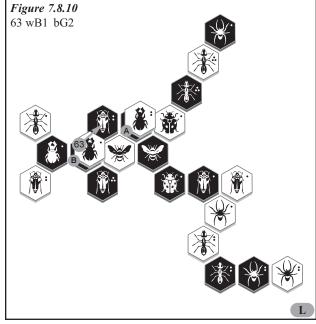
With proper application of a squeeze, a pinned bug can be brought back into play and have an influence on the game's outcome.

7.8.4 – Freeing Your Queen

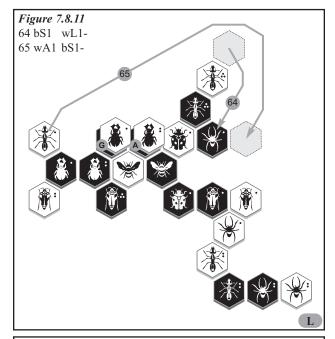
A fourth use of a squeeze is demonstrated in the 2011 BoardSpace Tournament semi-final game, *T!HV-EddyMarlo-DrRaven-2011-06-28-1708*. Two-time defending champion EddyMarlo shows his skill, using a squeeze to force a victory.

Beginning with *Figure 7.8.10* we see how this comes about. White's Queen is almost surrounded, all Black needs to do to win is fill one more space. However, there is no bug available to accomplish that seemingly easy feat. Black, in effect, is playing for the draw.





In *Figure 7.8.11* because moving Hopper #3 will allow the White Queen to escape, Black is forced to move Spider #1. White responds by pinning with White Ant #1.



Now, as we see in *Figure 7.8.12*, Black is squeezed. The only bug able to move is Black Hopper #3. When it moves as shown, the White Queen escapes, and White has an easy win.

Proper use of a squeeze can gain freedom for your Queen and lead to victory.

7.8.5 – Conclusion

Learn to use the Squeeze and you can turn a position that may seem to be a hopeless draw into a well earned victory. Control the outside of the hive, attack the Queen, and 'Squeeze' out a victory.



Chapter 7.9 – The Hop Around

The Hopper is an important bug in the hive. Many games end when a Hopper jumps in from the outer edges of the hive and fills the game-winning space around the opposing Queen. The ability to get into inaccessible spaces and its unlimited range make the Hopper an extremely important and potent weapon.

With the strength of its long range ability, however, comes a weakness. With the Hopper limited to straight line movement it is critical to get the Hopper placed into proper attacking position. If not, it may not be able to reach its final destination.

The basic concept of the Hop Around is to not be limited in planning the Hopper placement, but to look into the future and see how a Hopper that cannot reach a specific space in one move might be able to reach it in two or three moves.

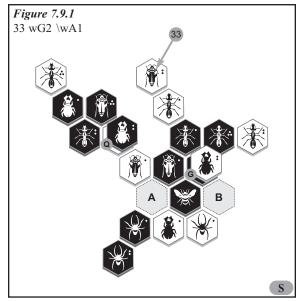
7.9.1 – Basic Hop Around

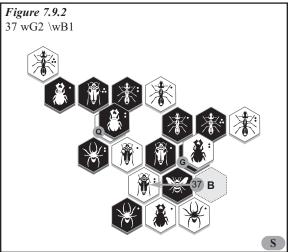
The first example is a basic hop around from the game *U!HV-ringersoll-guest-2011-06-07-2237*. As shown in *Figure 7.9.1*, White has just brought in Hopper #2. At first glance, it may seem that the Hopper's goal is to reach space B, but that is not the case. Space B can be reached by any one of a group of White bugs. Before the Hopper placement, White had three Ants and a Beetle that all could reach space B. Black cannot protect the space with a block, nor can a Black Beetle arrive fast enough to cover White Beetle #2. Space B is not the problem space. Space A is the problem space.

Thus, the ultimate goal for White Hopper #2 is to reach space A, the space that is very well defended by the block by Black Spider #1.

Figure 7.9.2 shows White Hopper #2 reaching its final destination. And even though defending Black Hopper #1 can jump out, there is no way for Black to prevent a White Ant from moving into space B followed by White Beetle #2 into the space vacated by the Black Hopper.

White wins and demonstrates the value of a hop around.

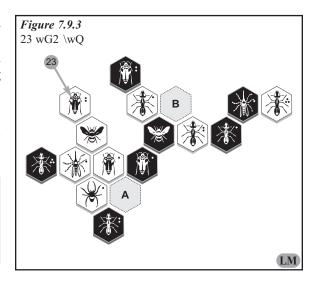




Another instructive example of a hop around can be found in the game *HV-Fumanchu-ringersoll-2010-11-12-1120*. In this case, the hop around is executed early in the game, but still shows how to get a Hopper indirectly into an attacking position.

White Hopper #2 enters the game as shown in *Figure 7.9.3*, with the goal of reaching space B by first moving into space A.

A basic hop around gets a Hopper indirectly into an attacking position. Look for these opportunities when it seems impossible for a Hopper to make a direct attack.



7.9.2 – Complex Hop Around

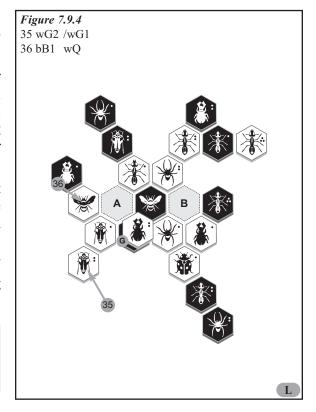
U!HV-ringersoll-Fumanchu-2011-05-08-1829 shows two Hoppers working together to perform a more complex hop around.

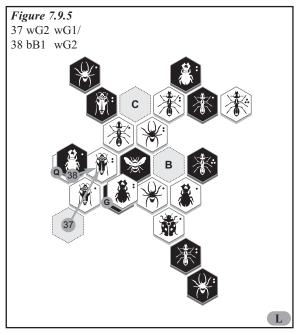
In *Figure 7.9.4* we see White bringing in Hopper #2 in order to execute a basic hop around by jumping, first to space A, and then to space B. This will be followed by White Beetle #2 winning by moving into space A. Black responds by bringing Beetle #1 into position to defend by covering Hopper #2 after it lands in space A.

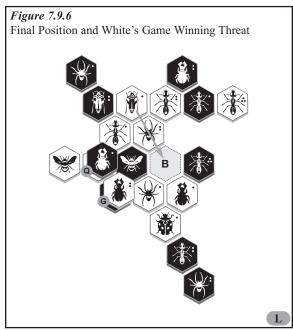
We see this plan unfolding in *Figure 7.9.5* (page 127). But here comes the second hop around, this time by White Hopper #1. White Hopper #1 jumps first into space C and then into space B.

Black resigns in the final position shown in *Figure 7.9.6* (page 127). Nothing can stop White Hopper #1 from going into space B.

A simple hop around is quite often easy to see. Master Hive® players, however, can find the complex, game-winning ones!



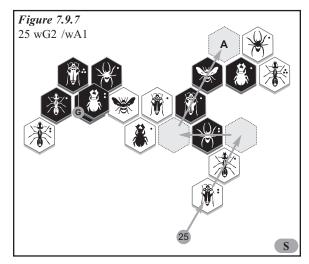




7.9.3 – Planning the Hop Around

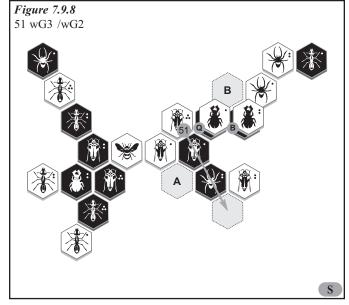
A master Hive® player plans many moves in advance. Nowhere is this more important than planning for a hop around. In the game *U!HV-ringersoll-cesc-2010-09-18-1355*, White is looking well into the future when playing for a Hopper pin replacement (Section 6.1.2 – Replacing a Pin).

Examining *Figure 7.9.7*, we see that White's immediate focus must be on defense. Black not only has two bugs (Hopper #3 and Beetle #2) directly threatening the White Queen but also has two Ants in reserve. It is vital that the White Ants be ready for the upcoming defensive needs. So, as we see, White begins a pin replacement on turn 25. Even though the White counter attack is still far in the future the placement of the White Hopper is such that by the series of moves shown, it can reach space A.



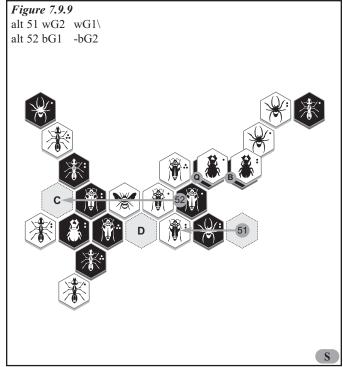
The game has continued. With three mobile Ants, White has defended well and thwarted the Black offensive efforts.

Figure 7.9.8 picks up the game as White begins the counter attack and assault on the Black Queen.



The purpose of the preparatory White Hopper move in turn 51 is apparent when one realizes that if White Hopper #2 were to immediately jump into space A (Figure 7.9.9), two unpleasant situations would result. First and most important, Black Hopper #1, which is currently defending the Black Queen, would be free to jump out. And by jumping to space C, the Black Hopper would free Black Beetle #2! In the meantime, White Hopper #2 would be pinned by Black Spider #2. And with the space previously occupied by Black Hopper #1 now vacant, the White Hopper would no longer be in position to attack the Black Queen. But that is not all, at some later time, after the Black Beetle #2 has covered the White Queen to render it immobile, Black Spider #2 would be in position to move into space D and attack the White Oueen.

Good planning early can lead to a victory producing, endgame hop around.



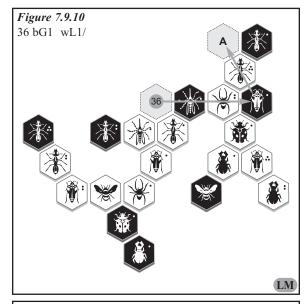
7.9.4 – Other Uses for the Hop Around

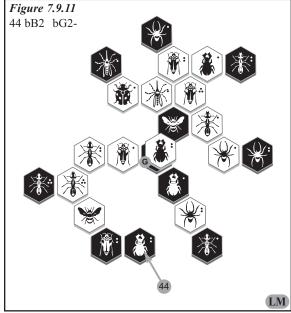
In most cases a hop around is used to get a Hopper into position to attack the Queen. But there are other situations where a hop around can be used to improve a Hopper's position for other reasons. In the game *U!HV-weronika-ringersoll-2010-12-11-1459*, a hop around is used as a pin replacement, freeing an Ant for more beneficial use elsewhere.

Notice how in *Figure 7.9.10* Black Hopper #1 has moved into position to continue into space A and replace the pin on White Ant #3. This would allow Black Ant #1 to join the attack at the other end of the hive.

Another common use for the hop around is to get a Hopper into position for a fill (Chapter 6.4). In the game *HV-BlackMagic-ringersoll-2010-10-31-1413*, BlackMagic turns what may look like a lost position into a victory with a three move hop around (and a little help from Black). Follow along starting with *Figure 7.9.11*.

When looking at this initial position and counting bugs, it may seem that White has no chance to win. White needs two bugs to win, but only has one bug, Beetle #2, available. But White has a plan focusing on using a hop around.





While Black Beetle #2 executes a Queen cover, White begins the hop around in *Figure 7.9.12*. White has no defensive bugs available, so with two bugs in reserve, and three free Ants, Black's attack will be unstoppable. White's only chance is to attack and to attack immediately!

With the formation of a ring on turn 47, as shown in this figure, White Hopper #1 is free to attack. But that just trades one Hopper for another and does not gain anything for White.

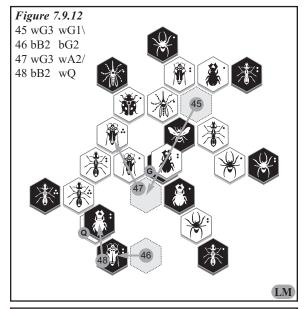
So White continues as shown in *Figure 7.9.13*. The hop around is complete and the White Ladybug is free to move. She can attack into any of the three labeled spaces. Black meanwhile has completely overlooked the dangerous threat and continues to attack. (In this game Black completely missed an opportunity to win. Can you find the move that could have won for Black?)

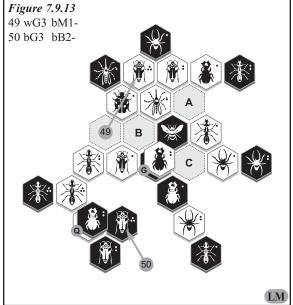
White forces the win with the next move by first moving the Ladybug into space A. This performs another fill. White Hopper #2 cannot be stopped from jumping into space B and leading by one tempo, White wins the race to the finish.

Watch for opportunities like these to use a hop around. You can find victories just around the corner.

7.9.5 – Conclusion

The Hop Around is a tactic that good Hive® players learn to master. Opportunities exist throughout the game to produce excellent results using this versatile tool.





Chapter 7.10 – Two Beetle Attack

The Beetle can be one of the most powerful bugs in the hive. When free to move about across the top of the hive, a Beetle can wreak havoc. Place two Beetles atop the hive (or three if playing with the Mosquito) and there is a good probability that you will be able to win the game.

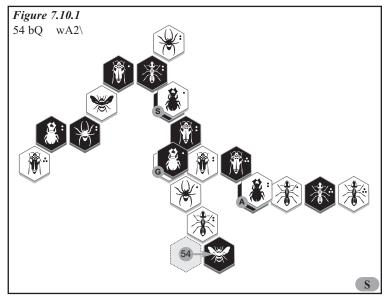
7.10.1 – Beetle Squeeze

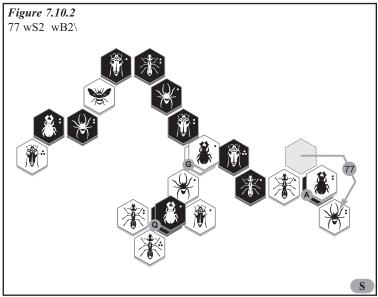
A Beetle defending the Queen can be a very formidable defense. In some cases, having a Beetle atop the hive is enough to pull a draw out of a certain defeat. But attack with two Beetles, and properly played, the solo Beetle has little chance.

Here is the game (*U!HV-Eucalyx-ringersoll-2010-08-29-1321*) in which Eucalyx taught the author a valuable lesson regarding the value of the Two Beetle Attack.

Figure 7.10.1 shows the position late in the game with White on the move. It may seem that since the Black Queen is mobile and has Beetle #1 defending, that White does not have the bug power available to force a victory. But Eucalyx proves otherwise as he unleashes the power of two Beetles atop the hive.

Step one is to free White Ant #3 from its current pinning duties. This is done by immobilizing Black Ant #3 with a Beetle cover. Step two is to pin the Black Queen and thus squeeze Black Beetle #1, forcing it to move. This will free White Hopper #1 which is currently being covered by the Black Beetle. Step three is to bring White Spider #2 around the hive to pin Black Ant #3 and release White Beetle #2 to join the attack. *Figure 7.10.2* shows the position after turn 77 when White has completed each of these three preliminary steps.





Now White implements the Two Beetle Attack. While Black has no choice but to mindlessly move Black Beetle #1, the two White Beetles force the Black Beetle into an untenable position. (See *Figure 7.10.3*.) When White approaches with Beetle #2, Black has no choice but to cover. White then covers with Beetle #1 and Black's goose is cooked.

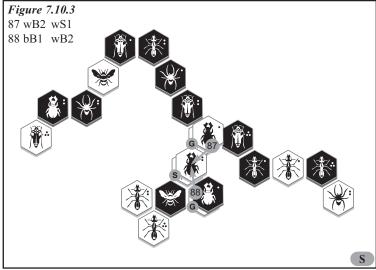
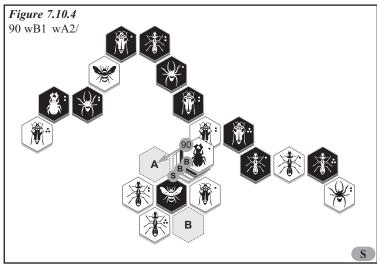
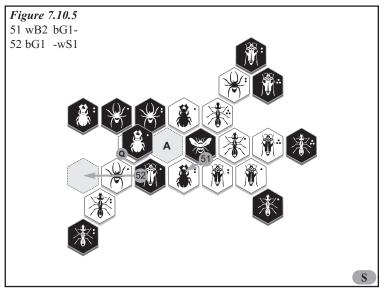


Figure 7.10.4 shows the triple stack of Beetles and the two spaces White needs to occupy in order to win. White Beetle #1 moves down into space A. Black Beetle #1 is uncovered and forced to move. Wherever the Black Beetle goes, White Beetle #2 will move into position to take space B and win the game.



Our second example comes from the game HV-Lony-ringersoll-2010-09-24-1107. White has had an excellent attack, but Black has defended well and White has now run out of attacking bugs. Reviewing Figure 7.10.5 and counting bugs (Chapter 7.1) we find that White has only to fill space A in order to win. But there are no White bugs available to do the job. By keeping the Black Queen surrounded, White might be able to earn the draw by forcing Black to play into space A, surrounding both Queens at the same time. Barring a colossal mistake by Black, the best that White can do is to play for the draw (Chapter 7.7).

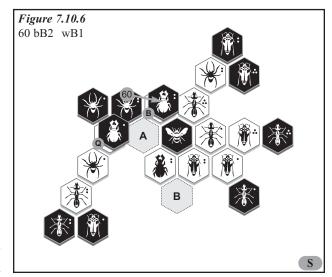


But planning to effectively use two Beetles, Black has a better idea. It starts with further restricting White's movement options by moving out with Hopper #1 on turn 52, as shown in *Figure 7.10.5* (page 132). It continues with Black Hopper #1 executing a pin replacement on White Ant #2 (Section 6.1.2) and freeing Black Ant #2.

Then, as shown in *Figure 7.10.6*, Black Beetle #2 moves in toward the White Beetle. The Squeeze (Chapter 7.8) is complete as Black covers White Beetle #1 on turn 60. The only two White bugs that can move are Beetle #2 and Hopper #2. Moving the Hopper relieves the threat of a draw and allows Black to continue the attack on the White Queen. Moving the Beetle atop the White Hopper or to space B allows the Black Queen to escape. Any other Beetle move and the White Beetle gets covered by a nearby Black Beetle; Black Beetle #1 if the Beetle goes to space A, Black Beetle #2 if the White Beetle climbs atop the Black Queen.

In any case, the threat of a draw is over. The Two Beetle Attack has forced a Beetle squeeze and Black wins.

These games give good examples of the Two Beetle Attack perfectly executing the Beetle Squeeze!

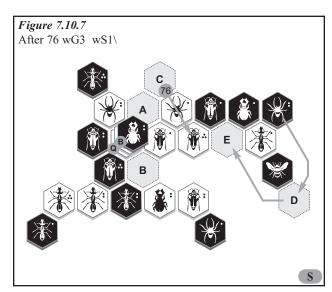


7.10.2 – Forcing the Second Beetle

Getting the second Beetle atop the hive is sometimes not an easy matter. Watch how in this next game (*HV-ringersoll-cesc-2010-10-09-1105*), Black uses a partial shutout (Section 7.5.2) to limit White's mobility and then careful Spider movement to force the second Beetle up and into the fray. With both Beetles mobile and atop the hive, Black had no problem winning the game.

Please examine *Figure 7.10.7*. Black is in control of the game but White has defended well. Black must plan and execute a two Beetle attack in order to force the victory.

White's defense is three fold. First, space B is well blocked. None of the Black Hoppers can reach this space so the only option is a Black Beetle. Second, even though White's movement options are limited, White Hopper #3 and White Hopper #1 working together are well placed defensively. If Black moves into space A with White Hopper #3 in its current position, White Hopper #1 can jump out and create problems by vacating another space



adjacent to the White Queen. When White Hopper #3 jumps to space C, a block is set and only a Black Beetle can reach space A. And finally, as odd as it may seem, White Beetle #1, even though currently covered by Black Beetle #2, is also in a good defensive position! If the Black Beetle moves prematurely, White Beetle #1 will be free to move. With White Beetle #1 free to move, the effectiveness of the partial shutout is seriously diminished.

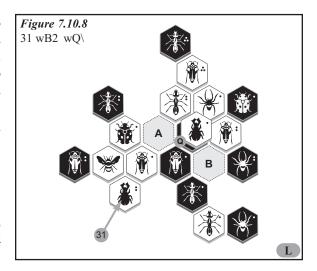
But Black has a plan for forcing Beetle #1 atop the hive. By moving Spider #2 to space D (*Figure 7.10.7* on page 133) and then into space E, Black Beetle #1 (currently in the elbow) will be free to move. With both Beetles atop the hive, Black can and did execute his attack and gained a well earned victory.

The second example shows how, by keeping the Black Ants busy elsewhere, White is able to force the second Beetle up on the hive and bring about an easy victory. *Figure 7.10.8* shows the situation late in the game *HV-Eucalyx-ringersoll-2011-01-16-2025*.

When White brings Beetle #2 into the game as shown, Black has no defense. The Beetle will climb up and over the line of bugs and into space A. Then White Beetle #1 will climb down into space B and White will win.

A key to this victory is White's ability to force the exodus of Black defenders and to keep the last remaining defender, Black Hopper #1, pinned from two different directions. This bidirectional pin (Section 6.1.5) means that Black would have to create two rings in order to free the Hopper. The attempt by Black to do that gives the White Beetle time to enter the game and climb atop the hive. Once both White Beetles are atop the hive, the power of the Two Beetle Attack claims another victim.

Watch for ways to force your second Beetle up on the hive. If you can, your win totals will go up, too!



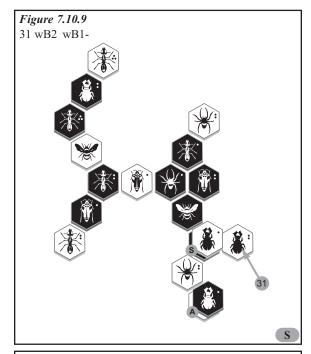
7.10.3 – Double Cover

Another maneuver that can be executed with two Beetles atop the hive is the double cover. In Section 7.2.4 – Defending the Queen – Adjacent Friendly Defenders, we saw how effective adjacent bugs can be in defending the Queen against attack. Two attacking Beetles can provide an excellent counter against well placed defenders.

In some cases the double cover will refer to the Queen and one defender, as shown in our first game in this section. In other cases, like the second game in this section, the double cover will be applied to two defenders. In either case, the Two Beetle Attack leads to the double cover which leads to victory.

Let's pick up the game *HV-ringersoll-roman65-2010-11-08-1116* on turn 31 in *Figure 7.10.9*, as White brings in the second Beetle. White already has control of the outside of the hive and with that control, White also has superior mobility. But it is the double cover that brings the game to a swift conclusion.

In *Figure 7.10.10* we see both the Black Queen and an adjacent defending Spider are covered. White's next two moves will see the two remaining White Hoppers drop directly into spaces A and B. Following that, one of the White Ants will move in and finally Beetle #2 will deliver the final stroke.





In the next game (*HV-Fumanchu-ringersoll-2011-02-26-2041*), Fumanchu teaches ringersoll a lesson with the double cover of two defending bugs. Please look at *Figure 7.10.11*. White already has one Beetle covering the defending Black Ladybug and with turn 25, has a plan for a double cover!

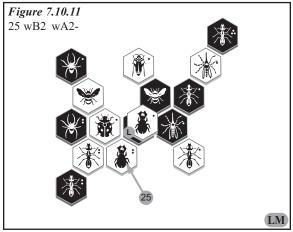
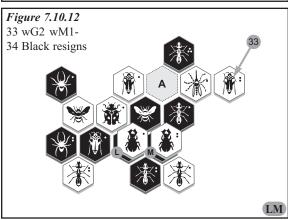


Figure 7.10.12 shows the game status after White has flawlessly executed the double cover. When White brings in Hopper #2, there is no defense. If either of the free Black Ants pins the White Hopper, White will win. Obviously, if Black Ant #3 abandons the Block of space A, then one of the White Ants will move in. Not so obvious is what happens if Black Ant #2 moves to place the pin.

If Black Ant #2 leaves its current post, White Beetle #2 cannot be stopped from moving toward and into space A. Black Ant #2 is currently part of a pocket formed around the Black Mosquito. And so, to keep the Black Mosquito from moving out it must remain covered. But once Black Ant #2 moves, the pocket formation is no longer there and White Beetle #2 will be free to move.

A double cover is an effective offensive tool. Use it and you will continue to add to your victory total.

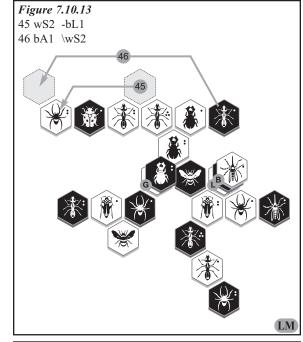


7.10.4 – Two Beetle Defense

As we have seen, two Beetles atop the hive are very powerful. But there are defensive tactics that can be used to counter this formidable attacking force.

The first, of course, is to defend in such a way that your opponent does not have the opportunity to get two Beetles up on the hive.

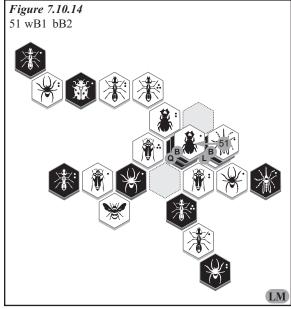
But when that is not possible look for the chance to defend with the second: the Two Beetle Defense. Get two of your Beetles up on the hive and in good defensive position and it is possible to negate the power of two opposing Beetles atop the hive! This is demonstrated in the game *U!HV-Wak-ringersoll-2013-09-15-0005*. In *Figure 7.10.13* Black surprisingly releases White Beetle #1! This may seem like suicide because White only has two spaces to fill around the Black Queen and now will have a Beetle and a Mosquito atop the hive. Black, however, has carefully calculated the defense.



We see the game a few moves later in *Figure 7.10.14*. Things now looks even worse. White has two bugs up, both of which are threatening to move into empty spaces around the Black Queen, and the two defending Black Beetles are now covered!

But this seemingly dire situation is actually a good defensive position for Black. If either the White Beetle or the White Mosquito moves, then a Black Beetle will be released. Because of the close proximity of the two stacks, the released Black Beetle will be in position to cover the other bug and the attack will be stopped. Two properly placed defending Beetles have proven to be a strong defensive force.

Two properly placed Beetles atop the hive can stop an opposing Two Beetle Attack. Be ready for these chances and watch your victory totals climb.



7.10.5 – Conclusion

A Beetle atop the hive is a dangerous thing. Two Beetles atop the hive are deadly. Watch for your chances to implement this strong weapon and double your chances for victory!

Chapter 7.10 – Two Beetle Attacl	Chapter	7.10 -	Two	Beetle	Attack
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Play Hive® Like a Champion

Chapter 7.11 – Using Your Spiders

Spiders are generally considered the least powerful of all the bugs. Their strictly limited movement pattern is the most difficult for beginners to master. But in the hands of a true Hive® Master, even with its limited movement, there are situations in which a Spider can be a very useful bug.

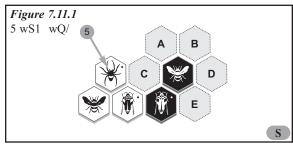
Initial placement is extremely important with the Spider. When an Ant or a Beetle is not placed in its optimal space a player may only lose one or more tempo to get it into the proper position. When placing a Spider, however, it is vitally important that its intended target is taken into consideration. A misplaced Spider may never be able to reach an important space.

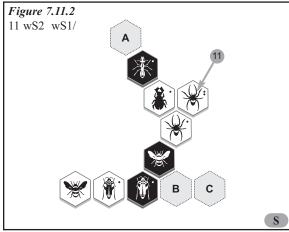
7.11.1 – Spiders in the Opening

Many Hive® players find Spiders more useful in the opening than later in the game. Due to its three space movement limit, a Spider can more quickly move from one end of the hive to the other in the opening when the hive has yet to grow to its full size.

In the game *U!HV-Eucalyx-ringersoll-2010-08-30-2234*, we have an excellent example of White getting a very efficient use of both Spiders. First, in *Figure 7.11.1*, Spider #1 is placed in such a way that it threatens to pin the Black Queen, either directly or indirectly. If Black places a new bug in either space A or space B, then White Spider #1 will pin the new bug, indirectly pinning the Black Queen. If Black places a new bug in any other space, then White Spider #1 will pin the Queen from space B. Moving the Queen is no better. Not only does this waste a valuable tempo, it does not get her out of danger. If she moves to space E, the White Spider will pin her from space D. If she moves to space C, she is moving into danger and will soon be pinned as White continues to develop more bugs.

A few moves later, White follows the excellent placement of Spider #1 with the placement of Spider #2 as seen in *Figure 7.11.2*. This newly placed Spider is well positioned to choose between two excellent uses. It can move to space A and pin Black Ant #1 or move to space B and attack the Black Queen. There are only two ways to stop White Spider #2 from attacking the Black Queen in space B. The first way is to





place a pin with Black Ant #1. This, however, releases White Beetle #1 and is therefore not a viable option for Black. The second is to place a defensive bug (Hopper or Beetle) in space B. This is a better option but still not a great one. If a new bug is placed in space B, it can immediately be pinned by the White Spider moving to space C.

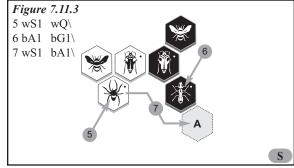
Excellent use of the Spiders in the opening will lead to another win by White.

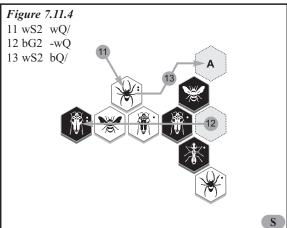
The same theme appears in the next two figures from the game *U!HV-ringersoll-HoborgHUN-2011-01-15-2116*. Turn five is shown in *Figure 7.11.3* when White places the first Spider. Black's Ant placement on turn six then allows the White Spider to place the pin on turn seven.

Figure 7.11.4 shows a few moves later as White places Spider #2, Black chooses to attack with Hopper #2, and then White pins the Black Queen with the newly placed Spider. By turn 13, White has both Spiders in the game and they are both performing very important tasks! One is pinning an opposing Ant and the other has pinned the enemy Queen!

A word of warning is needed before proceeding. In Chapter 8 – Beginners' Mistakes, under the subheading 'Misusing Your Ants,' one of the topics will be 'Failing to Get Your Ants into Play Quickly Enough.' When a beginner learns the power of a Spider properly placed during the opening, it is natural to want to place both Spiders early. This can, however, be a mistake if one's Ants are not developed quickly and efficiently.

Using your Spiders wisely in the opening will pay off with victories in the end!





7.11.2 – Pin Replacement

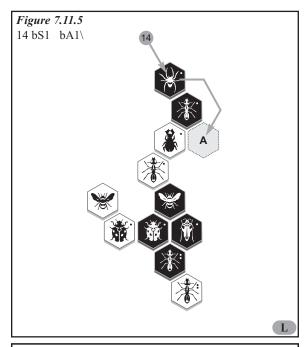
One of the more common uses for a Spider is as a pin replacement, typically freeing an Ant for use elsewhere in the hive. Though more common in the later stages of the game, this tactic can be used at any time from the opening, through the midgame, to late in the endgame. Here is a classic example of the use of a Spider as a pin replacement relatively early in a game. This comes from the 2011 BoardSpace Tournament final round game *T!HV-ringersoll-DrRaven-2011-07-07-0031*.

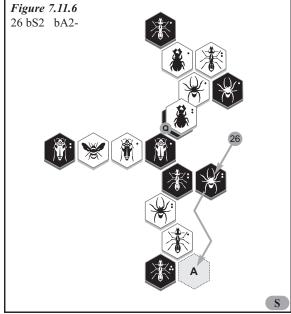
In *Figure 7.11.5* we see Black's placement of Spider #1 on turn 14. Note how this placement allows a later move to space A, pinning White Beetle #1 and freeing Black Ant #1 for more productive use. If you look ahead to *Figure 7.11.10* (page 143), you will see how Black Ant #1 was, in fact, used after the completion of the pin replacement.

Another pin replacement is illustrated in *Figure 7.11.6*, from the game *U!HV-Eucalyx-ringersoll-2010-08-30-2234*, seen both previously in this section regarding Spider use in the opening and in Section 6.1.2 – Replacing a Pin. Here Black Spider #2 is placed so that by moving to space A, the pin on the two White bugs is replaced and Black Ant #3 can now safely be used elsewhere.

Although not the classic maneuver seen in *Figure 7.11.5*, this pin replacement was effective none the less.

When tempo is not an issue and a Spider is in reserve, watch for possible pin replacements. Trade in a Spider and receive an Ant! This is a great, winning technique that even a beginner can master.





7.11.3 – Spider Placement

The game *U!HV-FishBoy-ringersoll-2010-12-16-0027* is very instructive, contrasting good Spider placement with poor Spider placement. On turn 12 (*Figure 7.11.7*), Black's first Spider placement brings with it a dual threat. The first threat is a direct pinning attack on the White Queen (space A). The second is a double pin on two White Ants (space B). White, a beginner, concentrating on defending his Queen, moved the Queen out of range of the newly placed Spider. Unfortunately, this allowed Black to pin two very valuable Ants with just one Spider, a trade that definitely favored Black!

Black's good Spider placement is immediately followed by a poor Spider placement by White (Turn 15 in *Figure 7.11.8*). When White's Spider attacks the Black Queen by moving to space A, a bad ring is formed (Chapter 8.3 – Beginners' Mistakes – Making a Ring). The Black Queen escapes and pins the White Spider in the process.

Figure 7.11.8

15 wS1 wA1/
16 bA2 bL1\
17 wS1 bA118 bQ wS1
15

16

17

18

18

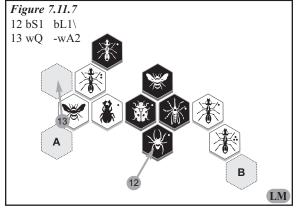
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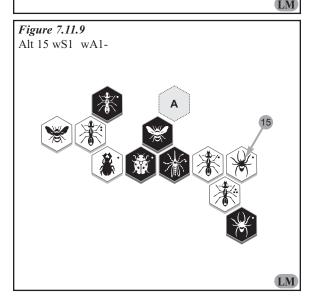
18

Now contrast what actually happened to what could have occurred. Please look at *Figure 7.11.9*, in which White Spider #1 is placed just one space farther away from the Black Queen. Now, if the White Spider is allowed to approach the Black Queen, it successfully pins the Queen from space A. From this position, the Black Queen can not escape. (We have seen this game previously in Chapter 7.3 – Controlling Bug Placement.)

All in all, this is a very instructive game highlighting the importance of well thought out Spider placement.

The Spider is the weakest of all bugs in the hive. Well planned placement is critical if a Hive® player wishes to become a master of both the Spider and the game.





7.11.4 – Spiders on the Attack

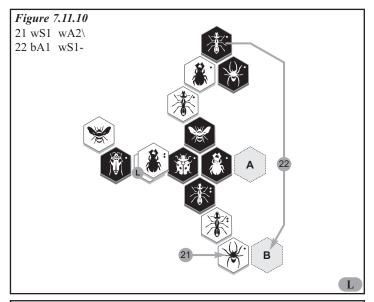
Continuing with the game *T!HV-ringersoll-DrRaven-2011-07-07-0031*, from Section 7.11.2, we can see White put both Spiders to excellent use.

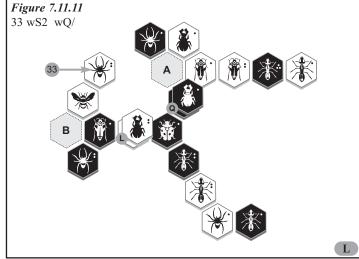
Figure 7.11.10 shows the placement of the first White Spider. Notice how it threatens to pin Black Beetle #1 by moving to space A. And if the Beetle moves, the White Spider attacks the Black Queen by swooping into the vacated space. This virtually forces Black to respond by using Ant #1 to place a pin from Space B. This Ant will remain tied down to defense until the threat by the White Spider is removed. But, before finding out the ultimate use of White Spider #1, let's turn our attention to White Spider #2.

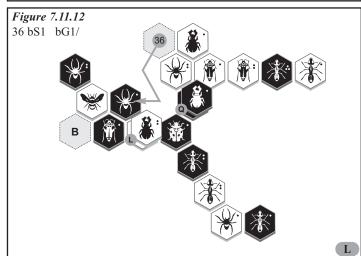
The second White Spider is brought into play on turn 33 (*Figure 7.11.11*). The first and foremost threat is an offensive one. White Spider #2 threatens to move into space A. Not only does the Spider attack the Black Queen from this space, it also frees White Beetle #1 to climb atop the hive.

This second Spider is also well placed defensively. It can move to space B, possibly freeing the White Queen to escape, or it can be used to pin Black Spider #2 if it should attack the White Queen.

When, in fact, Black chooses to attack, White elects to continue the attack rather than defend. The resulting position as Black continues to attack is shown in *Figure 7.11.12*.







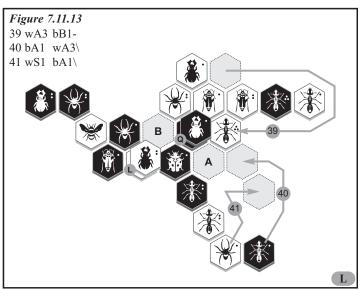
The final diagram from this game (*Figure 7.11.13*) shows White Spider #1 coming back into play. On turn 39, White has just moved Ant #3 into attacking position next to the Black Queen. Now the threat is to win the game with Ant #1 occupying space A and Beetle #2 filling space B, the final two spots around the Queen. Black is forced to block with Black Ant #1 as shown (turn 40). The White Spider now moves in (turn 41) to place a pin. All three of Black's Ants are now rendered useless. Black cannot stop the White attack as both White Beetles climb atop the hive and move in for the final attack.

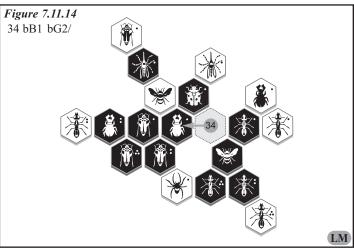
All in all, another game gives an instructive midgame and endgame use of two Spiders on the attack.

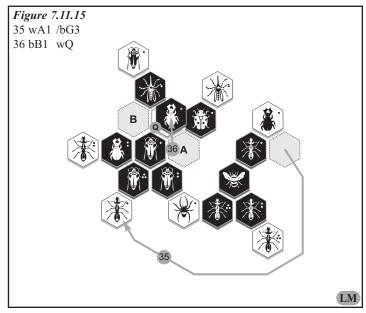
Typically speaking, the Spider is the least valuable bug to have in the reserve as the game enters the endgame. The inherent problems with the Spider's movement make finding a profitable space to enter into the game more and more difficult. The game *HV-EddyMarlo-peter20-2011-05-23-0455*, an early round game from the 2011 BoardSpace Tournament, shows how Spiders can be part of a game-winning endgame attack when used in conjunction with a Beetle cover (Chapter 6.2). Black skillfully maneuvers so that first Spider #1 and then Spider #2 are dropped directly into attacking position against the White Queen.

Follow along in *Figure 7.11.14* as the game progresses. Black Beetle #1 moves in to attack the White Queen. (You may remember this game from Chapter 7.6 – Making a Ring.)

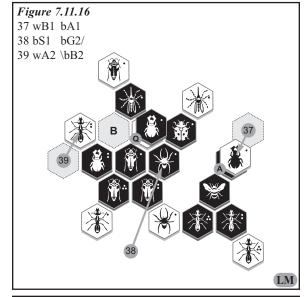
In *Figure 7.11.15* White pins Hopper #3 but cannot stop the Black Beetle from covering the Queen on turn 36. Notice how both space A and space B are now opened up to direct drops from the Black reserve!





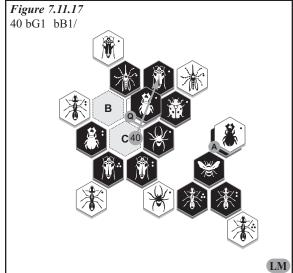


And in *Figure 7.11.16*, we see that after White climbs Beetle #1 atop Black Ant #1, Black drops Spider #1 directly into space A. To protect against another direct drop into space B, White is forced to slide Ant #2 as shown.



Since the direct drop into space B is no longer legal, Black finds an ingenious alternative. In *Figure 7.11.17* Black frees space C for the direct drop by jumping Black Hopper #1 as shown. There is no defense for White, and peter20 has a well earned victory against EddyMarlo, the two time defending BoardSpace champion. Both Black Spiders attacked the White Queen and yet neither of them ever moved! Direct drop attacks proved to be devastating.

Contrary to what beginners think, Spiders CAN be effective attackers; when used in the hands of an experienced Hive® player, of course.



7.11.5 – Spiders on Defense

Beginners have an even harder time finding a good defensive use for Spiders! But it can be done as we shall shortly prove.

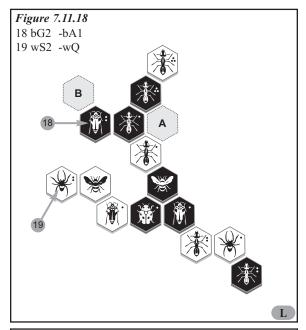
In another tournament game between two masters, *T!HV-Loizz-ringersoll-2011-06-13-2246*, Loizz makes an excellent and instructional defensive Spider placement. Please see *Figure 7.11.18*.

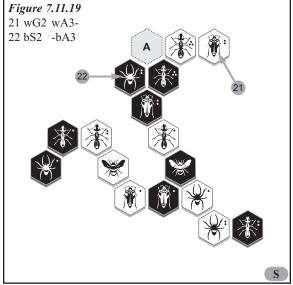
Black has just placed Hopper #2, planning to hop into the elbow (space A) and free Black Ant #1. White, however, stops this with the defensive move shown. With this excellent Spider placement, Black cannot effectively free the Ant. White threatens to pin the Hopper by moving into space B. If Black continues with the original plan and hops into the elbow, then the White Spider moves in and keeps the Black Ant pinned.

By forcing Black to change his defense, White gained a valuable tempo and was able to successfully continue the attack. Ultimately, White was able to win. This move also demonstrates how, even when on the attack, a well executed defensive move can prove to be valuable.

Another example of a great defensive Spider placement is in *Figure 7.11.19*, from the game *HV-ringersoll-Fumanchu-2011-02-22-1227*. White has just placed Hopper #2 in preparation for a pin replacement freeing Ant #3. Black responds with the placement of Spider #2 as shown. This placement forms a defensive elbow and stops the upcoming pin replacement. If White Hopper #2 jumps into space A and forms the elbow, Black Ant #3 is free. White quickly ran out of bugs and with three bugs in reserve and two Ants mobile, Black had no problem winning the game.

Defending with a Spider may not be easy, but as these examples show it can be done!





7.11.6 – Spider Interception

Due to its inherently limited movement ability, the Spider may not always be able to reach its destination space. This gives way to a defensive maneuver that shall be called the Spider Interception. This tactic is demonstrated in the game *T!HV-stepanzo-ringersoll-2013-06-14-1515* as depicted in *Figure 7.11.20* and *Figure 7.11.21*.

As we can see from the first figure, White has an excellent attack going and with the placement of Spider #2 is now directly attacking space A. Black could of course shift the pin from White Spider #1 to White Spider #2 and pin both spiders, but this would leave space B open to a new bug placement. A Beetle placed here could not be stopped from climbing atop the hive. So ringersoll decides to defend in a different manner. He decides to use the Spider Interception.

On turn 18, as shown in the second figure, Black places Spider #2. This move executes the intercept. From this position the Black Spider keeps the White Spider from attacking the Black Queen and at the same time threatens to pin it!

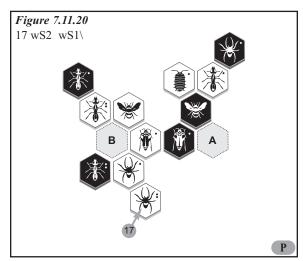
The White Spider may, and in fact will, later in the game, move to space C and then on to space D. But in the mean time Black will have time to place a Beetle defender in space A of the first figure.

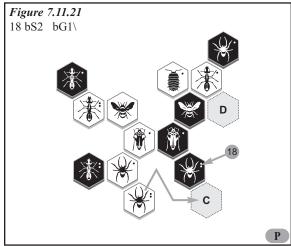
At this time it is important to identify a potential danger with the placement of Black Spider #2. Note that the placement of this bug pins a defender, Black Hopper #1. As long as this bug stays pinned, it is not an effective defender because it loses its ability to vacate the space adjacent to the Black Queen. The advantage from the Spider Interception must be weighed against the disadvantage of the self pin.

This shows just another way that the weakest bug in the hive can be used as a powerful defender!

7.11.7 – **Conclusion**

Some may consider a Spider to be nearly useless, but as you learn and study this wonderful game, you too, will begin to see the potential in this unique bug.





Chapter 7.12 – Counting Tempo

The second key to victory is Tempo (Chapter 5 – Strategy in the Hive). If the game becomes a race, do I win before my opponent does? If we both go all out on the attack, will mine succeed before my opponent's? If so, are there productive ways that my opponent can delay my attack while at the same time keeping his under way and thereby gain tempo? Can I guard against this?

If your opponent is a tempo ahead and would win an outright race, ask yourself, "What can I do to slow him down and shift the advantage to me?"

7.12.1 – Simple Tempo Counting

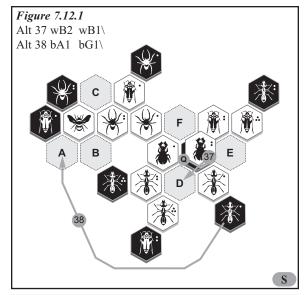
Let's start with the simple counting tempo example (*U!HV-guest-ringersoll-2011-01-28-2345*) from Chapter 7.1 – Counting Bugs. *Figure 7.12.1* is the same as *Figure 7.1.12* with labels added to the six vacant spaces adjacent to the two Queens. As noted previously, Black can win easily by bringing the final three Black bugs (a Hopper and two Beetles) into play and moving them into position. This would take six moves. Black counted tempo and realized that even with White on the move, the game could be won in only three without risk of losing.

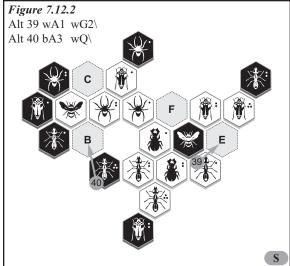
The key to winning in three moves is proper timing with the three Black Ants. In the actual game White moved Beetle #2 into space F. But best is to move Beetle #2 into space D.

Here is the sequence considered by Black:

Alt 37 wB2 wB1\ (space D) Alt 38bA1 bG1\ (space A) Black starts with Ant #1 because freeing White Ant #1 does not pose a danger. This Ant can now move but is already attacking the Queen. Any move it makes will just waste a tempo (the key to Black's entire plan).

Let's continue with *Figure 7.12.2*. White slides Ant #1 into space E. This is better than space F because if White fills space F, then Black Ant #2 can safely release the pin on White Hopper #3 since the White Hopper is no longer threatening to attack the Black Queen. Then on turn 40 Black attacks with Ant #3.





Here White could, with two Ants free, go on the defensive, first pinning Black Ant #2 and then using the second Ant to pin whatever new bug Black placed. This would only put off the inevitable, so White pressed forward.

Figure 7.12.3 shows the final two moves. All in all, an elegant victory more quickly brought about by accurately counting tempo.

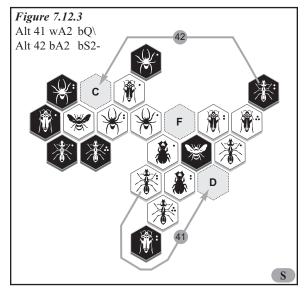
Learn to count tempo correctly and you will also soon be counting, not only tempo, but victories!

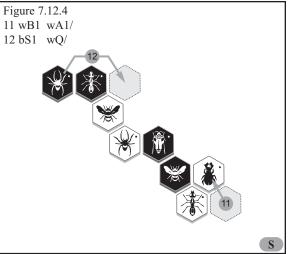
7.12.2 – Gaining Tempo with a Beetle Cover

An excellent tactic to use to gain tempo is a Beetle cover (Chapter 6.2). When the opposing Queen is covered, the possibility exists of placing new bugs from the reserve directly into attacking position. Each bug placed directly into attacking position gains one tempo for the attacker.

A good example of how this can quickly lead to victory is the game *U!HV-BlackMagic-ringersoll-2010-11-25-2138*. Both players immediately go on the attack. Black, moving second, and already a tempo behind makes a fatal mistake early. While White attacks on turn 11 with a Beetle, Black attacks on turn 12 with a Spider (*Figure 7.12.4*). We shall soon see the importance difference between these two bugs!

In *Figure 7.12.5* (page 151), White has just covered the Black Queen and now can place bugs directly into attacking space A and space B. Let's count tempo and see who is ahead. White has four spaces to fill and only one bug in play (Beetle #1). Two of those spaces (A and B) can be filled in just one move each. One additional bug must be brought into play and then moved into attacking position. And finally, Beetle #1 will fill one of the spaces. White's final tempo count is five.





On the other hand, Black needs three spaces filled but has no bugs in play to fill them. Each of the three spaces will require two tempi; one tempo to bring in a new bug from the reserve and one tempo to move the newly placed bug into attacking position. Even though Black is on the move, White is ahead and will win easily. *Figure 7.12.6* shows White turn 23. Realizing that a race to the finish is a lost cause, Black has already gone on the defensive. But it is too late. There is no defense. White won easily. This is an excellent demonstration of how a Beetle cover can gain tempo and lead to victory.

Use a Beetle cover to gain tempo and you will gain victories, too.

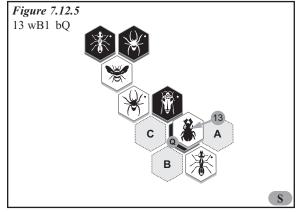
7.12.3 – Gaining Tempo with Good Defenders

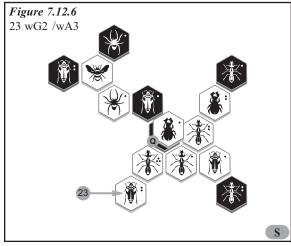
A more complex tempo counting example is presented in *Figure 7.12.7*, from the game *U!HV-weronika-ringersoll-2011-01-11-2256*. Both players, first White and then Black, have moved Beetles atop the opposing Queens.

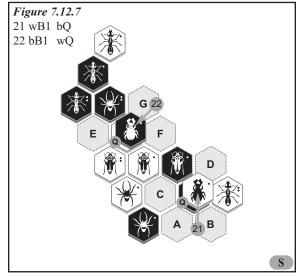
White is on the move, so let's count tempo and see who would win an outright race to the finish. White must fill four spaces: A, B, C, and D. Bugs in play and available are only three; White Ant #1, White Hopper #2, and White Beetle #1. In order to win, White must bring at least one additional bug into play. Fortunately, a new bug can be brought into space B and immediately be in position adjacent to the Black Queen. So the initial count for White is 4: 1) bring in a new bug to space B; 2) Hopper #2 to space D; 3) Ant #1 to space A; 4) Beetle #1 to space C.

Black must fill three spaces: E, F, and G; and has three, or possibly four, bugs already in play. These Black bugs are Ant #2, Spider #1, Beetle #1, and possibly, Ant #1. Like White, Black can place a new bug from the reserve directly into position in space G. The initial count for Black is three: 1) bring a new bug to space G; 2) Ant #2 to space E; 3) Beetle #1 to space F.

Based on our initial count, Black seems to be ahead even though White is on the move.







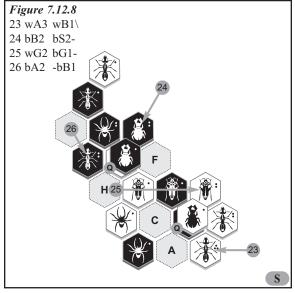
Let's examine *Figure 7.12.8*, follow the next four moves, and see how the game progresses.

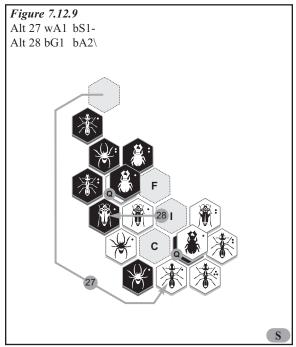
On turn 23, White fills space B with Ant #3 from the reserve. Black follows on turn 24 by also bringing in a bug (Black Beetle #2) from the reserve to space G. And then White plays the tempo gaining move 25 wG2 bG1-. Notice how this moves does double duty, both attacking and defending. It attacks space D, but it also defensively frees another space next to the White Queen. And finally, Black slides Ant #2 into space E.

Now counting tempo, the tempo-gaining Hopper move (turn 25) has changed things. White seems to be ahead. Both players have two spaces to fill and both players have bugs already in play that can fill them. For White, Ant #1 can move into space A and Beetle #1 can move down into space C. For Black, Spider #1 can move into space H (the space recently vacated by White Hopper #2) and Beetle #1 can move into space F. So the conclusion would be that White, being on the move, would seem to have the advantage.

BUT the excellent defensive position of Black Hopper #1 in combination with the positioning of Black Spider #1 creates a winning defensive position for Black. And this is why: the location of Black Spider #1 potentially creates a defensive ring (Section 7.6.2 – Making a Ring – On Defense, Freeing a Defender). As soon as either space A or space C is occupied, a ring is formed and Black Hopper #1 is free to escape. This escape attacks space H, gains a tempo for Black, and shifts the victory back to Black.

Note the potential continuation as shown in *Figure 7.12.9*. On turn 27 White moves Ant #1 into space A, attacking the Queen but forming the above mentioned ring. Black Hopper #1 hops into space H and Black is threatening to win. Yes, White Hopper #1 can jump out, but no tempo is gained. A new Black bug can now be brought from the reserve into Space F, followed by Beetle #1 into the space vacated by the White Hopper.





Recognizing the problem encountered by forming the ring, White tried a different approach. Going back to *Figure 7.12.8* (page 152), White placed Hopper #3 from the reserve as shown in *Figure 7.12.10*. Unfortunately, this also loses a tempo and Black wins. First, Spider #1 attacks into space H and then Black Beetle #1 climbs into space F.

This game provides excellent examples of both accurately counting tempo and gaining tempo by good defensive positioning.

Count on your defense to gain tempo. Count your tempo to gain wins!

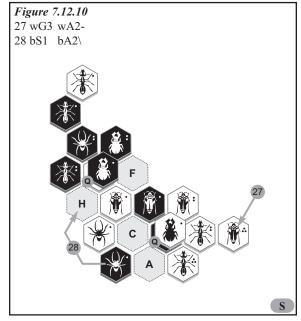
7.12.4 – Gaining Tempo with a Waiting Move

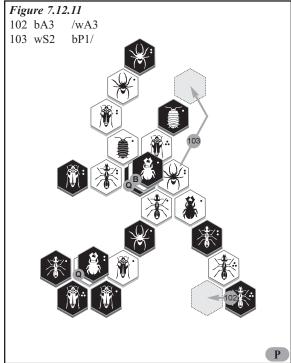
Interestingly enough, you can sometimes gain a tempo by wasting a tempo, using a technique called a waiting move. Black does this on the way to victory in *Figure 7.12.11*, from the game *T!HV-dynamical-Eucalyx-2013-05-15-0418*.

White has only one space to fill while Black has two spaces to fill. So at first glance it may seem that White is ahead. The difference, however, is that Black has a huge lead in mobility! Black has two bugs available (Ant #3 and Beetle #2) to fill the final two spaces and claim victory. But White, with only Spider #2 mobile, is suffering through a partial shutout.

Not wanting to take a chance in a long tournament game, Eucalyx uses a waiting move. On turn 102 he moves Black Ant #3 as shown. White must move Spider #2, vacating a space around the Black Queen. This sequence of moves gains a tempo for Black, who can now safely attack with Ant #3.

Use a waiting move to waste a tempo but gain a tempo, and you won't be waiting long for another victory.





7.12.5 – Wasting Tempo

As has been mentioned before; many games are won or lost by just one tempo. This means that wasting just one tempo can lose a game. We will examine a game in which Black has a won game in spite of the fact that White has successfully executed a Beetle cover of the Black Queen. But then Black throws the game away with the loss of just one tempo.

Follow along with *HV-walkie-Dulok44-2011-05-11-2256*, starting with *Figure 7.12.12*. White has just performed a Beetle cover of the Black Queen, a very strong offensive maneuver, but in this case not enough to force a victory. Let's count tempo. Let's count Black first since he is on the move. Black has three spaces filled with three to go. Two Black Ants are in play and in position to move in, so Black needs to bring in one more bug. Black's count is four: one to bring in an additional bug plus three to move in the three bugs.

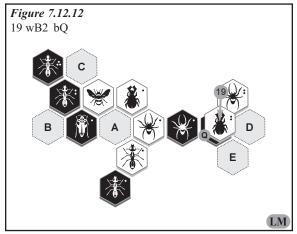
Now let's count tempo for White. The Queen cover helps. Two bugs can be dropped in directly adjacent to the Black Queen into spaces D and E. No other bugs are in play, but when Black moves Ant #1, White Ant #1 will be free to move. White's count is also four: two new bugs brought in adjacent to the White Queen, Ant #1 filling one space, and White Beetle #1 filling the final space.

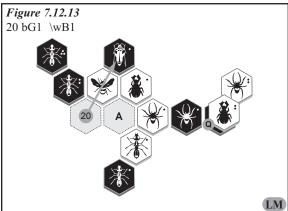
One note regarding Black's plan of attack: Space A must be the final space filled because when space A is filled, White Beetle #1, which is in a well placed defensive position, will be free to move. The best plan would be to place a Hopper in space B. From space B, this newly placed Hopper would threaten both space A and space C. With the counts equal and Black having the move, Black is ahead and should win. BUT Black makes a serious mistake! On turn 20, Black moves Hopper #1, a bug which is already in attacking position (*Figure 7.12.13*). This loss of just one tempo costs Black the game.

Throwing away a tempo in many cases is the equivalence of throwing away a game. Don't do it!

7.12.6 – Conclusion

Accurately counting tempo is an excellent way to make your games count. Do it and win!





Chapter 7.13 – The Mosquito Conversion

The Mosquito has the potential to be the most powerful bug in play. In the hands of an experienced Hive® player, the Mosquito can scurry around the hive like an Ant, jump into protected spaces like a Hopper, or climb atop the hive like a Beetle. If one is not careful, however, the Mosquito can be limited to moving like a Queen or a Spider, or worse yet, rendered totally immobile by being left adjacent only to another Mosquito.

Add a Ladybug to the mix and the Mosquito becomes even more powerful. But all of this power is not automatic. This unique bug must be adjacent to another piece to absorb that piece's movement ability.

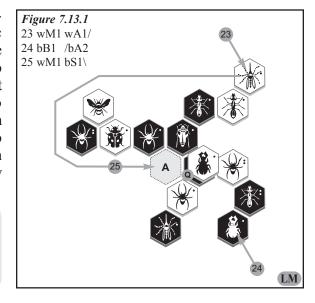
But what does one do when one finds the Mosquito reduced to movement of a mere Spider, for example? Use this tactic known as the Mosquito Conversion and convert your Mosquito into a more powerful or tactically superior bug.

7.13.1 – Ant-Beetle Conversion

The most common Mosquito conversion, one which can happen in the opening, midgame, or endgame, is the Ant-Beetle conversion. Typically in this case, the Mosquito is initially placed adjacent to an Ant, moves adjacent to a Beetle, and then climbs atop the hive.

Figure 7.13.1 from the game *U!HV-ringersoll-DrRaven-2011-04-17-0130*, shows a good example of this very basic conversion. With turn 23, White places the Mosquito into the position as shown. Black follows by placing Beetle #1, no doubt hoping to get the Beetle into a defensive position. But White forces the Mosquito atop the hive by moving to space A. Note that because of the pocket formation (Section 4.5 – Pocket) around space A, there is no way for Black to place a pin and stop the newly converted Mosquito from climbing atop the hive. With a Mosquito and a Beetle now atop the hive, White proceeded to force a win.

A Mosquito moving like a Beetle atop the hive is a very powerful bug. Keep your eyes open for the Ant-Beetle conversion and you will see more victories.



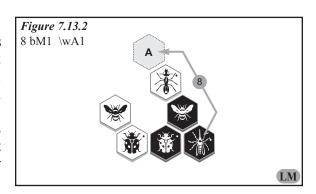
7.13.2 – Conversion in the Opening

Another basic application of the Mosquito conversion is highlighted in a very common Black defense in games with both Ladybug and Mosquito. Please take a look at *Figure 7.13.2*. In this opening, Black starts with Ladybug, Mosquito, and Queen positioned as seen here. When White attacks the Black Queen, the Mosquito, absorbing the movement of the Ladybug, moves to space A. From this position she pins the attacking White Ant, converts to an Ant by acquiring the Ant's movement ability, and frees up her original spot for another Black defender.

As a side note, this move also restricts White's ability to use the White Ant to place a Beetle in close proximity to the Black Queen.

Although a very common opening sequence, this specific illustration comes from the game *U!HV-Fumanchu-ringersoll-2010-12-16-1606*.

To get full use of the Mosquito, it is very important to understand the Mosquito Conversion and use it efficiently in the opening moves of a game of Hive.

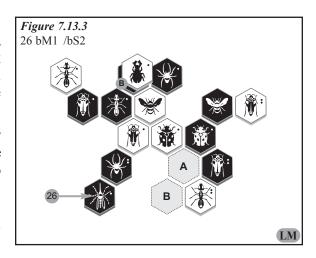


7.13.3 – Proper Mosquito Placement

Application of the Mosquito conversion begins with its very first placement. Care must be taken to ensure that the Mosquito is placed in such a way to maximize its potential from the very moment it enters the game.

HV-kanoeboy-chornyi-2011-05-12-1002, from the 2011 BoardSpace Tournament, is an excellent example of a Mosquito conversion. Let's start with *Figure 7.13.3*. Black has just made what may seem to be a less than optimum Mosquito placement. It comes into the game but with the restricted movement of a Spider!

Examining carefully the situation shows that this seemingly weak placement is actually a game winner. The immediate threat is to move to space A. By doing so, the Black Mosquito releases Hopper #2 and converts to a Ladybug. After this move/conversion, Black has two game-winning threats. White can counter one or the other, but not both. And thus, Black wins.



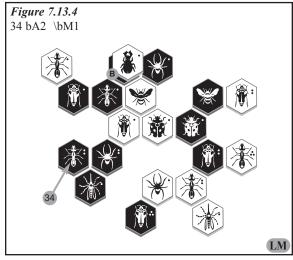
White must counter both threats, but how? Because White Ant #1 is tied down and must hold its pin on Black Hopper #1, the only counter to this Mosquito conversion threat is to place a new bug directly into a blocking position (Chapter 6.3 – The Block) in space B. Unfortunately, this leads to a self pin of White Ant #2! This forced move leads to White's loss.

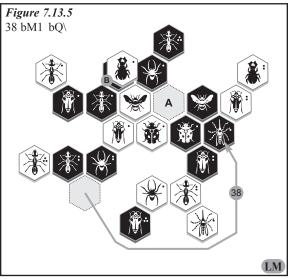
A few moves later we come to the situation shown in *Figure 7.13.4*. Here Black has just brought Ant #2 into the game. By placing this new Ant adjacent to the Black Mosquito, the Black Mosquito is given the movement of this newly placed Ant. This is another interesting and different application of this tactic.

The final Mosquito conversion wins the game for Black. The Black Mosquito moves adjacent to the Black Queen as shown in *Figure 7.13.5*. This poses two threats. First the Black Queen is no longer pinned (Chapter 6.4 – The Fill) and can move into space A, the final space adjacent to the White Queen. And secondly, the Black Mosquito has now converted to a Ladybug and can easily fly into this same game-winning space.

All in all, this proves to be a well played game demonstrating multiple aspects of the Mosquito conversion.

Proper Mosquito placement leads to good Mosquito Conversions. Good Mosquito Conversions lead to good Mosquito usage. Good Mosquito usage leads to more victories!





7.13.4 – Hopper Conversion

As the game progresses and the areas around the opposing Queens begin to be more congested, Spiders and Ants lose their value. Unable to get into blocked or surrounded spaces, these bugs cannot force the final victory. At these times, Hoppers, Beetles, and Ladybugs truly show their worth. Mosquitoes, too, can convert to these bugs and get into these otherwise inaccessible spaces. This is another instance when the Mosquito's power comes to the fore.

The next game (*HV-Fumanchu-ringersoll-2010-11-13-1314*) shows an Ant-Hopper conversion that leads to a win for White.

Figure 7.13.6 shows the White Mosquito moving to space A. Adjacent to Black Hopper #1, the White Mosquito threatens to hop into space B and end the game. Black is able to pin the Mosquito with Ant #1 but with the White Ladybug still in reserve, White had an easy victory in just two more moves.

Watch for opportunities for a Mosquito to convert to a Hopper and at the same time watch your losses convert to wins.

7.13.5 – The Immobile Mosquito

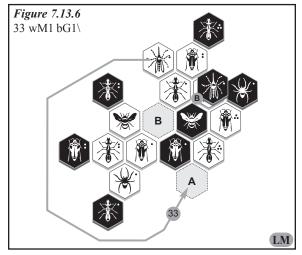
Before leaving the topic of the Mosquito Conversion, a warning is in order. Please remember that a Mosquito has no inherent movement of its own. If a Mosquito is adjacent to no other bugs other than another Mosquito, it has no movement ability whatsoever.

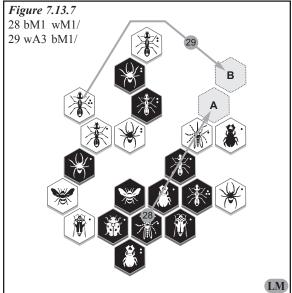
The following game (*U!HV-ringersoll-DrRaven-2011-02-16-0208*) demonstrates a scenario where the Black Mosquito ends up losing its ability to move and spends the remainder of the game helplessly stranded and unavailable for either attack or defense.

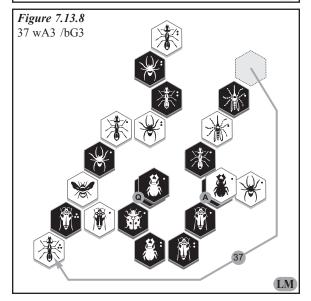
Figure 7.13.7 shows the position when the Black Mosquito, using the Hopper's movement ability, jumps out, occupying space A. At first glance this may seem to be a good move, because the Mosquito is now adjacent to White Beetle #1 and thus threatening to climb atop the hive. But White counters by moving Ant #3 to space B. This pins the Black Mosquito.

Over the next few moves, White first moves Beetle #1 and then Ant #3. With both of these bugs gone, the Black Mosquito is only adjacent to the White Mosquito. The next figure (*Figure 7.13.8*) shows this position after the Black Mosquito has lost all its movement ability. The Black Mosquito never moved again and White went on to win.

An immobile Mosquito can be a useless bug or a serious liability. Protect against allowing your Mosquito to become immobile.







7.13.6 - 'Faux' Beetle Conversion

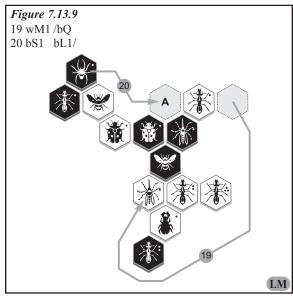
Many a Hive® player has seen a seemingly well planned attack falter because of the 'Faux' Beetle conversion. One must remember that a Mosquito gains its movement ability from adjacent bugs. And just as was discussed in the previous section, a Mosquito gains no movement ability from an adjacent Mosquito, even if the adjacent Mosquito is atop the hive and moving like a Beetle!

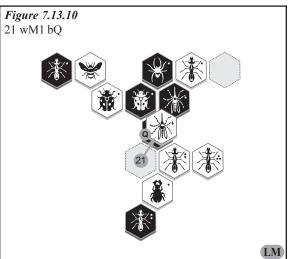
Figure 7.13.9, from the game *T!HV-Fumanchu-ringersoll-2011-07-02-1918*, demonstrates this. One of the strengths of the Ladybug/Mosquito defense for Black is that not only can the Mosquito jump out using the movement of the Ladybug, but if an opposing Beetle approaches, the Mosquito can climb atop it when it covers the friendly Queen.

But when the approaching bug is a fellow Mosquito moving like a Beetle, then this defense loses some of its effectiveness. As the White Mosquito attacked, Black freed his own Mosquito using a fill by Spider #1 (Turn 20). But, lo and behold, when the White Mosquito covered the Black Queen (Turn 21 in *Figure 7.13.10*), the Black Mosquito was unable to reply in kind.

White's cover worked as planned. The Black Mosquito could not climb up to defend and White went on to win rather handily.

A Mosquito on guard by your Queen is a good defense against an opposing Beetle, but if the bug on the attack is the opposing Mosquito, beware the 'Faux' conversion. Don't put your trust in your Mosquito when this is the case.





7.13.7 – Conclusion

Study, learn, and use successful Mosquito Conversions and your Mosquito will demonstrate its full power and potential! In no time at all, you will be demonstrating the skills of a true Hive® Master.



Play Hive® Like a Champion

Chapter 7.14 – The Ladybug

In October 2010 at the Essen Game Fair in Essen, Germany, the much anticipated Ladybug was released as the newest expansion bug to the game Hive. This new bug with its unique and unusual movement pattern quickly proved to be very useful in the hands of an experienced player.

Let's examine some ways that a Hive® Master successfully uses the Ladybug.

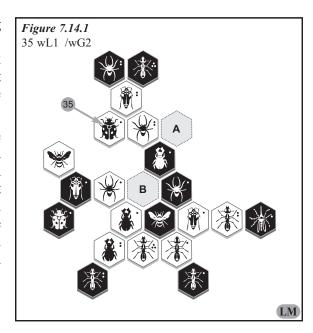
7.14.1 – The Ladybug Attacks

The most obvious use of this new bug is on the attack. With the ability to jump into otherwise restricted spaces, the Ladybug is much like the Hopper. When comparing the Ladybug with the Hopper, it can be seen that each has its strengths and weaknesses. Not being confined to straight line movement, the Ladybug is much more flexible in initial placement and movement. But with its strict three space movement requirement, she does not have the long distance attack capability of the Hopper.

Three upcoming examples will show the power of the Ladybug on the attack.

The first excellent example of the flexibility of the Ladybug on the attack is shown in *Figure 7.14.1*, from the game *HV-Dragonfly-ringersoll-2010-10-21-0036*. Even though Black has worked hard at restricting White's new bug placement (Chapter 7.3 – Controlling Bug Placement), the White Ladybug enters the game and cannot be stopped!

Note how a White Hopper cannot be brought into the game and immediately threaten space B. Indirectly, however, a White Hopper brought in instead of the Ladybug can threaten this space with a hop around (Chapter 7.9). But it must first jump to space A before going to space B and winning. With an Ant mobile and ready to defend, Black would wait until the Hopper is in space A and then place a pin. The Ladybug, on the other hand, can immediately go into space B. No pin can be placed because attempting to pin the White Ladybug makes a ring and the Ladybug is still free to attack.



The next game, *T!HV-Salish99-Fumanchu-2011-05-11-1845*, is from the 2011 BoardSpace Tournament. And again, the flexibility of the Ladybug on the attack wins for White. *Figure 7.14.2* shows the entry of the White Ladybug on turn 29. She comes into the game directly into a pocket (Section 4.5) and cannot be stopped. White wins! Again note that a Hopper placed in this same space does not immediately threaten space A.

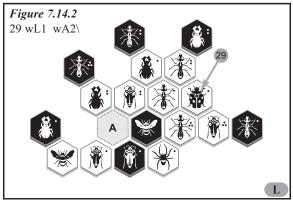
One final example, as shown in *Figure 7.14.3*, should drive the point home. In *HV-BlackMagic-ringersoll-2010-11-20-1541*, we see a winning Ladybug attack in a situation where a Hopper would not have been able to do the job. The Black Ladybug will go directly to space A and win. Black has a Hopper in reserve but no space will allow the Hopper to directly threaten space A.

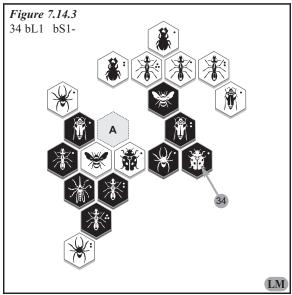
Learn the Ladybug's unique movement pattern and you will be able to make excellent use of the Ladybug on the attack.

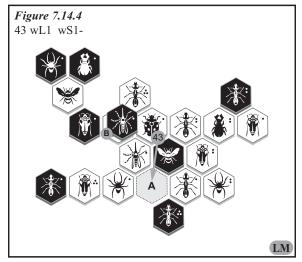
7.14.2 – The Ladybug in Confined Space

One of the major strengths of the Ladybug is the ability to maneuver in confined spaces. In many situations the attacker may find himself in a situation where the final space that needs to be filled cannot be reached by any available bugs. But an attacking Ladybug can jump directly from one attacking space to another attacking space and in doing so, she opens a space that can then be reached by another bug.

Figure 7.14.4 demonstrates this ability. This example comes from the game *HV-bird-ringersoll-2010-12-03-2326*, another loss for the author. (It seems that the best lessons learned come from losses!)







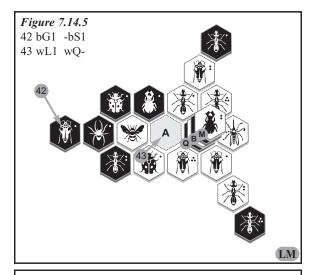
All the White bugs are in play. Due to a series of good pins and blocks, Black has put up an excellent defense. Of the White bugs not already in attacking position, three of them are free to move: Ant #3, Hopper #1, and Spider #2. But none of them are in position to move into space A. It seems that the White attack has come to a grinding halt. But NO, the power of the Ladybug in confined spaces wins the day. The White Ladybug makes the move shown, moving into space A. Now White has dual winning threats. White Ant #3 and Hopper #1 both threaten the space vacated by the Ladybug. Black can stop one or the other, but not both; so White wins.

In situations such as these, an attacking Ladybug that is otherwise free to move can move into any of the other attacking spaces in just one turn. A Hopper, on the other hand, can only jump into the space directly opposite its current space and a Beetle, although able to move to any space, may take two turns to do so.

From the 2011 BoardSpace Tournament semi-finals we find another excellent example of a Ladybug showing her superiority in confined spaces (*T!HV-DrRaven-EddyMarlo-2011-06-29-1850*). White has a very strong attack. Black has defended well and is threatening to draw. But the White Ladybug pulls out the victory. The winning move is shown in *Figure 7.14.5* as the White Ladybug moves from its current location directly into space A.

Replace the Ladybug with any other White bug and Black will more than likely earn the draw. The only other bug that could make this move would be a Beetle. But a Beetle will take two turns, first climbing up atop the hive and then climbing down into space A. As soon as the Beetle vacates its current space, one of the Black Ants will move in and the game will almost assuredly end in a draw.

Used in conjunction with a fill (Chapter 6.4), a Ladybug can be unstoppable as demonstrated in *HV-Vindicator-ringersoll-2010-11-17-0003*. As shown in *Figure 7.14.6*, Black has been relegated to fighting for a draw and so, on turn 42, moves Hopper #1 as shown. White responds on turn 43 with a fill that releases the Ladybug.



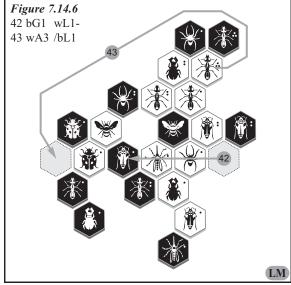
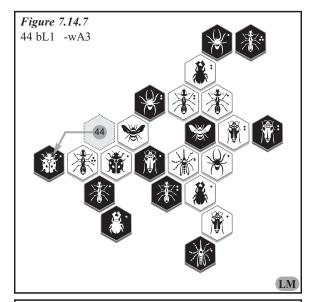
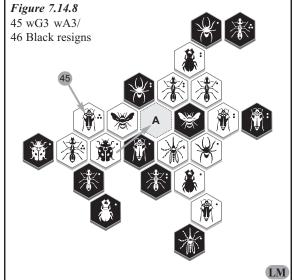


Figure 7.14.7 shows the versatility of the Ladybug on defense as the Black Ladybug moves to pin the White Ant, relieve the fill, and render the White Ladybug immobile.



Unfortunately for Black, White has a Hopper in reserve (any bug will do, but the Hopper presents dual game-winning threats). As we see in *Figure 7.14.8*, Black can pin the Hopper but cannot stop the Ladybug from moving into space A. White wins and again shows the versatility of the Ladybug in confined spaces.

In confined space the Ladybug will prove her worth, if you learn how to use her correctly.



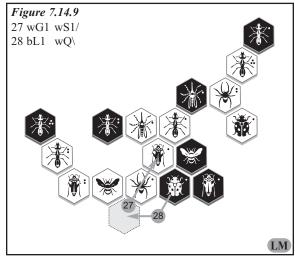
7.14.3 – The Ladybug on Defense

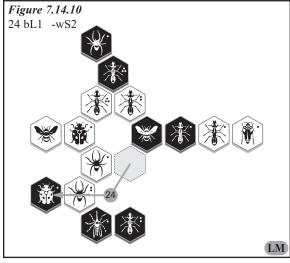
We have seen how effective the Ladybug can be in the confined space around the opposing Queen. Now let's see how effective she can be on defense.

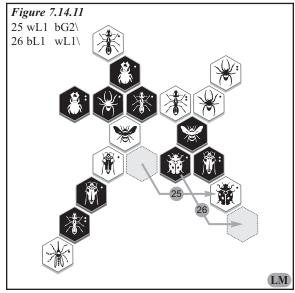
Let's start with *Figure 7.14.9* from the game *U!HV-weronika-ringersoll-2010-12-11-1459*. White has just attacked with Hopper #1. The Black Queen could attempt an escape but that could leave the Queen without any effective defense. Instead, on turn 28, the Black Ladybug moves as shown. White must now either place a new bug or move the Ladybug (the only mobile White bug). In two moves the Black Queen will be free. With only three bugs in reserve, White does not have enough bugs to win. (See Chapter 7.1 – Counting Bugs.)

The next example, *Figure 7.14.10* from the game *U!HV-bird-ringersoll-2010-12-11-1848*, shows how a defending Ladybug can move out and replace a pin on an opposing bug. Both Black Ant #2 and the Black Mosquito are now free and will soon be used elsewhere in the hive.

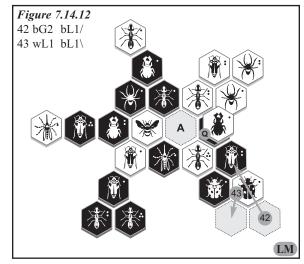
A Ladybug vs. Ladybug battle occurs in the game *HV-ringersoll-guest-2011-04-24-1840*. First, in *Figure 7.14.11*, we see the White Ladybug move out and effectively pin the defending Black Hopper. Black responds on turn 26 with a Ladybug pin as shown.





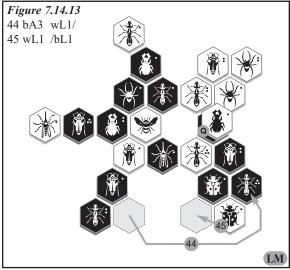


A few moves later Black threatens to win with a well placed Hopper fill (Chapter 6.4) on turn 42, releasing the Ladybug as seen in *Figure 7.14.12*. The flexibility of the Ladybug on defense shows as the White Ladybug moves on turn 43 to set a pin on the Black Ladybug.



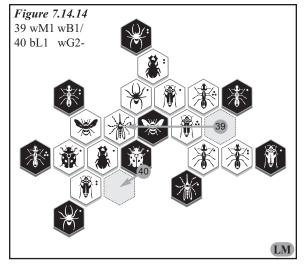
Another Black fill, this time with Ant #3 (*Figure 7.14.13*), and again the White Ladybug responds by shifting and resetting the pin.

With the close proximity of the two Queens and both players' effective use of the Ladybug, this game ended in a draw after 66 moves.



And finally we get our last example of a defending Ladybug from the game *HV-weronika-ringersoll-2010-12-08-1205*. *Figure 7.14.14* shows what occurs right after the White Mosquito jumped in and attacked the Black Queen. The threat is that White Beetle #1 will climb atop the Black Ladybug and from this position atop the hive it cannot be stopped!

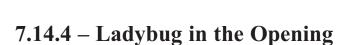
The Black Ladybug 'bugs out' and while doing so, sets a block on the White Beetle. This move frees the Black Queen to escape.



In order to keep the Black Queen trapped, White's response in *Figure 7.14.15* is forced. The Black Ladybug slides across pinning the Hopper, setting a block on space A, and freeing the Mosquito. With both vacant spaces around the Black Queen protected by blocks, the White Spider in reserve is virtually useless.

The Ladybug defender has done another great job and Black goes on to win.

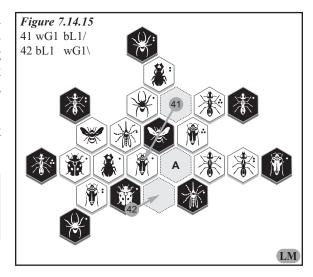
Keeping in mind the flexibility and defensive ability of the Ladybug will allow you to continue to count your victories.

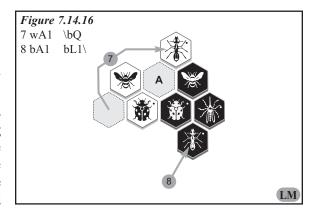


The combination of the strengths of the Ladybug: on offense, working in confined space, and on defense, makes the Ladybug an excellent choice as an opening bug. The late rounds of the 2011 BoardSpace Online Tournament* highlight this magnificently. In fourteen of the twenty three games played in the final two rounds of the tournament both players started with the Ladybug. In the other nine, one of the two players opened with her.

We will look at just one example (*T!HV-ringersoll-Fumanchu-2011-06-28-2316*). In this game, Fumanchu uses the Ladybug/Mosquito opening as Black and pulls out a draw. *Figure 7.14.16* shows the position after four moves by each player.

The Black Ladybug is well placed in numerous ways. In this defensive position, the Ladybug is ready to jump out if a ring is formed or space A is filled. The close proximity to the White Queen means that when she jumps out, she can, if she wishes, immediately attack the White Queen. And finally, the adjacent Mosquito has been given her movement ability and can thus also jump out defensively.





^{*} Because the Ladybug had just recently been introduced, the rules of the 2011 BoardSpace Online Tournament required that the Ladybug be used in every game.

All nine games of the semi-final matchup between Fumanchu and ringersoll are listed below* because they are excellent games demonstrating all aspects of the use of the Ladybug. Studying them will give a Hive® student an excellent education in the use of the Ladybug.

The Ladybug is an excellent choice for an opening bug. Use her wisely and your play will continue to improve.

7.14.5 – Conclusion

The Ladybug is an interesting addition to the complement of Hive® bugs. With her intriguing movement pattern, she provides many unique opportunities to use her in a variety of situations. Study and learn how to use her effectively. If used properly, she will win many games for you.

^{*} Here are the nine games of the 2011 Tournament semi-final between Fumanchu and ringersoll:

T!HV-Fumanchu-ringersoll-2011-06-26-1833; won by White

T!HV-ringersoll-Fumanchu-2011-06-27-2357; won by White

T!HV-ringersoll-Fumanchu-2011-06-28-2316; draw

T!HV-Fumanchu-ringersoll-2011-06-29-2314; won by White

T!HV-ringersoll-Fumanchu-2011-07-02-1812; won by White

T!HV-Fumanchu-ringersoll-2011-07-02-1918; won by White

T!HV-ringersoll-Fumanchu-2011-07-02-2014; won by White T!HV-Fumanchu-ringersoll-2011-07-03-1907; won by Black

T!HV-ringersoll-Fumanchu-2011-07-03-1957; won by White

7.15 – The Pillbug

With a history of over ten years on the market and an established worldwide player base, the standard game of Hive® is an exciting, thought provoking challenge to any serious gamer, while remaining simple and easy to learn for the younger or less intense audience. Add the two earlier expansions, the Mosquito and the Ladybug, and the game becomes even deeper and more exciting. Unfortunately, most experienced Hive® players recognize that adding these bugs increases the advantage that White has by virtue of the first move.

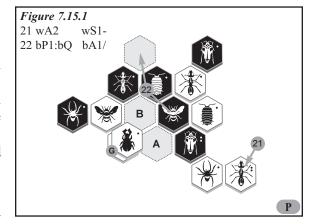
In discussions among players around the world, particularly in some of the user threads on BoardGameGeek, it is commonly recognized that there has been a need for a defensive bug to balance the offensive power of the Mosquito and Ladybug. In response, John Yianni proposed in January 2013 a new bug. By allowing play testing at BoardSpace.net*, feedback from some of the best players in the world resulted in an exciting new addition to the Hive® family: the Pillbug!

7.15.1 – Rescuing the Queen

The most obvious use of the Pillbug is in a defensive role, rescuing the friendly Queen from the immediate danger of loss. The first two games will show good examples of how this can occur.

The first example comes from the game *U!HV-kkurtonis-ringersoll-2013-05-22-1657* as shown in *Figure 7.15.1*. White, continuing with the attack, brings in Ant #2 on turn 21. White has a very strong threat! There is a bug ready to fill each of the two empty spaces adjacent to the Black Queen. Ant #2 can occupy space A and Beetle #1 easily drops down into space B. Even if the Black Pillbug moves out when the ring is formed, the White Hopper currently under Beetle #1 will be in place to deliver the final blow into the space vacated by the Pillbug.

But here comes the power of the Pillbug Queen Rescue. On turn 22, the Black Pillbug picks up the Black Queen and moves her as shown**. Not only does this retrieve the Queen



^{*}Games prior to February 24, 2013, the Pillbug rules were different.

^{**}Special movement notation is needed for the Pillbug, please see page 13.

from a dangerous position, it also leaves the White Pillbug and White Ant #1 hopelessly pinned.

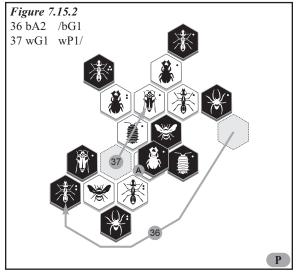
Another example of a classic Queen Rescue is shown in *Figure 7.15.2*, from the game *U!HV-fungames-ringersoll-2013-05-03-2142*. Both players have strong attacks brewing, but the difference is the Black Pillbug. Black had just attacked with Ant #2 on turn 36. This fills the 5th space and threatens to win. White countered by jumping out with Hopper #1 on turn 37. This is also an attacking move, filling the penultimate space around the Black Queen. Now White is only one space away from victory.

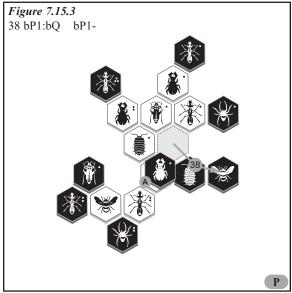
But Black responds as shown in *Figure 7.15.3*: he uses the Pillbug on turn 38 to rescue the Queen. White's threat has been terminated and with White in a shutout position, two Black Ants free, and Black Beetle #1 atop the hive, Black had no problems, winning in just two more turns.

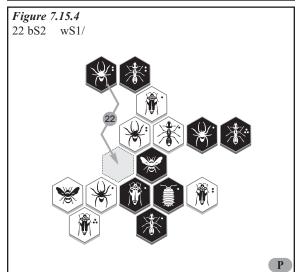
In some situations you may need to help complete the surrounding of your own Queen in order to successfully extract her from a dangerous situation.

Notice how in the game *U!HV-Juamax-ringersoll-2013-04-17-2138* (*Figure 7.15.4*) Black uses Spider #2 to fill the fifth space around the friendly Queen. This will allow the Pillbug, on a future turn, to place the Queen outside the confines of her current position. This move drastically improves her safety and defensibility. It is no wonder then that Black won the game easily.

Position your Pillbug adjacent to your Queen and when your opponent attacks, execute a Queen Rescue to move her out of danger!







7.15.2 – Stripping an Attacker

To rescue the friendly Queen, the Pillbug must be adjacent to her. Move the Pillbug one space away and it is in place to execute the second common defensive maneuver by stripping away attacking bugs.

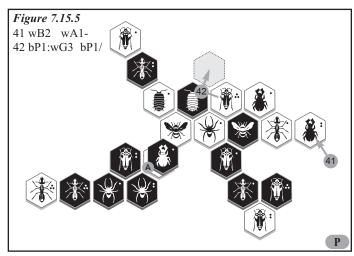
Our first example of this tactic comes from the game *U!HV-wisewol-ringersoll-2013-05-21-1808*. As depicted in *Figure 7.15.5*, White brings in Beetle #2 to advance toward the Black Queen. In defense, the Black Pillbug picks up White Hopper #3 and moves it away from the Queen. Not only does this remove the Hopper from attacking the Queen, but from this position, it cannot get back to the attacking position that it was in!

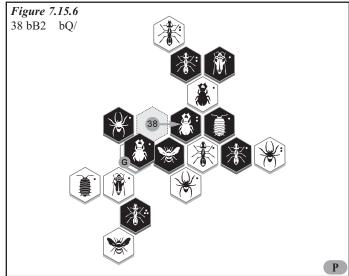
In this next game (*U!HV-kkurtonis-ringersoll-2013-05-08-2142*), both players use this tactic. First Black, and then White, strip away attacking bugs from their Oueen.

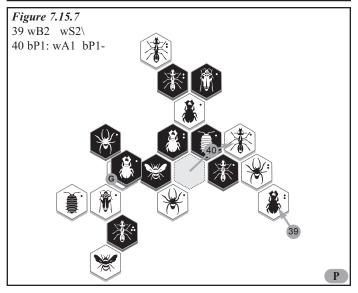
In *Figure 7.15.6* Black Beetle #2 moves in as shown. Using a fill, this move will allow the Black Pillbug to strip away White Ant #1.

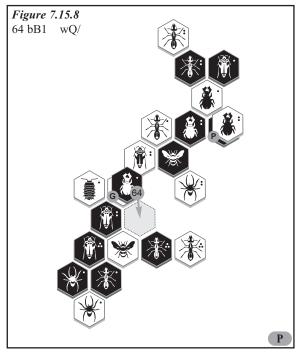
After White brings in a Beetle on turn 39 (See *Figure 7.15.7*.), the Black Pillbug strips away White Ant #1. Note that due to the rule regarding bugs just moved by a Pillbug, the recently moved White Ant cannot move in the immediately following turn. By moving the White Ant into the elbow, Black Ant #1 is also free to move. And when it does, White Ant #1 will be pinned.

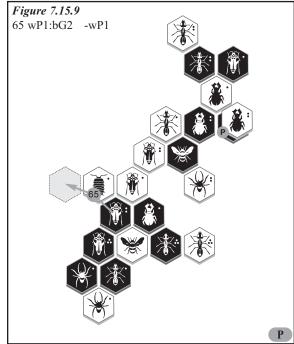
Later in the game, after halting the White attack, Black begins the counter attack. But White uses the same tactic to strip away a Black attacker and the game ends in a draw.











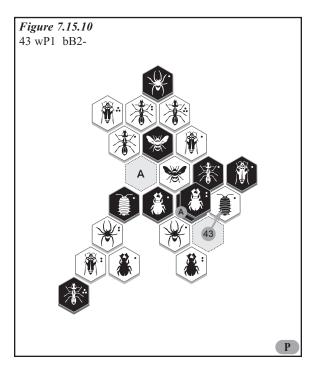
Black Beetle #1 moves in to attack (*Figure 7.15.8*) and the White Pillbug strips away the attacking Black Hopper #2 (*Figure 7.15.9*).

Neither player has the strength available to force a victory and after just a few more moves the players agreed to a draw. By using the Attacker Strip, each player put up an effective defense.

When choosing to use this defense, placement of the Pillbug can be critical. *Figure 7.15.10* shows the difference between an in line Pillbug placement and an elbow Pillbug placement. In this game (*U!HV-ringersoll-image13-2013-03-03-1223*) the Black Pillbug is in line with the Black Queen. It can only strip a bug from space A. On the other hand, the White Pillbug has just moved into an elbow alignment with the White Queen. It can strip bugs from two different spaces. It can strip out Black Ant #1 or (if Black Beetle #2 moves away) Black Ant #2 (currently under the Black Beetle).

With the close proximity of the two Queens this difference did not matter. With two expert players, this game was destined to be a draw.

A Pillbug does not need to be adjacent to the friendly Queen in order to defend her: two spaces away is close enough to use its special power to pluck out attacking bugs.



7.15.3 – Covering the Pillbug

By adding the ability to rescue a threatened Queen, the Pillbug completely changes the complexion of the game of Hive[®]. With another weapon added to the defensive arsenal of a master player, an attacker must always take the Pillbug into consideration when planning an attack. The next five sections discuss how to counter the Pillbug and its powerful defensive potential.

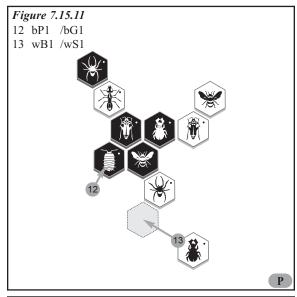
In theory, the easiest counter to the Pillbug is a Beetle. By covering either the Pillbug or the Queen, an attacker has removed the defender's ability to rescue the Queen. In many cases this leads to a successful attack.

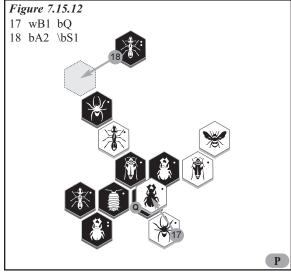
Our first example comes from the game *U!HV-ringersoll-kkurtonis-2013-04-19-2304*. *Figure 7.15.11* shows the game early on as Black brings in the Pillbug in a good defensive position, adjacent to the Black Queen. White counters by bringing in Beetle #1 in position to move in on the Black Queen and Pillbug.

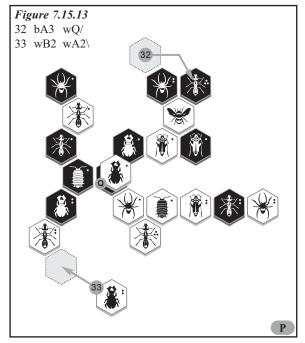
The game continues a few moves later in *Figure 7.15.12*. Here we see the White Beetle covering the Black Queen and rendering her immobile. This effectively removes the Pillbug's ability to rescue the Black Queen. This does, however, give Black an advantage in tempo. While White has placed and moved Beetle #1, Black has placed two Ants. This gain in tempo shifts the momentum and allows Black to gain a very strong attack.

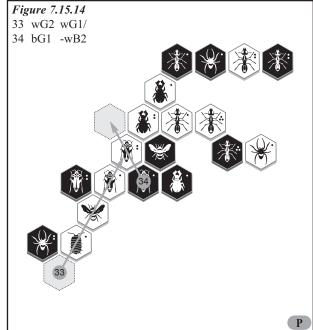
Over the next dozen moves, Black continues attacking while White is forced on the defensive. Ultimately this leads to *Figure 7.15.13* (page 174). On turn 33, White brings in Beetle #2 with the plan to advance and cover Black Beetle #2. This serves multiple purposes: first, White Ant #2 will be freed for defense; second, the Black Beetle will continue to be immobilized; and third, the White Beetle will be in position to cover the Black Pillbug.

With two Beetles atop the hive to completely counter the power of the Black Pillbug, two Ants free, and a Hopper in reserve, White carefully defended, counter attacked, and eventually won on turn 55.





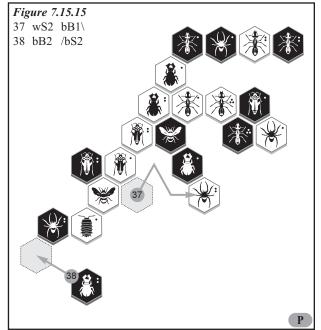


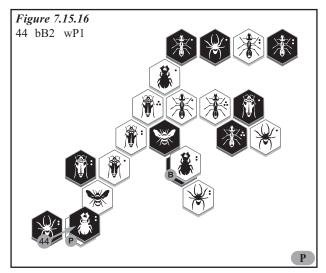


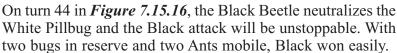
In the next game (*HV-blefinjo-ringersoll-2013-05-05-1828*) while White attacks, Black defends carefully, all the while keeping a Beetle in reserve. After having successfully withstood the White assault, Black counter attacks, using the carefully preserved Beetle to neutralize the opposing Pillbug.

Figure 7.15.14 shows a Hopper exchange, White attacking with Hopper #2 and Black jumping out with Hopper #1.

A quick bug count after the continuation in *Figure 7.15.15*, shows that Black has successfully defended. White needs two bugs to win. The Hopper in reserve will be able to attack, but the only two mobile White bugs are both Spiders and neither of them can get into a game winning attacking position. On turn 38 Black brings in the final Beetle to begin the assault on the White Queen.







To make effective use of your Pillbug in defending your Queen, you must constantly consider the possibility of an opposing Beetle covering either your Pillbug or your Queen. In many cases a player will wait until both opposing Beetles are neutralized before bringing in a defending Pillbug.

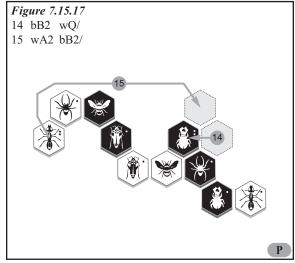
This is demonstrated in the following two figures from the game *U!HV-ringersoll-Juamax-2013-04-17-2221*.

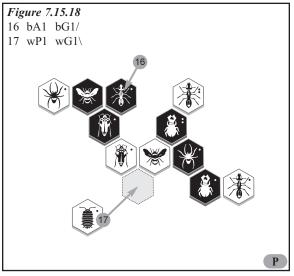
Figure 7.15.17 shows White pinning the second Beetle as it moves in toward the White Queen.

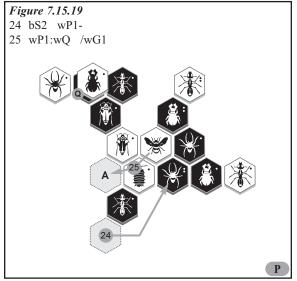
And now, since both Black Beetles are pinned, White brings in the Pillbug on turn 17 in *Figure 7.15.18*.

Later when Black threatened to win by filling the fifth space around the White Queen (turn 24 in *Figure 7.15.19*), the White Pillbug used its special ability to extract the Queen and stop the Black attack. On turn 25 the White Queen is picked up and deposited safely into space A. With the Queen now safe, White continued the attack on the Black Queen and won easily.

The most effective way to counter the special power of the opposing Pillbug is to use a Beetle cover. Plan for the power of this common tactic and you will soon be a successful Hive® player.







7.15.4 – Surround the Pillbug

A second method to counter the Pillbug is to surround it. The special power of the Pillbug allows it to pick up an endangered Queen and move her to safety. But, if the Pillbug is completely surrounded, then its special ability is totally useless. Even if only partially surrounded, the destination spaces for the Queen may not be better, or sometimes possibly even worse, then her current location.

Let's examine our first example from the game *U!HV-blefinjo-guest-2013-05-19-1053*. Looking at *Figure 7.15.20* we see both Queens under assault but we also see that each of them has a friendly Pillbug nearby to defend. Black Spider #2 enters the game on turn 36 and moves in for the attack on turn 38.

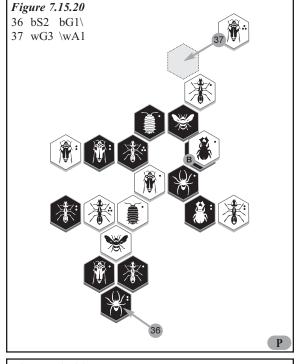
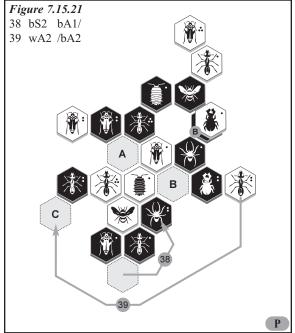


Figure 7.15.21 shows the situation as the Black Spider attacks. Black is in position to win with Ant #2 occupying the final space to surround the White Queen. The White Pillbug can pick up and move the White Queen to either space A or space B. But take a look at these two possible destination spaces! Each of them is already surrounded by five bugs. And in each case, Black Ant #2 can easily reach the final space and win the game. The power of the White Pillbug has been negated and White had to find a different way to defend. Using Ant #2, as shown on turn 39, White pinned Black Ant #2 and at the same time set a block to protect the final space around the White Queen.

Unfortunately this freed Black Beetle #2 which moved in to join the attack.

The win was not easy for Black. With only one Hopper left in reserve, a defending White Pillbug, and the danger of a strong White attack, Black had to play very carefully.



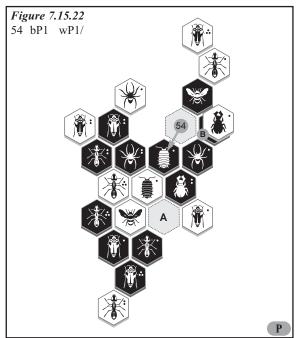


Figure 7.15.22 shows the Black Pillbug advancing into the fray as the White Pillbug continues to have no practical way to rescue the endangered Queen. Black finally prevailed on turn 64.

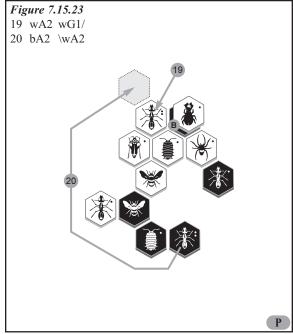
This proved to be an instructive game, one in which Black won primarily because the White Pillbug was surrounded and could not use its special power to rescue the Queen.

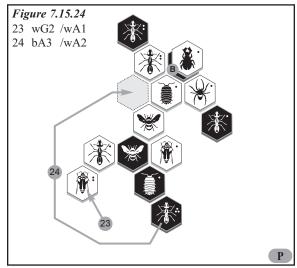
The next game shows how a placement error by White negated the power of the Pillbug, allowing Black to win. *Figure 7.15.23* shows this mistake from the game *U!HV-kkurtonis-ringersoll-2013-03-30-2357*.

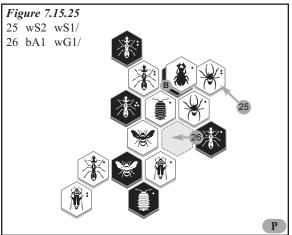
White places Ant #2 on turn 19 and Black promptly pins it on the ensuing turn 20. The problem is not that the newly placed Ant was pinned, this is almost expected in this situation. The problem is that the newly pinned Ant is helping surround the White Pillbug!

The position a few turns later is shown in *Figure 7.15.24* as Black Ant #3 moves in to attack the White Queen and keep the Pillbug surrounded.

Black Ant #1 attacked on turn 26 in *Figure 7.15.25* and Black won on the following turn.



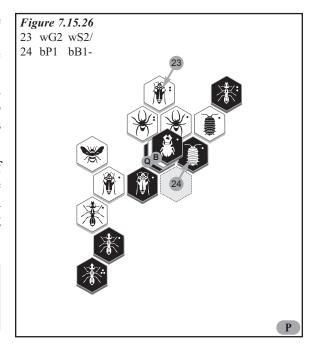




One final example of surrounding the Pillbug comes from the game *U!HV-BadBunny-ringersoll-2013-07-09-1025*. In this case, shown in *Figure 7.15.26*, White has moved, first the Pillbug and then a Hopper, into attacking position. The Pillbug was pinned by Black Ant #2, but as we know a single pin is not sufficient for a Pillbug, so Black needed to do more to successfully defend. Black elected to advance his own Pillbug on turn 24 as shown.

This move provides multiple benefits. It stays within range of the friendly Queen so if the opportunity arises it can rescue her. It is now in position to strip away White Spider #1 and finally, as we are here demonstrating, by partially surrounding the White Pillbug, it removes the danger of a Pillbug attack.

If it is not practical to cover your opponent's Pillbug, watch for the opportunity to surround it. Yes, you can negate the power of the Pillbug, if you know how!



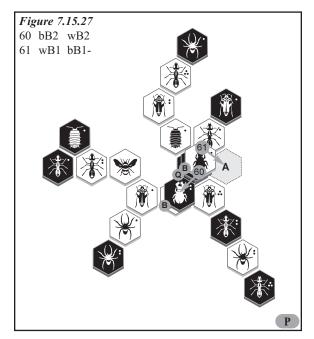
7.15.5 – Squeeze the Pillbug

The Squeeze is a very powerful tactic used to force your opponent to make a move that is advantageous to your cause and not to your opponent's. Under normal circumstances, the special power of the Pillbug makes a squeeze very difficult because the Pillbug can move adjacent bugs. But occasionally you may force your opponent to use this special ability to your benefit.

Take a look at the situation from the 2013 tournament game *T!HV-stepanzo-ringersoll-2013-06-14-1515*. In this position the Black Queen is located at the bottom of a stack of Beetles and the friendly Pillbug is too far away to be able to rescue her. But Black finds a way to force the White Pillbug to move the Black Queen into position where she can be rescued by the Black Pillbug.

We start in *Figure 7.15.27* where Black Beetle #2 relieves the cover of White Beetle #1, leaving the White Beetle free to move. White elects to move into space A.

In *Figure 7.15.28* (page 179) Black Beetle #1 covers White Beetle #1 and now, if it were not for the special power of the



Pillbug, White would be shutout. But even though it itself cannot move, the White Pillbug can use its special movement ability. Unfortunately, the only bug that it can move is the Black Queen! It is forced to rescue the opposing Queen!

Now the Black Queen is in a position where the Black Pillbug can move in and execute a Queen rescue. *Figure 7.15.29* shows the Black Pillbug advancing adjacent to the Queen and with White continuing to be shutout, Black will complete the rescue on the next turn. With the Queen rescued and any threat for a White victory or a draw gone, Black easily proceeds to force the victory.

Counter the opposing Pillbug with a squeeze. You may be able to force the Pillbug into an unfavorable move or even force it to rescue your own Queen!

7.15.6 – The Self Pin

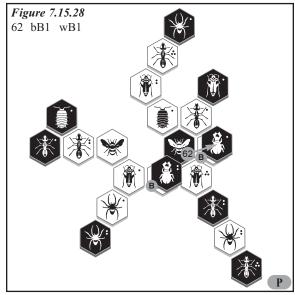
What happens when the opposing Pillbug threatens to move your Queen into a dangerous, potentially deadly position? The counter to this threat may be a self pin! Move or place one of your own bugs to stop the opposing Pillbug from moving your Queen.

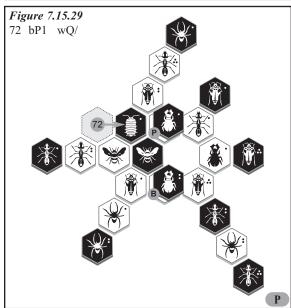
This is the case in *Figure 7.15.30* from the game *HV-guest-ringersoll-2013-05-25-2120*.

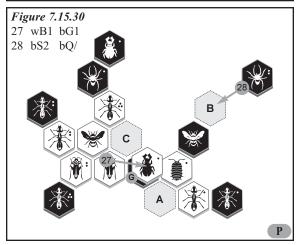
On turn 27 the White Beetle continues its approach toward the Black Queen. The danger is that the White Pillbug can pick up the Black Queen and deposit her into space A. In this space she would have three of the six spaces around her already filled and with the next move, she would be covered by White Beetle #1. This is definitely a very dangerous situation for Black!

The proper defense is shown on turn 28 when Black Spider #2 is placed in space B. Not only does this stop the White Pillbug from moving the Black Queen into space A, it also threatens to move into space C.

It seldom happens, but a good player is always on the lookout for the opportunity to use a self pin to negate the power of the opposing Pillbug.







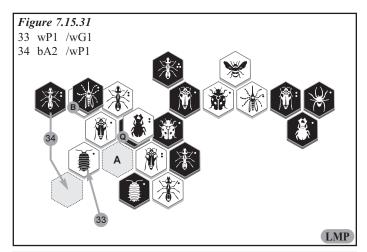
7.15.7 – The Double Pin

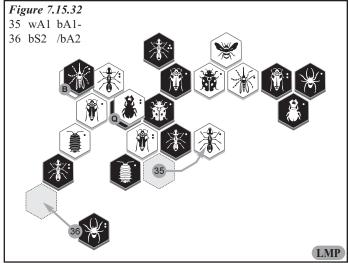
Due to its ability to move an adjacent bug, the Pillbug is very difficult to pin. With any other bug, a pin is an effective and long term method for immobilizing it and reducing its effectiveness. But the Pillbug is a different story. True, a Pillbug may not immediately move a bug that has just pinned it, but given time, it can move the pinning bug away.

Let's look at a game showing how Eucalyx, a Master Hive® player effectively uses the Double Pin to stop the advance of the opposing Pillbug.

The game is *U!HV-ringersoll-Eucalyx-2013-04-27-1111* and White has a very strong attack going. In *Figure 7.15.31* White places the Pillbug in position to move into space A. Black immediately moves Ant #2 to pin and immobilize the Pillbug. After an intervening move by White, there is the danger that the White Pillbug will pick up Black Ant #2 and deposit it into space A. To keep this from happening, Black places Spider #2 as shown in *Figure 7.15.32*. The double pin is in place. The White Pillbug cannot move, nor can it carry the Black Ant into attacking position.

When a single pin will not stop the opposing Pillbug, watch for chances to use a double pin. This can stop the Pillbug in its tracks.





7.15.8 – Winning a Drawn Game

The Pillbug is definitely not a one-trick pony! We have seen how it can be used defensively, but it can also be used in an offensive capacity. One way is to force a win in an otherwise drawn game. A draw quite often occurs when the opposing Queens are in close proximity to one another and filling the final space around one Queen also fills the final space around the other. By rule this results in a draw.

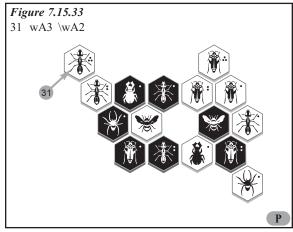
The most common tactic used against this maneuver is a squeeze, forcing your opponent to move one of the attacking bugs, allowing your final bug to win. Add the Pillbug into the mix and another tactic surfaces as we shall see from the game *U!HV-ringersoll-preve-2013-04-14-2130*.

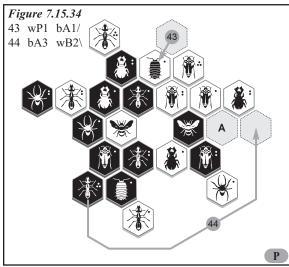
First examine *Figure 7.15.33*. The Queens are separated by only one space and both Queens are already surrounded by five bugs. This game has draw written all over it. The only defending bug is Black Hopper #2 and if Black attempts to free it, White Hopper #3 will jump in and take the draw. But White has a plan, revolving around the Pillbug.

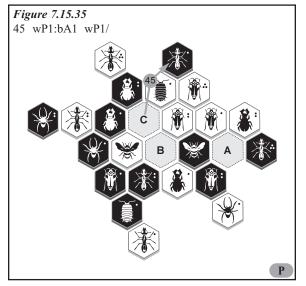
Figure 7.15.34 shows the situation some moves later after both players have brought their Pillbugs into the game. Black attempted to negate the Pillbug advance with Beetle #2, but White has smartly pinned it. As the White Pillbug advances, Black has no choice but to defend, pinning White Beetle #2 and placing a block on space A. But it is too late.

On turn 45 in *Figure 7.15.35*, the White Pillbug extracts Black Ant #1 and White will win. The immediate threat is the White Queen advancing into space B followed by White Hopper #3 into space A. The only defense against this Queen attack is to cover the White Queen with Black Beetle #1, but this removes one of the Black attackers and gains tempo for White. Note also that any Black bug which occupies space C can be sucked out by the White Pillbug!

This game shows the power of the Pillbug to turn a drawn game into a victory!







7.15.9 – The Direct Attack

The first two expansion bugs, the Mosquito and the Ladybug, were definitely offensive weapons in the hands of an experienced Hive® Master. Because of this, there was a clamoring within the gaming community to introduce a defensive bug to counteract the additional attacking strength of these two expansions.

John Yianni designed and introduced the Pillbug as a primarily defensive piece. But sure enough, it did not take long for the truly aggressive players to build an attacking strategy around this new, defensive bug!

The first of these games is *T!HV-stepanzo-DrRaven-2013-06-27-0201*, as depicted in the four figures on this page.

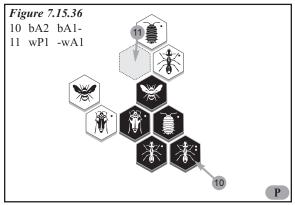
The Direct Attack begins in *Figure 7.15.36* as the White Pillbug advances toward the Black Queen.

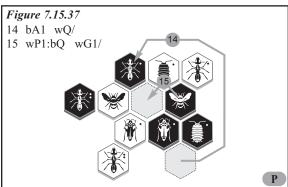
Black makes a fatal mistake on turn 14 in *Figure 7.15.37*. Not realizing the power of a direct attack, Black Ant #1 moves in to attack the White Queen, making a ring in the process. But White responds by picking up the Black Queen and depositing her adjacent to the White Queen. This may seem counter productive because it brings the two Queens closer together, a position that quite often results in a draw. But here, the primary purpose is to get the Black Queen out of range of the defending Black Pillbug.

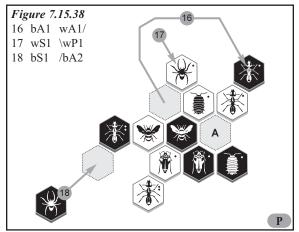
Now let's look at *Figure 7.15.38*. With White Ant #1 in position to win the game by moving into space A, Black is forced to move Ant #1 away on turn 16. On turns 17 and 18, each player brings in a Spider.

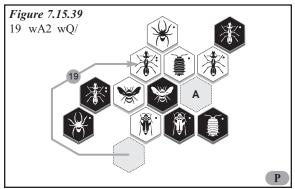
And then in *Figure 7.16.39*, White Ant #2 attacks on turn 19. The game is over. If Black does not pin White Spider #1, the Pillbug is going to move it into space A and win. The only bug available to pin the Spider is Black Ant #1, and if it releases the pin on the White Ant, the White Ant moves in for the victory.

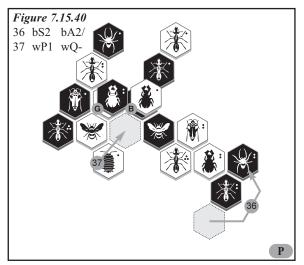
This game is a great example of the attacking power of the primarily defensive Pillbug.

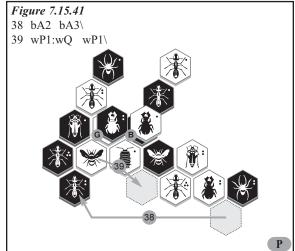












In the second of these games, stepanzo is on the receiving end of a direct attack from image13, the eventual 2013 BoardSpace champion. Starting with *Figure 7.15.40*, lets see how the game (*U!HV-image13-stepanzo-2013-05-15-1602*) progresses.

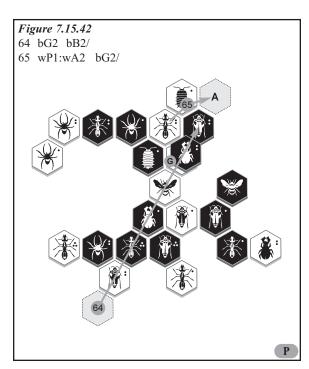
Black finishes a pin replacement to keep White Beetle #2 pinned (turn 36) and free Ant #2. White follows by attacking with the Pillbug (turn 37)!

In *Figure 7.15.41*, Black Ant #2 attacks, but the White Pillbug lifts up the White Queen and moves her in for the attack! With White Beetle #1 atop the hive and White Ant #1 mobile, Black is doomed.

Pay attention and be on guard for the Direct Attack. The defensive Pillbug can turn into an offensive powerhouse in the hands on an aggressive Hive® player.

7.15.10 – Bringing a Trapped Bug into the Game

There are many tactics available to the Pillbug that are not easily categorized as either a defensive tactic or an offensive one. The first of these is bringing an otherwise trapped and useless bug back into the game. The following three games demonstrate how this can be done.



Let's start with *T!HV-Kobajagi-ringersoll-2013-05-12-1950* as shown in *Figure 7.15.42* (page 183). White Ant #2 is hopelessly pinned and currently useless for either attack or defense. Black however makes a mistake allowing the White Pillbug to show off its power!

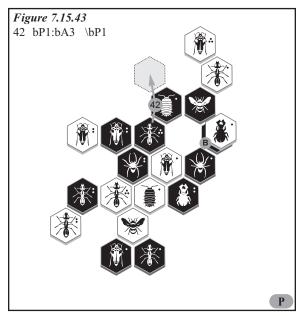
After the Black hopper moves as shown on turn 64, the White Pillbug rescues White Ant #2, moving it out to space A. The White Ant is free, the Black Hopper is pinned and as we shall see in Section 7.15.11 – Adjusting Placement of a Friendly Bug, the White Pillbug is in position to use its power again, all on the way to a well earned White victory.

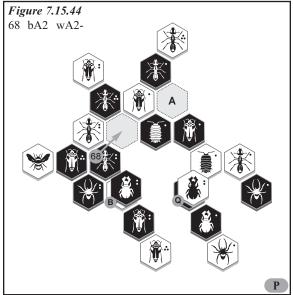
A second demonstration of the Pillbug's ability to extract an Ant from a blocked position is *Figure 7.15.43* from the game *U!HV-blefinjo-guest-2013-05-19-1053*. On turn 42, the Black Pillbug moves Black Ant #3 into the clear and Black moved on to win.

And finally, from the game *U!HV-Kobajagi-ringersoll-2013-05-10-2220*, we have *Figure 7.15.44*. In the position shown, Black Ant #2 is free to move, but where can it go? The proximity of the two arms of the hive forms an impassable gate, blocking the Ant in. But the Pillbug gives the Ant a chance.

By moving as shown on turn 68, the Black Ant has put itself into position for the Pillbug to carry it into space A. And from space A, it is free to move around the hive.

When is a trapped bug not trapped? When a friendly Pillbug can use its special power to free it! Watch for these opportunities and then watch victories come pouring in!





7.15.11 – Adjusting Placement of a Friendly Bug

What does a player do when a Spider or Hopper cannot reach the optimum space required? Without the Pillbug, one just curses and says, "Oh, well!" But with the Pillbug, it may be as simple as moving the bug to a different location.

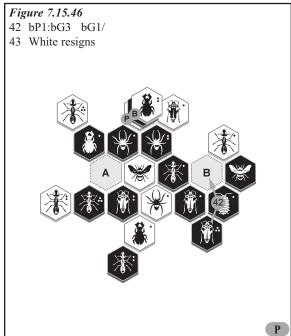
We can see this well illustrated in *Figure 7.15.45* from the game *T!HV-Kobajagi-ringersoll-2013-05-12-1950*. White would love to get Spider #2 into attacking position on the Black Queen. It would be great if the Spider could get into either space A or space B. Unfortunately, with its strictly limited movement, it cannot get to either of these spaces.

But using the Pillbug, White can shift the Spider to space A1 or to space B1. From space A1 the Spider can easily reach space A. And from space B1 it can easily reach space B. Kobajagi chose the later and moved the Spider into its intended space.

Our second example comes from the game *U!HV-Queribus-ringersoll-2013-04-05-2155* and is shown in *Figure 7.15.46*. Black is on the verge of winning but needs to get a final bug into space A. White has set up an effective block on this space, keeping Black Ant #2 out. Black Beetle #1 and Black Ant #3 are both adequately pinned. The only bug that has the ability to get into this space is Black Hopper #3, but even with a hop around, it is not targeting this game winning spot. With the Pillbug, however, Black moves the Hopper into space B as shown on turn 42 and with the Hopper into position to attack and safely tucked into a pocket and therefore immune from a pin, White had no chance and resigned.

When a bug is not correctly placed to get to its intended destination, look for your Pillbug to adjust its placement. Do this and your win percentage will climb!





7.15.12 – Creating a Fill

Expert Hive® players know how to use a fill to free up an attacking bug. With the Pillbug in one's arsenal the use of this offensive tool is greatly enhanced. This will be demonstrated by the next two games.

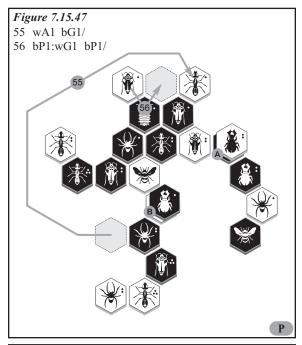
In the game *T!HV-reh191-ringersoll-2013-05-04-0959*, as seen in *Figure 7.15.47*, Black seems to have run out of bugs. There are two spaces to fill around the White Queen. Beetle #1 is sitting atop the hive prepared to occupy one of these spaces, but Black has no mobile bug available to use to force the victory.

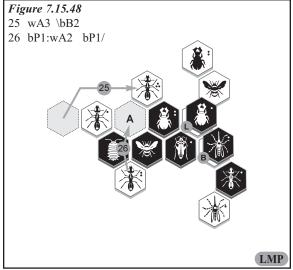
But the Pillbug saves the game. Even though the Pillbug itself cannot move, it can pick up White Hopper #1 and move it as shown here. Moving the White Hopper executes a fill in relation to Black Hopper #1 which is now free to attack the White Queen. Black chalks up another victory to the offensive power of the mighty Pillbug.

Image13, the 2013 BoardSpace champion, shows his prowess with the Pillbug in *Figure 7.15.48*. This figure is from the game *U!HV-ringersoll-image13-2013-05-12-1249*.

Not satisfied with having the Mosquito and one Beetle atop the hive, image spots the opportunity to use the Pillbug to force the second Beetle up on the hive. Shifting White Ant #2 into space A, creates the fill and the pin by White Ant #3 has been negated. Black Beetle #2 climbs atop the hive and with three powerful bugs up on the hive, image easily forces the victory against the helpless author!

The Fill is a powerful offensive weapon. Use the Pillbug to create one, free an important friendly bug, and victory will soon be yours.





7.15.13 – Making A Ring

'Rings are bad' is a maxim learned early on by most Hive® players, except of course when they are good. With the Pillbug added to the hive, the opportunity for a good ring occurs more often, both offensively and defensively. Watch how, in these next two games, a good ring in conjunction with the Pillbug results in victory.

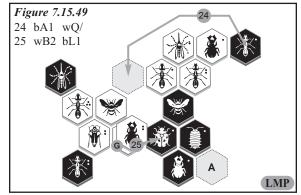
The first is from the game *U!HV-guest-ringersoll-2013-04-16-0058* and can be seen in *Figure 7.15.49*. Black Ant #1 moves in to form the ring, while at the same time attacking the White Queen. One of the identifying factors of a good ring is whether any opposing bugs are freed by the ring. In this case only Black bugs are freed! The Black Ladybug is free but will soon be covered by White Beetle #2, while the Black Queen, even though she is blocked in, can be moved away by the adjacent Pillbug. When the Black Queen escapes to space A, a string of White bugs is left behind and Black was able to continue on to victory.

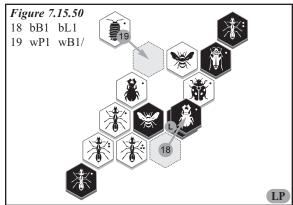
In the next game (*T!HV-ringersoll-Kobajagi-2013-05-19-1901*) White safely makes the ring with the Pillbug placement (See *Figure 7.15.50*.) because a Black Beetle has just covered the Ladybug, the only Black bug freed by the ring. The Pillbug is now in position to be used either offensively to attack the Black Queen or defensively to rescue the White Queen.

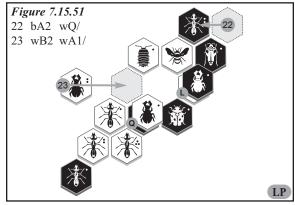
Two moves later, in *Figure 7.15.51* after both players have moved their Beetles, Black attacks with Ant #2 and White does a direct drop of Beetle #2, forming another ring!

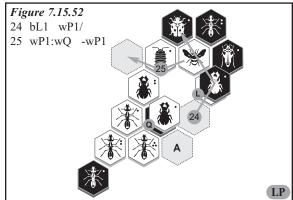
In *Figure 7.15.52* Black actually threatens to win when the Ladybug attacks, but the well placed White Pillbug removes the White Queen and White will win easily. Another direct drop, this time into space A, and plenty of bugs in reserve was too much for Black to defend. Black fell on his sword, ending the game on turn 34.

Not all rings are bad! When a Pillbug is nearby and able to rescue the friendly Queen or strip off an attacker, a ring may be a game saving tactic.









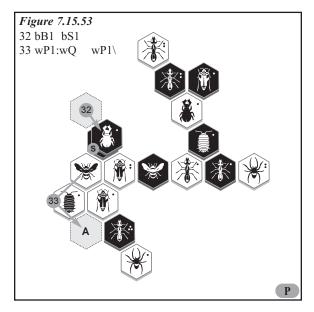
7.15.14 – **Hurrying a Bug**

Still another use of the Pillbug is to hurry along a slow moving bug, getting it into position faster than would normally occur. In *Figure 7.15.53* in a game that we have previously seen (*U!HV-kkurtonis-ringersoll-2013-05-08-2142*), Black Beetle #1 is moving in and is threatening to cover the White Queen. The White Queen can easily move away but using the White Pillbug will hurry her along and get her out of range of the Black Beetle much more quickly.

On her own, the White Queen will reach space A in four turns. But the Pillbug can get her there in just one! In many situations this savings in tempo can mean the difference between victory and defeat.

This tactic usually will apply only to the Queen or Beetle because they are typically limited to moving just one space at a time. But it can also speed up a spider if the Pillbug can pick it up from one side of a line of bugs and deposit it on the other.

Save tempo by using the Pillbug. Let it pick up a slow moving bug and hurry it along and you may be speeding onward to victory.

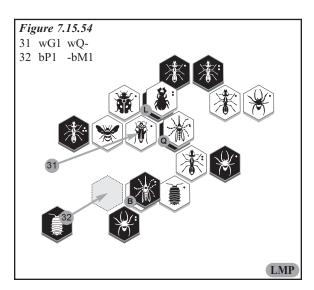


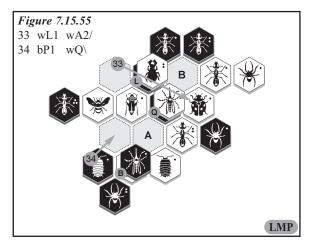
7.15.15 – The Pillbug and the Mosquito

Whenever potential expansion bugs have been proposed by Hive® players around the world, the discussion would inevitably gravitate toward the interaction of the new bug with the Mosquito. One of the primary subjects discussed is whether the Mosquito should inherit any special ability of a new bug or just its movement pattern. With the introduction of the Pillbug, it seems that this question has been answered. Yes, the Mosquito inherits, not just the movement pattern, but the special power of the Pillbug.

This creates some very interesting and complex situations as we shall see as we review the following four games.

Let's start with *HV-fabian-stepanzo-2013-07-20-1003*. A quick glance at *Figure 7.15.54* would seem to show that White has an easily won position. The Black Queen is covered by the White Mosquito, there is a White Ant in reserve, the only bug available to stop the White Ladybug is Black Ant #3 (but doing so will free the White Queen), and





White Beetle #2 is atop the hive and ready to climb down. The White attack should be quick and decisive.

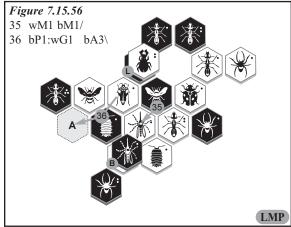
But this game is played with the Pillbug and even though White eventually wins, the Black Pillbug makes this an interesting and complex ending.

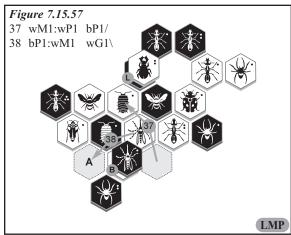
After the White Ladybug attacks on turn 33 (*Figure 7.15.55*), the Black Pillbug moves into stripping position. (See Section 7.15.2 – Stripping an Attacker.)

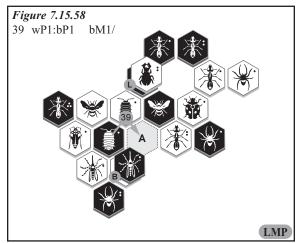
Because Beetle #2 must keep the Black Ladybug covered to the very end, space A must be the next space filled. But when it is filled on turn 35 (*Figure 7.15.56*) the Black Pillbug strips out the White Hopper. (As a side note here, by rule, the Black Pillbug cannot move the White Mosquito because it has just moved. See the special rule on page 12.)

Now in *Figure 7.15.57* the White Mosquito, inheriting the special power of the adjacent Pillbug, picks up the White Pillbug and places it in the space just vacated by White Hopper #1. The Black Pillbug responds by stripping out the White Mosquito. But in *Figure 7.15.58*, the White Pillbug moves the Black Pillbug into space A and the game will end on Black's next turn. (Note, too, here that because it was just moved, the Black Pillbug cannot use its power to rescue the Black Queen or strip away White Ant #2.)

This game clearly shows the complex interactions that can occur when two Pillbugs interact with the pesky Mosquito!





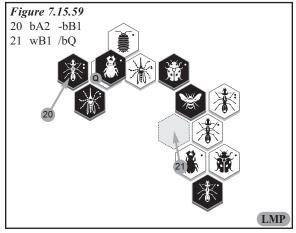


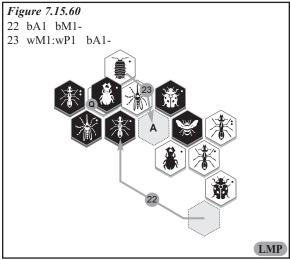
The Pillbug-Mosquito pair, when adjacent the friendly Queen, can be an extremely effective defensive combination. Benihona shows how this pair can quickly switch from defense to offense in the game *U!HV-Benihona-fabian-2013-06-27-1745*.

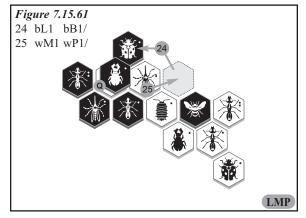
Even with the White Queen covered by Black Beetle #1 and a direct drop of Black Ant #2 on turn 20, the two White bugs work together to pull out a victory. Please refer to *Figure 7.15.59* where we see White Beetle #1 moving in to counter attack.

When Black threatens to win after Ant #1 attacks on turn 22 (*Figure 7.15.60*), the White Mosquito, acting like a Pillbug, picks up the White Pillbug and deposits it into space A. This move both clears a space adjacent to the White Queen and fills a space adjacent to the Black Queen: truly a dual purpose move.

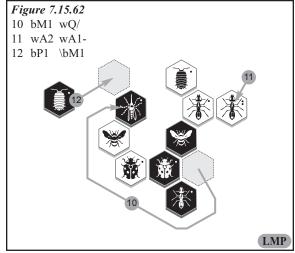
Now White is threatening to win. The Black Ladybug is forced to move. And even though she immediately attacks, White has won. *Figure 7.15.61* shows the White Mosquito moving in to attack and Black does not have enough defenders to stop White from completing the conquest of the Black Queen.



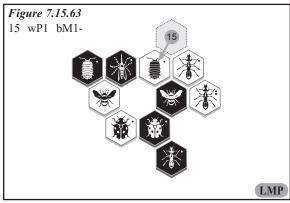




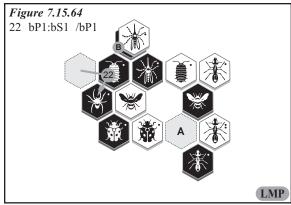
And yet again, the power of the Pillbug and Mosquito on the attack is demonstrated in *Figure 7.15.62*, from the game *T!HV-ringersoll-stepanzo-2013-06-23-1000*. Black first attacks with the Mosquito (turn 10) and then places the Pillbug (turn 12).



Examine the situation after turn 15 (*Figure 7.15.63*) when the White Pillbug joins the fray.

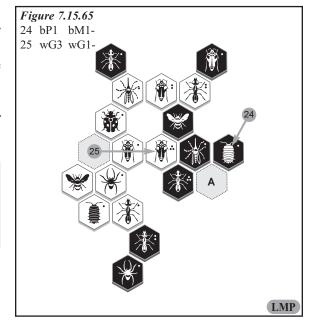


The danger for White of the Pillbug-Mosquito combination is clearly shown in *Figure 7.15.64*. The White Queen has five spaces filled; only one to go for Black to win. If White ever fills space A and completes the ring, the Black Mosquito will pick up the White Pillbug and move it in for the victory. White must fight hard to defend. Unfortunately for ringersoll, all stepanzo needed to win the tournament match was a draw, and with careful play, he forced a draw and won the match.



And finally, *Figure 7.15.65* from the game *U!HV-LadyBrawne-ringersoll-2013-05-16-2336*, shows another instructive Pillbug-Mosquito interaction. In a defensive situation, Black places the Pillbug as shown, in order to give the Black Mosquito the ability to rescue the Black Queen. And, sure enough, when White Hopper #3 jumps in to attack, the Black Mosquito pulls out the Black Queen, placing her into space A.

The Pillbug-Mosquito combination forms a very powerful duo, both on offense and defense. Learn to maximize their combined power and you will also maximize your victory totals.



7.15.16 – Conclusion

The Pillbug is, without a doubt, the most complex of all the bugs in the hive. With this new bug in the mix, the game has changed completely. To be successful, a player must continually keep the Pillbug in mind, both one's own and one's opponent's.

Chapter 7.16 – Psychology in the Hive

A wise man wrote: "the swift do not always win the race, nor do the mighty win the battle... because time and unexpected events overtake them all." In the game of Hive® the better player does not always win. And some of those games are won because of psychological and mental situations, not because of positions that occur on the board. Let's examine some of the psychological aspects of this fantastic game.

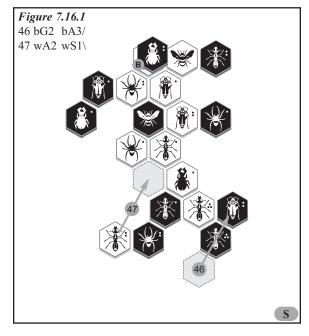
7.16.1 – Physical Conditioning and Mental Preparedness

Needless to say physical conditioning and mental preparedness are important aspects of the game, especially when playing in a tournament. Playing when tired or not feeling totally up to par will more than likely result in a sub-par performance: fewer wins, more losses. When playing ranked games on BoardSpace, beware of playing when you are overly tired. A loss to a lower rated player may result in a substantial drop in a player's rating! When getting tired or not feeling well, play unranked games or don't play at all.

An example of a loss caused by playing while not feeling well is demonstrated in *Figure 7.16.1*, from the game *HV-meche5-ringersoll-2010-09-20-2228*. The author, playing Black, was playing against a relatively new player. He totally overlooked White's excellent use of a fill (Chapter 6.4) by Ant #2 to free Beetle #1 for the final assault against the Black Queen!

Don't be overwhelmed by playing against a higher rated opponent. In the 2011 BoardSpace Tournament, the top players in the world lost four games in the preliminary rounds, all against lower rated players. The best way to improve is to continually play the better players. Continually playing BoardSpace's Dumbot will teach you the basics and possibly increase your win totals, but it will never make you into a true Hive® Master.

Mistakes happen. Don't beat yourself up when you lose a game on a stupid move. Even the best players in the world do that occasionally. Using golf as an example, the experts say that one of the qualities that allowed champion golfer Tiger Woods to play at such a high level for such a long period of time was his ability to not let one bad shot affect the next.



Put a bad game or a bad move behind you and move on. Don't let one bad move lead to another and another and another.

Train yourself to examine a line of play, determine whether it is good or not, and make a decision. Don't waste time going back and reexamining lines of play that you have already determined to be poor. If your opponent makes an unexpected move, things may change and previously discarded lines of play may need to be reconsidered. But under normal circumstances, be decisive.

When your opponent does something totally unexpected there are two possible responses. Strictly from a tactical standpoint it may seem that taking extra time to examine the situation may be the best. But from a psychological standpoint, responding quickly may make your opponent think that you had already considered this line, judged that it was favorable to you and planned a counter. This may psyche your opponent out and force him to take more time than necessary or possibly even change his plans completely.

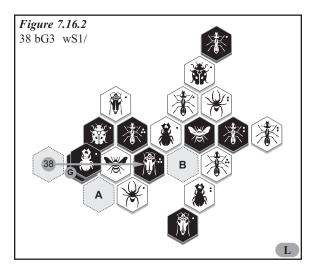
When playing seriously, prepare yourself physically and mentally. You will soon find yourself winning more and losing less.

7.16.2 – **Never Give Up**

"Never, never, never give up" is one of Sir Winston Churchill's more famous quotations and it applies to the game of Hive® as well. Although there are situations when playing against a superior opponent when a defeat is inevitable and falling on one's sword is acceptable, in most cases one should play to the bitter end. Even a Hive® Master will occasionally make a serious mistake. This next game from the BoardSpace 2011 Online Tournament will give an example.

Let's set the circumstances. Fumanchu and ringersoll are playing in the semi-finals. Fumanchu is leading 3-2 with one draw. So far in the match Black has not won, so indications are that the first player to win as Black will win the match. If Fumanchu wins, the match is over and he proceeds into the finals. If ringersoll wins, he survives to fight another day.

We will pick up the game (*T!HV-ringersoll-Fumanchu-2011-07-02-2014*) in *Figure 7.16.2* at turn 38. Up to this point, this has been an excellent game with attacking chances on both sides. White is only one move from winning but Black has defended well with pins on the White Ladybug and White



Beetle #2 and space B well protected by a block (Chapter 6.3). White has two Hoppers in reserve but there is no place to place a Hopper to threaten space B, even using a hop around (Chapter 7.9). Black jumps in with Hopper #3 and now threatens to win with either Beetle #1 or Ant #1 moving into space A.

Ringersoll was depressed, mentally beaten, and ready to resign. In fact he had already selected 'Resign' from the BoardSpace menu and had the cursor over the 'Done' button! But then, he forced himself to regroup, change his mental attitude, and rethink the situation. There was a possible plan to get a Hopper into space B.

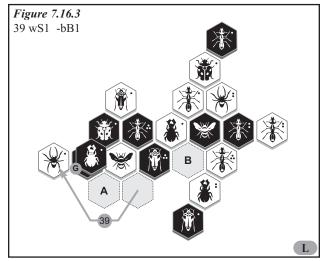
The only defense to an immediate loss was moving White Spider #1 and the only possible chance was moving it as shown in *Figure 7.16.3*.

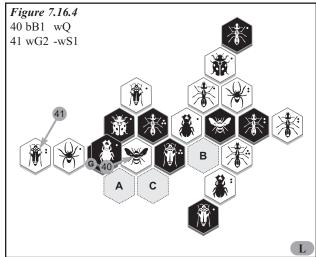
And then, the big mistake! Black Beetle #1 moved to cover the White Queen. Black was no doubt planning to bring a bug from the reserve directly into either space A or space C, followed by the Black Beetle winning the game. But the entry of the White Hopper on turn 41 (*Figure 7.16.4*) was totally overlooked.

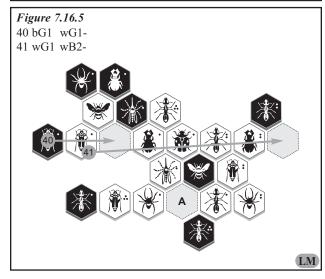
Now, White Hopper #2 is threatening to jump into space B. If Black Ant #1 pins the Hopper, then the White Ladybug wins the game. Black actually elected to pin the White Hopper with Black Hopper #3, but this opened the gate protecting space B and White Ant #2 moved in for the win.

HV-bird-ringersoll-2010-12-03-2326 shows another example of mentally giving up. Figure 7.16.5 shows an endgame situation where Black has been on the defense the entire game. Finally on turn 40, a Black threat forces the White Hopper move on turn 41 as shown. Now White's threat to win is: the Ladybug into space A and then the dual threat of Hopper #1 or Ant #3 into the space vacated by the Ladybug. Under stress and giving up, Black attempted a failed defense with the Mosquito climbing atop White Beetle #1.

If instead, Black had pressed the attack, there was no defense for White! With three Black Ant's mobile and only two spaces to fill, the Black attack was destined to succeed. But Black had given up mentally and lost a winnable game!







Never give up! Watch for the counter attack and wait for a mistake! Even Hive® Masters make game-losing mistakes!

7.16.3 – Do the Unexpected

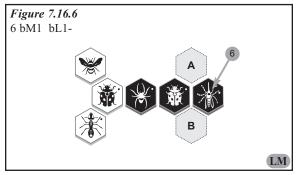
Continuing with the semi-final tournament match between Fumanchu and ringersoll; we will next demonstrate how doing the unexpected can produce benefits. Fumanchu and ringersoll are BoardSpace friends and regularly play against one another. It is safe to say that they are intimately acquainted with each other's style of play. Knowing that he was going to have to do something different in order to win, ringersoll opened game eight of their match (*T!HV-Fumanchu-ringersoll-2011-07-03-1907*) with an inferior, 3-bug defense. (See *Figure 7.16.6*.)

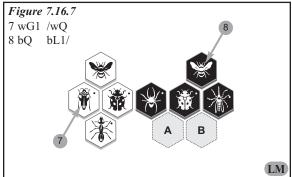
The basic philosophy of the 3-bug defense is to get the Black Queen one space farther away from the White Ladybug while at the same time keeping two good defenders (Ladybug and Mosquito) adjacent the Queen. It also has the advantage of typically providing more choices for Black to bring in new bugs. With proper play, however, this opening has proven to give an advantage to White, and with the Queens separated by at least two spaces, Black's drawing chances have been reduced.

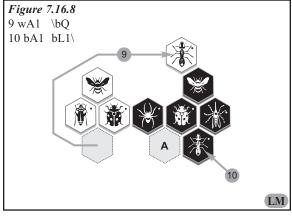
But in this case, facing an unexpected Black opening, White played a less than optimal attack. *Figure 7.16.7* shows as each player brings in their fourth bug. White brings in Hopper #1 and by rule, Black must bring in the Queen. As we shall see as the game progresses, Black will use space A and space B to safely and effectively bring new bugs into the game.

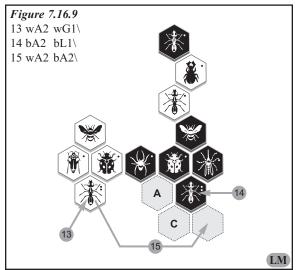
In *Figure 7.16.8*, we see the White assault of the Black Queen begins with White Ant #1. Black uses space B to bring in the first defending Ant.

A few moves later we come to *Figure 7.16.9*. Both players have brought in their second Ant. Then, White Ant #2 pins Black Ant #2. As the game continues, it becomes evident that space C would have been a better pin placement because it restricts Black new bug placement in space A.









Black now uses space A to bring in Ant #3 (*Figure 7.16.10*) and White follows suit by also bringing in his third Ant. It is interesting to note that not only have all three Black Ants entered the game through either space A or space B (as labeled in *Figure 7.16.7* on page 196), but the game winner, Black Beetle #1, will do so also.

The game ends in *Figure 7.16.11* as Black Hopper #3 attacks. Black has two threats to occupy space D. The first is the direct and immediate threat posed by Black Hopper #1. It can be stopped by a pin by one of the White Ants (not White Ant #1, however, because that opens the gate and allows Black Ant #2 access to the game ending space). But the second threat, the one posed by Black Beetle #1 cannot be stopped and White resigned.

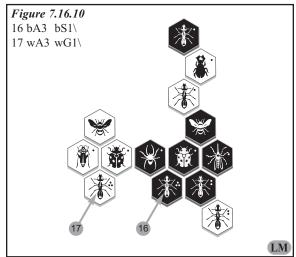
This game has shown a good example of a game won, not by the better player, but by the player who did the unexpected.

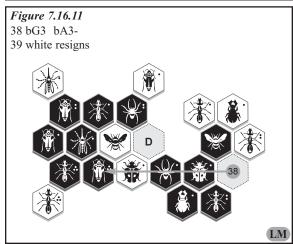
7.16.4 – Using the Clock

The next psychological tactic to be discussed only really comes into play during tournament games when a clock is being used. In BoardSpace tournaments, a player loses on time when his total time is both greater than thirty minutes and more than ten minutes greater than his opponent's time. This creates some situations where one player is forced to play quickly or possibly lose on time.

Remember that when it is your turn and your clock is running, your opponent is using your time to analyze the situation. When your opponent is short on time, playing quickly puts additional time pressure on him. This may result in mistakes that can be turned into victories.

Let's go back to the game discussed in the previous section (*T!HV-Fumanchu-ringersoll-2011-07-03-1907*). Fumanchu and ringersoll are both known for taking their time and not playing quickly. In fact, some of their friendly games have lasted well over sixty minutes. This no doubt had an influence on the outcome of this game. Whereas, ringersoll had studied the opening and knew what he was going to do and therefore was able to play quickly through the opening few moves, Fumanchu did not expect this opening and spent more time planning his first few moves. This resulted in less time available for analyzing later in the game.



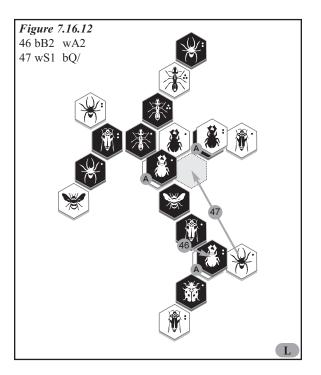


This, no doubt, benefited ringersoll and helped him achieve a match changing victory. The final times for this game were: Fumanchu, 29:42; ringersoll, 14:54.

A second example is the game T!HV-Loizz-ringersoll-2011-06-13-2246 seen previously in Chapter 7.11 – Using Your Spiders. In this game, ringersoll, under time pressure at the end, lost a game that might have had drawing chances.

In *Figure 7.16.12* Black makes a deadly error. With two Beetles atop the hive and in good defensive position, ringersoll chooses to move away with Beetle #2, hoping to bring the final Black Hopper into the game in a good defensive position. Unfortunately, under time pressure, he makes a huge mistake. White attacks with Spider #1 and Black is forced to immediately bring the Beetle back to defend the Queen. Black lost two vital tempi, and soon lost the game!

In tournament games, good clock management can lead to additional victories. Use the clock wisely and win.



7.16.5 – Conclusion

Hive[®], when played at a top level, can be more than just a fun, family table game. It can be a mental and psychological conflict. Learn to use psychological tactics and wins will come in greater number.

Chapter 7.17 – The Pin Revisited

The study of tactics for the game of Hive® has now come full circle. The first tactic learned by most beginning Hive® players, and therefore the first tactic discussed in Chapter 6.1, was The Pin. And now the last tactic discussed will be The Pin Revisited.

When playing on BoardSpace against a top ranked opponent, a beginner may see the expert move an Ant into a pinning position and leave it there for a moment while examining the position. Quite often the expert will then pick up the Ant, move it to another position, and spend some more time examining this second position. All of this before making the final decision and clicking 'Done.' Many beginners wonder, "What's the difference between this pinning position and that pinning position?"

After studying all the tactics available in the hive, an experienced player can answer this question and will then begin to make pin placements that have better long term consequences. With these better pin placements will come better play and eventually, more victories.

The following sections will review eight previous chapters in the light of making final pin placement decisions. As we review some of the games discussed in earlier chapters, one will see that it is typically the Ant (or a Mosquito moving like an Ant) that is the bug under consideration. This, of course, is because the Ant's superior mobility gives it more choice when placing a pin. Occasionally, a Ladybug may have a choice of pin placement locations. But because of their limited movement abilities, Hoppers and Spiders rarely, if ever, have any choice.

7.17.1 – Pin Replacement

The pin replacement is a very basic tactic that beginning Hive® players typically learn very quickly. But there are some nuances to this tactic that take longer to learn. Let's revisit the game *U!HV-Eucalyx-ringersoll-2010-08-29-1321* which was used in Chapter 6.1 – The Pin to demonstrate the classic pin replacement. Looking back at *Figure 7.1.5* on page 69, you can see how White used this tactic to release an Ant, which was then used to pin two Black bugs.

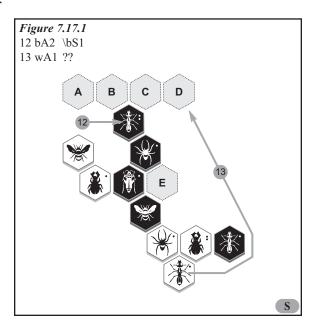


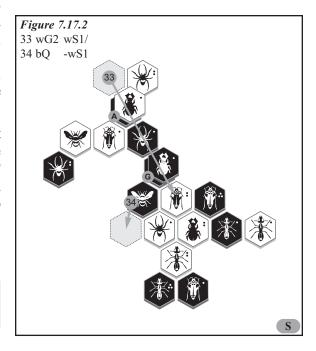
Figure 7.17.1 (page 199) takes us back to turn 13 when White Ant #1 initially places the pin on Black Ant #2. White has two choices. The first choice is to pin from space B, with a plan later to bring in a Hopper or Spider to space A. The end result would be a pin from space C.

The second choice is to pin with the Ant from space C, bring in the new bug to space D, and place the final pin into space B. Is there a difference? If so, what is it?

Space E is the key. Currently this space is vacant. But it is very easy for Black to place a Hopper in space E. And here is the potential problem for White. If the White Ant were to pin from space B, and Black were to place a Hopper in space E, then White would be forced to allow the Hopper to pin Ant #1 or waste a tempo moving the Ant again. Recognizing this, Eucalyx made the correct choice. He placed the pin by White Ant #1 into space C. The move was 13 wA1 bA2/.

A secondary consideration for White is that the Hopper that ends up in space B will be positioned to attack back into the middle of the hive later in the game. In fact, *Figure 7.17.2* shows this actually happening. Even though the Black Queen escapes, the White Hopper allows White Beetle #2 to climb atop the hive and now White has two Beetles atop the hive. The resulting attack by two Beetles (Chapter 7.10 – Two Beetle Attack) brought White a well earned victory.

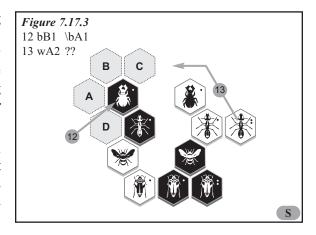
Choose your pin replacements well and the long term effect will be losses replaced with victories!



7.17.2 – **Beetle Cover**

Proper pin placement is also important when defending against a Beetle cover (Chapter 6.2). In the game *HV-ringersoll-Fumanchu-2011-02-18-1224*, previously discussed in Section 6.2.2 – The Cover – Direct Drop, we see an earlier pin placement decision by ringersoll that had long term negative consequences later in the game after Fumanchu had successfully executed the cover.

Figure 7.17.3 shows Black's first attempt to bring in an attacking Beetle and White's planned pin. With a free Ant ready for defense, there was no question that White would place the pin. The question was, "From which space would the pin be placed?"

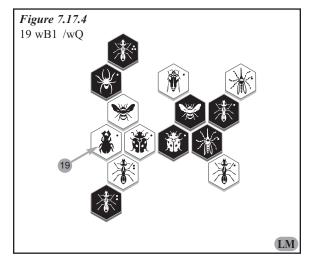


Typically speaking, an inline pin is best (space B). An inline pin does a better job of both limiting new bug placement and reducing the future chances of a fill freeing the pinned bug. With the inline pin, Black bugs cannot be brought into play in either space A or space C. In addition, if Black attempts a fill to free Beetle #1 it would take two bugs to do it. With this reasoning, White chose space B.

The problem however surfaced later when Black covers the White Queen. With White Ant #1 pinning from space B and the White Queen covered, space D is open to a direct drop attack (Section 6.2.2 – The Cover – Direct Drop). If, however, White had pinned the Black Beetle from space A, then the White Ant would prevent this from happening. Go back to Section 6.2.2 to see how this game eventually turned out.

Sometimes it is the pin that you don't place that costs you the game. Looking at *Figure 7.17.4* from the game *HV-Fumanchu-ringersoll-2011-02-26-2041*, we see White placing Beetle #1 in position to climb atop the hive. Black Ant #3 is available to place the pin, but Black instead elects to bring in another bug. This allows the White Beetle to climb up and the rest was history! For details, see the discussion about this game in Section 7.10.3 – Two Beetle Attack – Double Cover.

Choosing your pin placement wisely will lead to better defense against a Beetle cover. This, in turn, will lead to more wins!



7.17.3 – Defensive Block

It is relatively easy to see the relationship between pin placement and The Block (Chapter 6.3) because most gates are formed by the placement of a pin. Sometimes however the placement of the pin leading to a block must be planned in advance. In this next example, *HV-Desire-ringersoll-2010-08-17-2054*, Black sets a pin to stop the approach of a threatening Beetle and at the same time prepares for a defensive block a few moves later. The defensive block becomes instrumental in victory later in the game!

In *Figure 7.17.5* we see White Beetle #2 entering the game and threatening to advance toward the Black Queen. Black is going to pin with Ant #1. But from which space should it be done? Space B has the advantage that it limits White bug placement is both space A and space C. Considering the long term defense of the Black Queen, however, Black chose space A.

And then, when White Ant #2 entered the game as shown in *Figure 7.17.6*, Black completed the block by pinning the newly placed White Ant with Black Ant #2. Both space A and space B are now well protected behind the block and White's defense held off the Black attack.

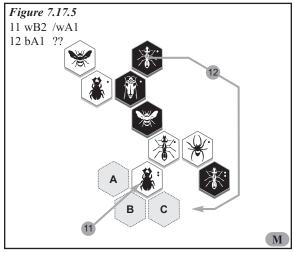
When defending, an expert player takes time to look ahead, searching for well placed defensive blocks.

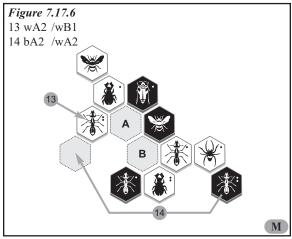
7.17.4 – **Counting Bugs**

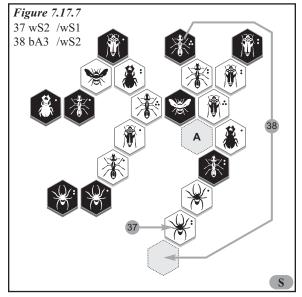
Because it is so basic to a successful Hive® playing career counting bugs was the first of the advanced tactics considered back in Chapter 7.1. Knowing how, when, and where to place a pin to gain in the bug count can be a critical skill.

In the game *HV-albedo-ringersoll-2010-08-22-1936*, Black effectively reduces White's attacking strength by one bug by the timely placement of a pin. Interestingly, the placement of one pin required the release of another pin. Let's see how this worked as demonstrated in *Figure 7.17.7*.

White has just placed Spider #2. The threat is to move into space A and attack the Black Queen. This move also fills the elbow and releases White Beetle #1. If allowed to happen, this maneuver will result in two additional bugs attacking the Black Queen. To counter this threat, Black pins Spider #2 with Ant #3. This releases White Ant #2 to move. But Ant #2







is already in an attacking position. When Ant #2 moves into space A and Beetle #1 is released, White only gains one attacking bug, rather than two.

This game aptly illustrates how a properly placed pin can reduce an attacker's strength and aid in counting up another victory.

7.17.5 – Control Bug Placement

Proper pin placement allows a top notch Hive® player to control the bug placement of his opponent. As was discussed in Chapter 7.3 – Controlling Bug Placement, this can be instrumental in winning.

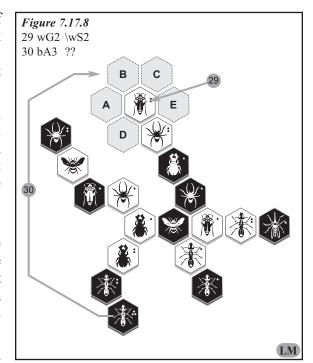
The game that will now be discussed (*HV-Dragonfly-ringersoll-2010-10-21-0036*) was seen previously in Chapter 7.14 – The Ladybug. But here, the game will illustrate how a misplaced pin failed to control new bug placement by White and resulted in a loss for Black.

Black is doing an excellent job of controlling the outside of the hive and has a huge advantage in mobility. All three Black Ants and the Black Mosquito (acting like an Ant) are mobile. The only place that White can bring in a new bug is adjacent to White Spider #2.

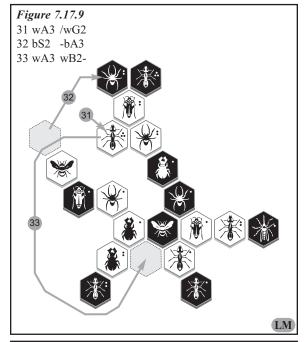
White Hopper #2 enters the game on turn 29 as shown in *Figure 7.17.8*. And now Black will pin the Hopper with Ant #3. The obvious question is, "From which space should the Black Ant place the pin?" But the more important question is, "Which space poses the biggest threat for White to place new bugs?"

The answer is that space D is the critical space. Why? Because any new White bugs brought into space D cannot be pinned! Due to the close proximity of the branch of the hive containing the White Queen, any attempt to pin a bug brought into the game via space D will result in the formation of a ring. The formation of this ring would have disastrous consequences for Black!

To have any chance of winning, Black must place the pin from space A and control bug placement into space D. Unfortunately, Black placed the pin in space C with the move 30 bA3 wG2/ and soon lost.



On turn 31, White Ant #3 enters the game via the critical space and attacks the Black Queen on turn 33 (*Figure 7.17.9*).



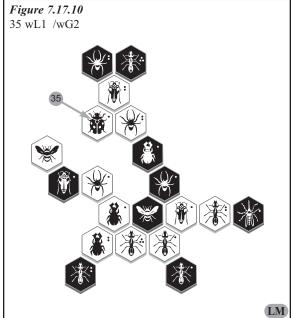
And then, finally, in *Figure 7.17.10*, the White Ladybug enters through the same critical, uncontrolled space. And when she enters she cannot be stopped.

This game definitely highlights the importance of controlling bug placement by placing the pin from the correct space!

7.17.6 – **Making a Ring**

Few of the tactics used in the game of Hive® are used in a vacuum with no relationship to other tactics. Just the opposite is actually the case. Tactics are often interconnected with one tactic leading to another and possibly to a third.

In the game *HV-lukiejro-ringersoll-2010-07-29-2049*, depicted in *Figure 7.17.11* (page 205), we see Black on the attack but running out of bugs (Chapter 7.1 – Counting Bugs). The key to White's defense is Hopper #1 (Chapter 7.2 – Defending Your Queen). Once the White Hopper is released and Black's attack has been stopped, White, with three bugs in reserve, one Beetle atop the hive, and two mobile Ants, will easily counter attack (Chapter 7.4). The key to victory, then, is releasing the White Hopper. And the key to this is the making of a ring (Chapter 7.6). This is where proper pin placement enters the picture. Proper pin placement allows the defensive ring.



Examining this figure, we see that on turn 36, Black has just played Beetle #2 with the immediate threat of climbing atop the hive and possibly beginning an unstoppable attack. Let's evaluate White's defensive possibilities. As previously mentioned, Black is running out of bugs. There is only one Black bug in reserve (Spider #2).

White Hopper #1 is currently the focus of a bidirectional pin (Section 6.1.5), one direction by Black Hopper #1 and the other direction by White Spider #1. In order to be released, both of these pins must be relieved. The first will be relieved when Black attacks with a bug into space A. The second will be released when a White bug moves into space E and makes a ring.

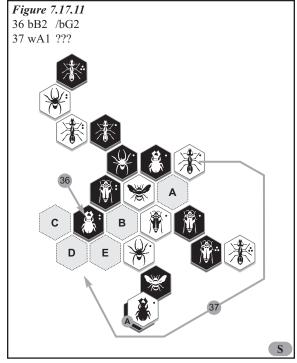
With the two Black Hoppers well placed to attack, White must pin with Ant #1, not Ant #3. Notice that if White pins from space D and then moves a bug into space E, Black Beetle #2 will be free to move. But if White pins from space C, the Black Beetle will still be pinned when the ring is formed.

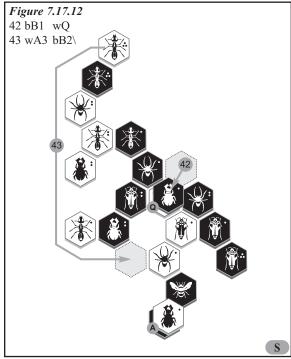
Figure 7.17.12 shows a few moves later as this series of events comes to fruition. Black is forced to allow the White Hopper to escape; White counter attacks and wins.

With proper pin placement, White controls which bugs are released with the forming of the ring and then goes on to win.

It is interesting to note that this game was played very early in the author's Hive® and playing Black, he missed a win. Can you find it?

A good choice of pin placement, combined with the formation of a good ring can be your road map to victory.



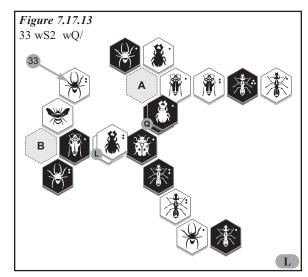


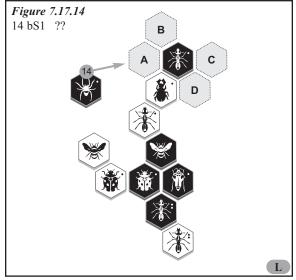
7.17.7 – Using Your Spiders

Most critical pin placement decisions involve Ants since they are the most mobile and typically offer alternative pin placements. Spiders, on the other hand, rarely offer options regarding pin placement. That is why initial Spider placement is so critical. This is very important when a Spider is used as a pin replacement (Section 6.1.2).

From Chapter 7.11 – Using Your Spiders, in the game *T!HV-ringersoll-DrRaven-2011-07-07-0031*, we arrive at *Figure 7.17.13*. This is the same as *Figure 7.11.11* on page 144, showing White Spider #2 on the attack. The reason that the White Spider attack is so potent is because White Beetle #1 is released by a fill when the White Spider moves into space A. If the White Beetle had been pinned by an Ant, the Ant would just shift around and keep the Beetle pinned. But with a Spider's restricted movement that is not possible in this case.

Let's go back to an earlier point in the game and see how the initial placement of Black Spider #1 led to this position. *Figure 7.17.14* shows the decision that Black must make when bringing in Spider #1 for a pin replacement. The first option is to place the Spider in space B with a plan to move to space D to free Black Ant #1. The second option is to place the Spider in space C with a plan to move to Space A to free the Ant. Which is better? DrRaven chose the first option eventually leading to the endgame situation shown in *Figure 7.17.13*.





But even before that, the choice of pin position affected the game. Compare *Figure 7.17.15* and *Figure 7.17.16*. The first is the actual position that occurred when Black Ant #1 moved out of its pinning position. The second is the position that could have been with the other initial Spider placement.

The key to evaluating the difference is space A. Notice that space A is inside a pocket (Section 4.5) in *Figure 7.17.15* but NOT inside a pocket in *Figure 7.17.16*. White's next move brought Hopper #1 into space B. There is no practical way for Black to keep this Hopper from jumping into space A.

In the actual game (*Figure 7.17.15*), the White Hopper released both White Beetle #1 and White Ant #1, allowing both bugs to move.

But in the what-if scenario, only the White Ant is released. This critical difference also had an effect on the eventual outcome.

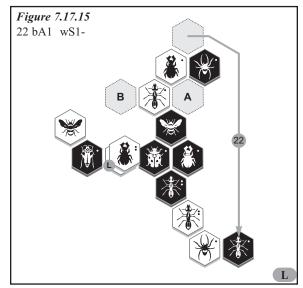
Another example of a pin placement decision based on the location of a friendly Spider is from the game *U!HV-lucassus-ringersoll-2011-02-13-1932*. White has just employed a ring to force the freedom of the White Queen. She has just escaped as shown in *Figure 7.17.17*. And now the question is, "Where should Black Ant #3 place the pin?"

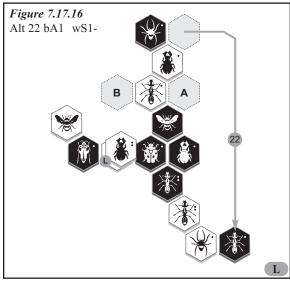
The answer comes from the location of the Black Spider. When the Black Spider attacks, it must end up in space B. Thus the Black Ant must pin from space C. Otherwise, the Black Ant will interfere with the attacking possibilities of the Black Spider.

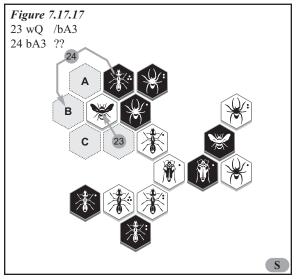
Because of its limited movement a Spider must be positioned properly to make good pins. Position your Spiders well and you will be positioned for more victories!

7.17.8 – Conclusion

Many considerations should go into the proper placement of each bug and each pin. To become a true Hive® Master, a player must learn how to make good pin placement choices.







Chapter 8 – Beginners' Mistakes

There are a series of mistakes that most, if not all, beginning Hive® players make. The goal of this chapter is to help readers of this book avoid these costly errors and to quickly learn to 'Play Hive® Like a Champion.'

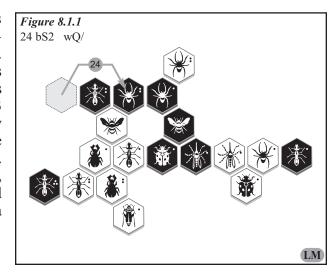
8.1 – Misusing Your Ants

Without a doubt, the Ants are the most powerful of all the standard bugs and can be a key factor in winning a game of Hive. Unfortunately, they can also be misused in a variety of ways, any of which can be costly when playing, not just against a skilled opponent, but even against a novice or BoardSpace's Dumbot.

8.1.1 – Starting with an Ant

The first misuse of an Ant can occur on a player's first turn! It may seem that playing your most powerful bug first is a good tactic. But NO, it is not a good idea to start with an Ant. Even though the Ant is the most powerful of the basic bugs, it can easily be rendered immobile by application of the One Hive and Freedom to Move rules. When an Ant is the first bug placed by either side, the probability is virtually zero that the Ant will ever be released to play any offensive or defensive role in the game. Against a competent opponent, wasting such an important bug so early in the game is usually a sure fire path to a loss.

The first two figures show a game with BoardSpace's Dumbot playing White (*U!HV-Dumbot-ringersoll-2011-01-23-1232*). Dumbot opened the game by playing an Ant. You will easily see the results. In *Figure 8.1.1* Black has just played Spider #2 as shown. Please note that this forms a ring which in most cases is not a good idea (Section 8.3 – Making a Ring). But in this case, it proves to be a very good offensive move. Why? Because both the White Queen and White Ant #1 are hemmed in and cannot move. If instead of an Ant, White had placed a Hopper, Beetle, Ladybug, or Mosquito on the first move, that bug would now be free to move. Moving out would not only clear a

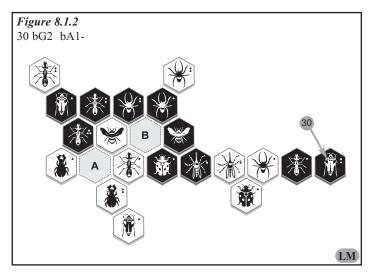


space next to the Queen, but could possibly be used in attacking the Black Queen. But as it stands, Black can form the ring with no negative consequences.

Figure 8.1.2 shows the game six moves later after Black has threatened space A, first with Hopper #1 (defended by a pin by White Ant #2 (Chapter 6.1 – The Pin)) and then with Hopper #2. White's position is hopeless. He cannot defend against both Hoppers. Once a Hopper moves into space A the Black Ladybug will easily move into space B and win.

Also interesting to note is that if White could switch Ant #1 with Spider #2, there would be one additional defender available and Black Hopper #2 could also be stopped. But as it is, the White Spider is useless in defense and Black wins.

Lesson Number 1 is: "Don't start with an Ant."

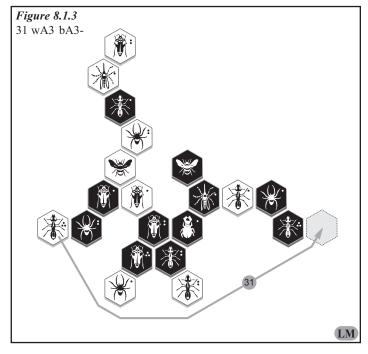


8.1.2 – Allowing Your Ants to Be Pinned

The second mistake that beginners often make with their Ants is to allow them to be pinned (Chapter 6.1 – The Pin). This is actually a broader application of the previous topic, 'Starting with an Ant.' When a player starts with an Ant, he is guaranteeing that this first Ant will be quickly rendered immobile. In fact bug placement on the player's second move does this immediately.

Remembering that one of the three keys to victory is Mobility (Section 5.1 – Strategy – Three Keys to Victory), a novice quickly learns that it is vitally important to keep one's Ants mobile and available for both defensive and offensive uses all around the hive.

A good example of this is *Figure 8.1.3* from a game between two experienced players (*HV-ringersoll-BlackMagic-2010-11-04-2151*). This figure shows White move #31. Note how all three of the Black Ants and the Black Mosquito are helplessly pinned. White Ants #2 and #3 are free to move and White is preparing to move White Hopper #2 in position to



replace the White Mosquito currently pinning Black Ant #1. After a successful execution of a Pin Replacement (Section 6.1.2), the White Mosquito will also be free to move.

With four bugs in reserve (one Hopper, two Beetles, and the Ladybug) and all four of the most mobile Black bugs out of play, it is just a matter of time before White forces a win. With the close proximity of the two Queens (Section 7.7.2 – Playing for a Draw – Compact Queens), White was forced to play carefully and finally won on turn 93.

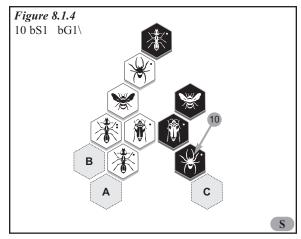
The second lesson: "A pinned Ant is a worthless Ant."

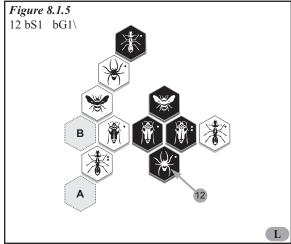
8.1.3 – Using Your Ants to Pin Spiders

Because of the Ant's superior mobility, it is a powerful defensive weapon when properly used to pin the opponent's attacking bugs (Chapter 6.1 – The Pin). Pinning an opposing Ant is usually a good trade off because your Ant is still mobile, but the opponent's Ant is not. This trade results in a net gain in available bug strength. On the other hand, using an Ant to pin an opposing Spider is very rarely a good idea. When a Spider is positioned correctly and making a powerful threat, a player may have no choice but to pin it with an available Ant. As long as the Spider's threat remains viable, the pinning Ant is forced to stay put and the player has lost an important bug.

Fortunately, because of the Spider's limited movement, there may not be a long term need to keep it pinned. As soon as the Spider is no longer a serious threat, the pinning Ant can be used for more important functions elsewhere. Following are three examples of situations where a Spider threat forces a pin by an Ant. One should pay particular attention to the moves leading up to the Spider threat and subsequent Ant pin. By recognizing these situations, an experienced Hive® player will avoid them and avoid being forced into positions where an Ant is wasted in this manner.

The first is *Figure 8.1.4* from *U!HV-ringersoll-Eucalyx-2010-08-15-2102*. Black has just played Spider #1 and is threatening to pin White Ant #1 by moving to space A. If the White Ant moves away, then the Black Spider will pin White Ant #2 by moving to space B. In either case, White loses an Ant. White has no choice but to pin the Black Spider. In the actual game, White moved Ant #1 to space C.





From the game *U!HV-ringersoll-Eucalyx-2010-10-23-2212*, we get our second example in *Figure 8.1.5* (page 211). Black has again just placed Spider #1 and has a dual threat. If White Ant #2 does not move, it will get pinned by the Black Spider going to space A. If the White Ant does move, then the Black Spider moves into space B and attacks the White Queen. This virtually forces White to waste a valuable Ant pinning Black Spider #1.

Finally, from the game *U!HV-ringersoll-Eucalyx-2011-01-29-2201*, comes our third example in *Figure 8.1.6*. On turn 34, Black places Spider #2 as shown, with the immediate threat of attacking the White Queen by moving to space A. White counters by pinning the Black Spider from space B with White Ant #2.

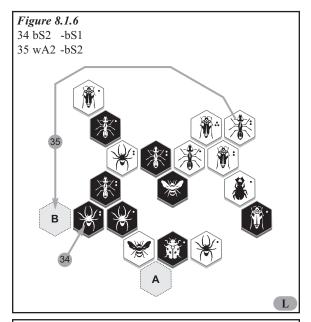
As mentioned above, if the Spider threat goes away, then the need for the pin may also go away. *Figure 8.1.7* demonstrates this. A few turns later, Black brings Ant #2 around and attacks the White Queen. Now notice that Black Spider #2 is no longer in position to attack the White Queen. The need for the pin no longer exists and White Ant #2 is free to be used elsewhere.

The lesson: "Don't waste an Ant pinning a Spider unless you absolutely must."

8.1.4 – Failing to Get Your Ants into Play Quickly Enough

An Ant in reserve can be very powerful. Two or three in reserve can be an almost unstoppable force. But a game lost with Ants still in reserve exemplifies an inefficient use of bug power. Allowing your opponent to bring his Ants into play while keeping yours in reserve could easily allow your opponent free rein over the entire hive. When you finally do bring your Ants into play, your opponent may be able to pin them and render them immediately useless.

In addition, not having enough Ants in play is a severe shortcoming while on the defensive. Being the most mobile bugs, Ants are particularly useful in rapid response to an opponent's immediate threats. But if your Ants are not in play, you could easily find yourself one tempo behind and in a lost game.



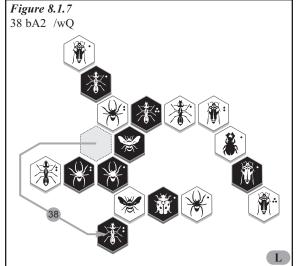
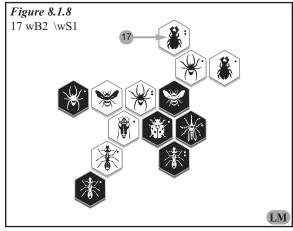


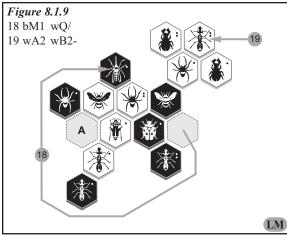
Figure 8.1.8 shows a position from a beginner's game (HV-cheewee-ringersoll-2011-02-17-0134) that exemplifies this defensive shortcoming. Let's analyze the situation. The only White Ant in play is already pinned. Black has an effective count of three Ants: the two Ants in play and the Mosquito in position to move as an Ant. Finally, with the positioning of White Spider #2 freeing her to move, the Black Ladybug is in excellent position to attack. All in all, White should be looking to defend, but instead, brings in another Beetle in an attacking position.

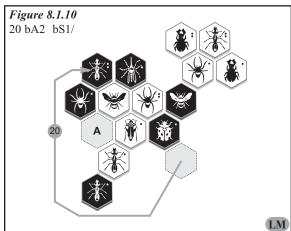
Follow the campaign as Black first attacks with the Mosquito on turn 18 (*Figure 8.1.9*) and then Ant #2 (*Figure 8.1.10*). Even though White Ant #2 was brought into the game in the meantime, White is helpless! Both Black Ant #1 and the Black Ladybug threaten to deliver the fatal move into space A. White Ant #2 can stop one or the other of the two threats, but not both.

An instructional side note here regarding the use of the Mosquito. Note that Black moved in first with the Mosquito and then the Ant. The reason for this is that attacking with the Ant first would remove the Mosquito's ability to move like an Ant, since it would no longer be adjacent to an Ant.

The lesson: "Get your Ants in play early."







8.2 – Allowing the Queen to Escape

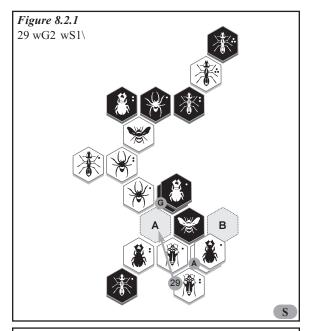
After carefully maneuvering bugs into position to surround the opposing Queen, it is very important to watch for opportunities for the opposing Queen to escape. Quite often when an opposing Queen escapes, the bugs she leaves behind are pinned and useless for future attacks.

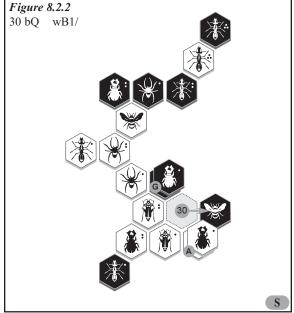
A good example of this is shown in a game in which White is a beginner (*U!HV-guest-ringersoll-2011-01-28-2333*).

As you can see in *Figure 8.2.1*, White has an Ant free, a Beetle atop the hive, and a Hopper in reserve. This adds up to a very strong White attack in the making. Even with a Beetle and a Hopper nearby for defense, Black must defend very carefully.

But here, White makes a critical, beginner mistake. Instead of moving Hopper #2 to space B, filling one more space and blocking the Black Queen, White moves the Hopper to space A!? This move frees the Black Queen to escape!

Figure 8.2.2 shows the position after the Black Queen escapes. Now, White has no chance to win. Notice how a string of six White bugs are all pinned, starting with the White Queen and ending with Ant #2 under White Beetle #1. A quick bug count (Chapter 7.1 – Counting Bugs) reveals that White has only four bugs available for attack, far short of the six needed to win. In the actual game, Black immediately went on the attack and won easily in ten more moves.

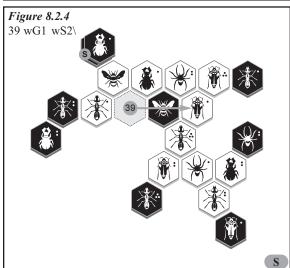




We draw our second example from the game HV-HoborgHUN-ringersoll-2010-08-25-2259, in which White allows the Black Queen to escape not once, but twice. Figure 8.2.3 shows the first escape, as White Hopper #2 jumps in adjacent to the Black Queen, but in so doing, allows the escape. White should bring one of the three bugs in from the reserve (Ant, Spider, or Hopper) and maneuver it into position to pin the Black Queen. Then, after the Queen has been immobilized, the White Hopper can safely jump into position.

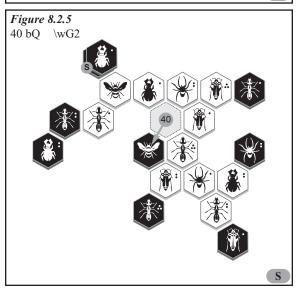
Figure 8.2.3
21 wG2 wB1\
22 bQ wG1-

Figure 8.2.4 shows the game's 39th turn in which another ill advised Hopper move allows the Black Queen to escape a second time.



This mistake not only allowed the Queen to escape, but led to the shutout position in *Figure 8.2.5* (Chapter 7.5 – The Shutout). Based on White's position in this game, the second Black Queen escape did not accomplish anything but a quicker resolution to an already lost game. But even in positions such as these, a good player is careful to not allow the opposing Queen to escape.

Don't snatch defeat from the jaws of victory by allowing your opponent's Queen to escape.



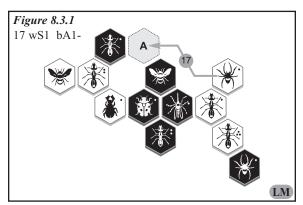
8.3 – Making a Ring

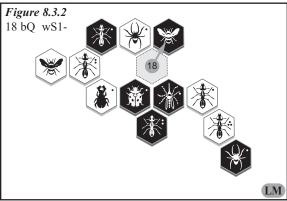
"Rings are bad." This is a basic principle that all beginning Hive® players must follow. Making a ring will quite often allow your opponent to choose where the ring will be broken and which bugs will be released. In most cases, this will leave the ring maker in an inferior position. Only if you control all the bugs in a ring is it safe, and even then the ring may not be all that helpful to you.

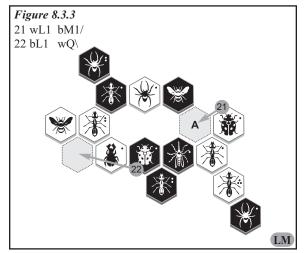
We will look at two positions from the same game between the author and a beginner (*U!HV-Fishboy-ringersoll-2010-12-16-0027*). Looking at *Figure 8.3.1*, it is easy to see that even though the game is still in its early stages, White is already in trouble. All three of White's Ants are immobile. This is never a good sign. White now compounds the situation by forming a ring by moving Spider #1 to space A.

Black can now break the ring by moving Black Ant #1, the Black Queen, or the Black Ladybug. As shown in *Figure 8.3.2*, Black elects to escape with the Black Queen (Section 8.2 – Allowing the Queen to Escape). Not only has the Black Queen escaped, but in so doing, she has pinned another White bug (Chapter 6.1 – The Pin).

A few moves later, White makes another mistake that is even more damaging than the first one! In *Figure 8.3.3* White moves the Ladybug into space A, forming another ring. Again, Black can choose between any of three bugs to break the ring. The Black Queen could escape again, or either the Black Ladybug or Black Mosquito could move out.



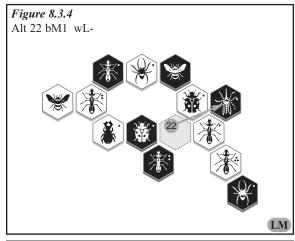


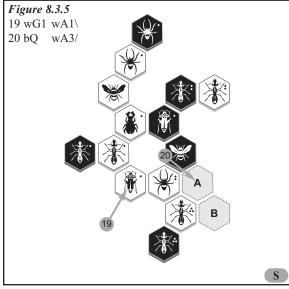


In the actual game, Black elected to attack with the Ladybug by 22 bL1 wQ\, but on post-mortem analysis, better is to move the Mosquito (using the Ladybug's movement ability) as shown in *Figure 8.3.4*. This leaves the Mosquito in excellent position, now being free to move as either a Ladybug or an Ant. Black Ant #2 continues to be free to move and when Black Ant #2 moves, the Black Ladybug will also be free. The position of the Black Mosquito also severely restricts White's placement of new bugs (Chapter 7.3 – Controlling Bug Placement).

Another example of a bad ring leading to a Queen escape and a lost position is *Figure 8.3.5* from the game *HV-Dragonfly-ringersoll-2010-10-20-0000*. White places Hopper #1 as shown, allowing the Black Queen to escape; first to space A then later to space B. If the Black Queen is allowed to move all the way to space B, she will replace the pin (Section 6.1.2 – Replacing a Pin) on White Ant #3 and allow Black Ant #3 to move on to more important duties. Notice the long string of seven White bugs, all pinned in place and unable to move. This poor situation was brought about, at least in part, by an ill conceived ring.

The game is hopelessly lost, highlighting the adage, "Rings are bad."

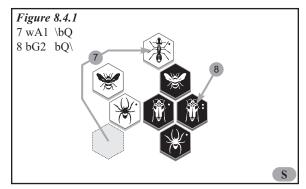




8.4 – Wasting Tempo in the Opening

The difference between winning and losing is often only one tempo. Place and move your bugs carefully in the opening. Moving a bug twice can be a loss of tempo. As White, this can give the initiative to Black. As Black, it can result in a quick defeat.

Figure 8.4.1 and Figure 8.4.2 (page 218) illustrate a lost tempo early in a game between a beginner playing White and the author playing Black (*U!HV-toh-ringersoll-2011-02-21-0339*). Black Spider #1's threat to pin White Ant #1 forces the White Ant to move. Attacking early as White is typically a good idea, but one should take notice of the placement of the White Ant on turn 7 as illustrated in the first figure.



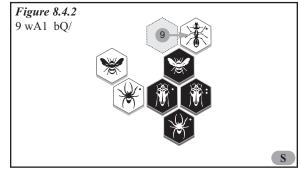
Not foreseeing the placement of Black Hopper #2 on turn 8 and not wanting to allow the newly placed Hopper to pin Ant #1, White wastes a valuable tempo by moving Ant #1 again, as shown in *Figure 8.4.2*. This lost tempo shifts the momentum to Black and is instrumental in the resultant loss for White.

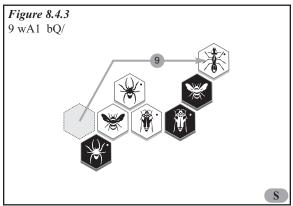
Another excellent example of wasting tempo in the opening is shown in *Figure 8.4.3* through *Figure 8.4.6* from the game *HV-lukiejro-ringersoll-2010-07-29-2043*. In this game, White places Ant #1 early in the game and then promptly moves it three times as shown in the first three figures. This waste of tempo allows Black to bring too many attackers into the game and soon White is overwhelmed.

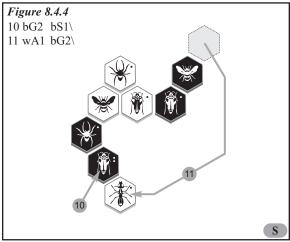
White's attack with Ant #1 in *Figure 8.4.3* is in line with an attacking White strategy and is acutally an acceptable move, unfortunately, it is followed by a series of poor ones!

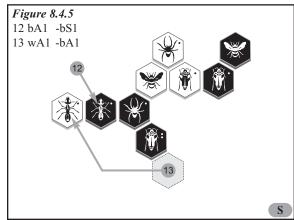
Instead of continuing the attack, White, in *Figure 8.4.4*, switches to the defensive by pinning the newly placed Black Hopper.

When the first Black Ant is brought into the game as shown in *Figure 8.4.5*, White decides that pinning the Ant is more important than pinning the Hopper. And moving the White Ant again, shifts the pin from one Black bug to the other.









And finally, *Figure 8.4.6* shows the position as Black brings in Ant #3. The only way White can stop this newly placed Ant from winning the game is to release Black Beetle #1. In two moves, this Beetle climbs up and over Black Hopper #3 and the game is over.

The lesson learned is: "Don't waste valuable tempo moving and removing an already placed bug."

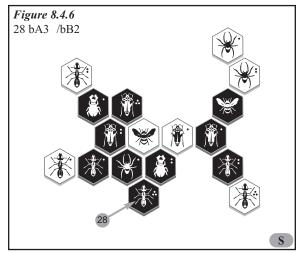
8.5 – Failing to Defend Your Queen

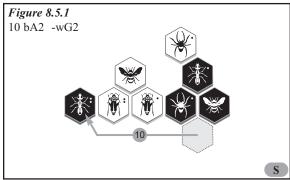
When friendly pieces adjacent to your Queen can move away, you are one step farther away from losing. This may also have the benefit of providing an escape route for your Queen. However, as soon as your Queen no longer has any friendly pieces next to her, she will be easier to surround and defeat.

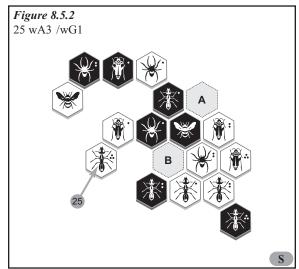
The best defenders are those bugs that cannot be hemmed in, i.e., Beetle, Hopper, Ladybug, and Mosquito (if adjacent to one of the previous bugs). Ants and Spiders make poor defenders because they can be too easily pinned (Chapter 6.1 – The Pin) or blocked (Chapter 6.3 – The Block).

Let's look at *U!HV-ringersoll-lucassus-2011-02-13-2044*. *Figure 8.5.1* shows the opening position after each player has played four bugs. Each Queen is free to move and is adjacent to two friendly bugs. There is a huge difference however in that the two Black bugs are a Spider and an Ant, whereas the two White bugs are both Hoppers. Even though all four bugs are currently immobile, we shall soon see the difference.

Figure 8.5.2 shows the position some moves later. White's attack has been relentless. The Black Queen is now surrounded and unable to escape. The two Black bugs have not moved and, in fact, cannot move. This means that White only needs four bugs to win! With White Hopper #3 poised to occupy either open space adjacent to the Black Queen and the newly placed Ant #3 now in the battle, Black has no chance.







One more example again highlights the importance of keeping defenders adjacent to your Queen. *Figure 8.5.3* shows Turn 24 in the game *HV-ringersoll-Dragonfly-2010-10-21-0108*. Beetle #1 and Hopper #3 are in position to execute the winning moves for White. Black Ant #2 cannot come to the defense because it is currently tied down keeping White Hopper #2 from jumping into an attacking position. Black desperately tries to get another bug into the fight by moving Black Beetle #1 as shown.

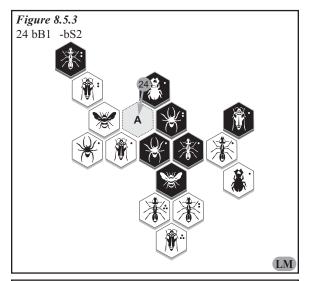
This highlights the importance of choosing defenders carefully! If Black Spider #1 were replaced with a Hopper, Beetle, or Ladybug, this Beetle move would free the defending bug to move out. But since a Spider is limited by the Freedom to Move rule, Black Spider #1 is trapped and cannot escape. White won easily.

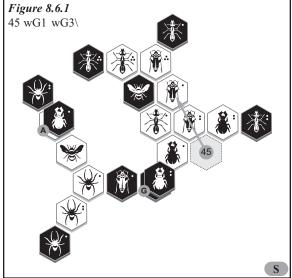
Another valuable lesson: "Keep defenders near your Oueen."

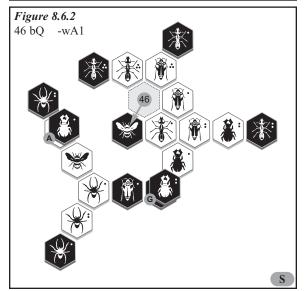
8.6 – Allowing a Shutout

Due to the application of the One Hive and Freedom to Move rules, it is natural that as the game progresses many bugs lose their ability to move. Not fully understanding the consequences of upcoming moves, many beginners find themselves in a position where no moves at all are available. Unlike the game of chess where such a position results in a stalemate or draw, a player unable to move in Hive® must pass instead. This situation, referred to as a Shutout (Chapter 7.5), results in one's opponent having a series of uninterrupted and unhindered moves. Except in very rare circumstances, this quickly results in defeat for the player who has been shutout.

Figure 8.6.1 and Figure 8.6.2 show the continuation of a game used in an earlier section (*U!HV-toh-ringersoll-2011-02-21-0339*). Not recognizing the mistake, White jumps Hopper #1 into position adjacent to the Black Queen, but in doing so, not only allows the Black Queen to escape (Section 8.2 – Allowing the Queen to Escape), but also ends up in a shutout position. Notice how all of the White bugs are rendered immobile! With one Hopper in reserve and both Beetles atop the hive, Black can, and did, quickly and efficiently end the game.







The following game demonstrates another example, but this time a shutout results from Black wasting too many tempi in the opening. By repeatedly moving the Queen, Black falls far behind in the development of bugs into the hive and sets himself up for a shutout by White. This comes from the game *HV-ringersoll-PansORama-2010-10-24-2145*.

Figure 8.6.3 shows turns 8 and 9. The Black Queen moves as shown and White Spider #1 pins Black Spider #1. When you examine the full move record you will see that this is actually the Black Queen's third move! This is, without a doubt, a severe waste of valuable tempi.

With no available space to place a new bug, the Black Queen is forced to move again as depicted in *Figure 8.6.4*. White follows by bringing Ant #1 from the reserve.

And finally, in *Figure 8.6.5*, Black makes still another Queen move, followed by White Ant #1 pinning the Black Queen.

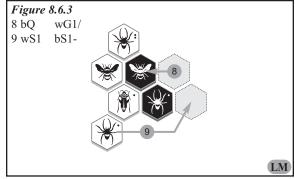
This leads to the position in *Figure 8.6.6* in which Black is now shutout. There are plenty of Black bugs in reserve, but no legal place to place any of them. White now proceeds to bring in more bugs and quickly ends the game.

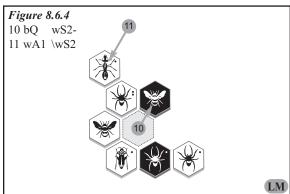
This game shows how one beginners' mistake (wasting tempo in the opening), resulted in a second beginners' mistake (allowing one self to be shutout), which led to a quick loss.

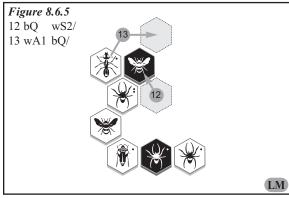
A very important lesson to learn: "Watch for and avoid the shutout."

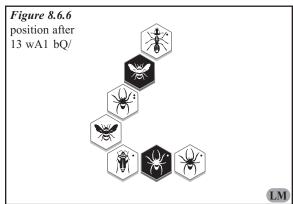
8.7 - Conclusion

Learn from these Beginners' Mistakes. Avoid them whenever possible. And soon, you will be playing Hive® like a champion!









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Chapter 9 – Opening Theory

A thorough, in-depth discussion of Hive® opening theory is beyond the scope of this book, but a brief discussion of some of the more common openings will be presented.

9.1 – Basic Concepts

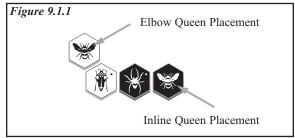
To begin, let's identify two basic opening formations, each of which is pictured in *Figure 9.1.1*. Notice the relationship between the White Queen and the first two bugs placed, White Hopper #1 and Black Spider #1. These three bugs form an elbow (Section 4.4 – Elbow) and thus this placement will be referred to as an Elbow Queen Placement. Notice, however, that the Black Queen, the Black Spider, and the White Hopper are placed, not in an elbow, but in a straight line. This placement will be referred to as an Inline Queen Placement.

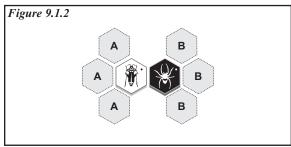
This allows an easy classification of openings into three different groups. The first two groups are similar in that each Queen is initially placed adjacent to the player's opening bug. Looking at *Figure 9.1.2*, the White Queen will be placed in one of the three spaces labeled A and the Black Queen will be placed in one of the spaces labeled B.

The third group differs in that at least one of the two Queens is not initially placed adjacent to the player's opening bug. Again looking at *Figure 9.1.2*, either the White Queen is not placed in one of the three spaces labeled A or the Black Queen is not placed in one of the three spaces labeled B. Or, possibly, both Queens are placed outside these respective areas.

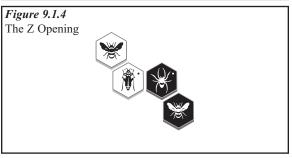
The first group, in which both Queens are placed in an elbow placement, will be referred to as Elbow Openings, with two subgroups: C Openings and Z Openings. The second group, in which at least one Queen is placed in an inline placement, will be referred to as Inline Openings and has three subgroups: I openings, J openings, and F openings. And finally all openings in the third group will collectively be referred to as X openings.

Figure 9.1.3 through *Figure 9.1.7* illustrate the five openings in the first two groups.











To begin our discussion, please examine *Figure 9.1.8*. Notice how both players have brought in an Ant and used it to pin the opposing Queen. Space A in this figure highlights the primary difference between the two initial Queen placements. With an elbow placement, there is a space that is 'inside the elbow.' When a bug is moved into this space, the defending bug, in this case White Hopper #1, is free to move. This is not the case with the inline placement. White is free to place bugs in any of the four empty spaces adjacent to the Black Queen without fear that the Black Spider defending the Queen will be freed. Understanding this difference is critical to proper opening evaluation.

It is interesting to note that the player placing the Queen last has the choice of which opening to play. In most cases this will be Black. The player placing the Queen first narrows the list to two or three different openings, but the ultimate choice belongs to the player placing the Queen last.

9.2 – Elbow Openings

9.2.1 – C Opening

When both players play their Queens in an elbow placement and both Queens are on the same side of the center line, we have the C Opening. Many feel that this opening raises the probability of the ultimate outcome being a draw due to the close proximity of the two Queens. If one is playing Black against a superior opponent and one considers a draw to be an acceptable outcome, then this opening may be a good choice.

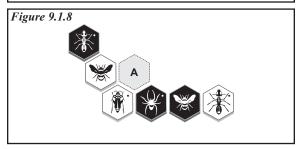
The C Opening games typically revolve around control of two spaces. (Please see *Figure 9.2.1*.) The two labeled spaces are the critical spaces. White has the upper hand if he can occupy space B before Black occupies space A. On the other hand, if Black occupies space A before White can occupy space B, then Black's game improves immensely.

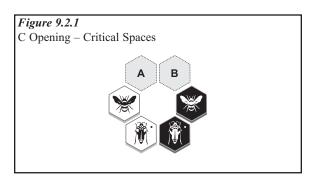
The value of these two spaces involves the making of a ring (Chapter 7.6 – Making a Ring). When the second player plays into his critical space, after the first player has already successfully occupied his critical space, then a ring is formed. In many cases, this will free either the opposing Queen or a bug defending the Queen.

Victory in C Opening games hinges not just on the occupation of the two critical spaces but also on the pins or covers on the defending bugs freed by the inevitable ring making.









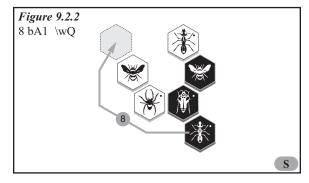
A sample opening from the game *U!HV-BlackMagic-ringersoll-2010-12-01-0040* is shown in *Figure 9.2.2*. White and Black have each brought in an Ant and pinned the corresponding Queen. White has taken the critical spot and in the end pulled out the victory.

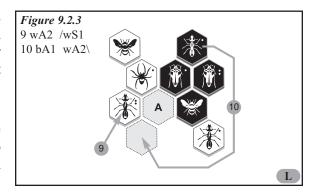
9.2.2 – **Z** Opening

When the Queens are on opposite sides of the center line, we have a Z Opening. In games between two players of equal strength, this quite often leads to a wide open game with White attacking early. If able to withstand this opening assault, Black has excellent counter attacking chances. Quite often victory hinges around the effectiveness of Black's Queen defense and the ability of White to pin and/or cover the Black defenders.

Mobility is a key in the wide open games that Z Openings regularly produce. These games quite often go to the side with the most free Ants. Failure to get one's Ants into proper offense/defense positions can be the primary source of defeat in Z Openings.

A very typical Z opening game (*U!HV-diogocrist-ringersoll-2010-12-02-0150*) is shown in *Figure 9.2.3*. White is on the attack and has already pinned the Black Queen. Black has two good Hopper defenders in place and with turn 10 has pinned White Ant #2 and set a Block on space A.





9.3 – Inline Openings

9.3.1 – I Opening

When both players elect to place their Queens inline, we have the I Opening. With proper play on both sides, this opening definitely favors White. As noted in the introduction to this section, an inline Queen placement does not allow for an efficient escape by the defenders of one's Queen. This defensive liability typically will negatively affect Black against an aggressive White player.

On the other hand, if White fully utilizes the first move advantage, White will not be negatively affected by the inline Queen placement. If, however, White allows Black to take the initiative and counter attack early, White's inline Queen placement may return to haunt him.

The game *HV-ringersoll-humdeabril-2010-12-27-2254* (*Figure 9.3.1*) shows a typical I opening. White has a distinct advantage at this point in the game. The Black Queen has been pinned, three spaces around the Black Queen have been occupied and Black is limited in new bug placement options. Black is soon forced on the defensive and White won relatively easily.

9.3.2 – J Opening

The J Opening occurs when White chooses an inline placement and Black chooses an elbow placement. This opening, more often than not, comes from White's desire to get his Queen into play early (turn 2) and at the same time keep Black from choosing either the C or Z Openings. With proper play, White can overcome the inherent problems with an inline placement.

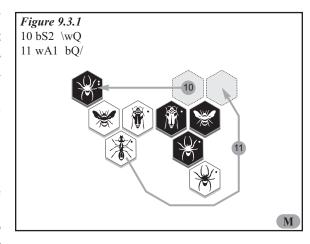
One advantage to the J Opening is that White can start its attack against the Black Queen with a Spider either above or below the initial bugs.

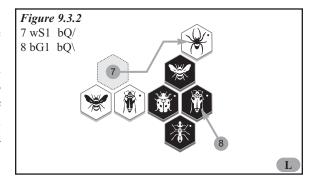
A typical J Opening, from the game *TU!HV-gideonbob-Eucalyx-2011-05-24-2005* is shown in *Figure 9.3.2*. White has begun the attack on the Black Queen, but Black is prepared to put up a good defense. In addition to the two well placed Black defenders (the Ladybug and Hopper #1) there is a Black Ant already placed and ready to respond to any White threat. Eucalyx, a Hive® Master, defended well and then, when the opportunity was presented, counter attacked and won.

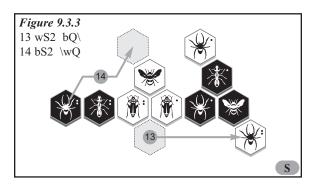
9.3.3 – **F** Opening

When White chooses an elbow placement and Black chooses an inline placement we have the F Opening. With proper play, this opening highly favors White. Black suffers from the defensive problems inherent in an inline opening, but does not have the counter attack chances that exist in the I Opening discussed above.

The example for the F Opening is *U!HV-ringersoll-lucassus-2011-02-13-2044*, a game that was previously seen in Section 8.5 – Beginners' Mistakes – Failing to Defend Your Queen. In *Figure 9.3.3* we see a scenario that definitely favors White. Black's Queen is pinned and the two defenders are a Spider and an Ant, neither of which are optimum defending bugs. White, on the other hand, has two Hoppers defending the White Queen. And once the White Ants begin to enter the game, Black will be in serious trouble.







9.4 – Other Openings

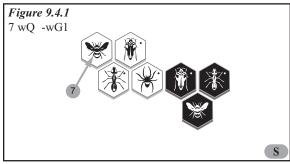
9.4.1 - X Openings

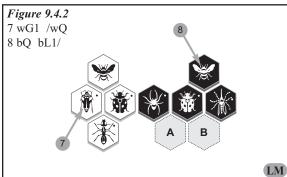
In all openings, the first bug played on both sides is immediately self-pinned by the player's second bug. There is nothing that can be done about that, it is just part of the game. However, if the Queen is not placed adjacent to the first bug, there will be at least two bugs that are self pinned. If White elects to do this, the result may be little more than a loss of tempo and a balancing of White's first move advantage. If, however, Black elects to do this, the lost tempo could result in a quick loss.

Due to the above, very little need be said regarding the X Openings. It is critical to get one's Queen into play early so that friendly bugs can move quickly. Playing an X Opening is not typically recommended.

HV-isagooss-ringersoll-2010-08-17-1928 demonstrates the shortcomings inherent in an X Opening. Figure 9.4.1 shows turn 7 when the White Queen is finally brought into the game. In this position two of the three White bugs already in the game are now pinned by the White Queen! Against an experienced Black player this puts White in a very deep hole right from the start. Ringersoll took advantage of this and won easily in 36 moves.

There is one X Opening that may have some merit. It is called the 3 Bug Defense. And should only be tried playing with both Ladybug and Mosquito. In this defense, Black typically plays Spider, Ladybug, Mosquito, and Queen in the pattern shown in *Figure 9.4.2* (from the game *T!HV-Fumanchu-ringersoll-2011-07-03-1907*). At the expense of one tempo, Black has placed himself in position to benefit from two defenders, is one step farther away from White's initial bug, and has more choices of new bug placement. In addition, if White allows Black to occupy spaces A and B, then the Black Ladybug and/or Black Mosquito can easily escape.





9.5 – Conclusion

Knowledge of these basic opening concepts, coupled with a good understanding of Hive® tactics, will soon lead to better midgame positions and more victories!

Chapter 10.1 – Bug Movement atop the Hive

Because the Freedom to Move rule applies atop the hive just as it does at ground level, bugs can be blocked by a gate formation atop the hive. This restriction applies to Beetles, Mosquitoes acting as Beetles, and Ladybugs. The Freedom to Move rule and gate formations do not affect Hoppers. During movement, Hoppers are considered to be 'flying above the hive' and therefore go over all bug formations in their path.

Adding this third dimension does create some interesting situations that may or may not be obvious.

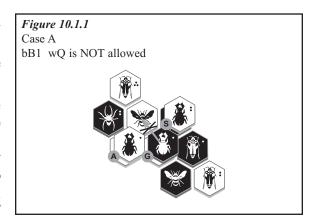
Basically, a gate formation affects movement whether it is at basic hive level or atop the hive. Even though a Beetle can climb atop another bug, it must still adhere to the Freedom to Move rule. In Beetle movement atop the hive, there are basically three cases.*

10.1.1 – Beetle Start Height and Beetle End Height are Equal

Case A) If BOTH blocking spaces are equal to or higher than the Beetle start height, then movement is NOT allowed.

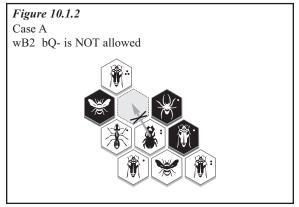
Case B) If EITHER blocking space is lower than the Beetle start height, then movement IS allowed.

Look at *Figure 10.1.1* and *Figure 10.1.2* (page 230). In the first, the height of both Black Beetle #1 (the moving bug) and the target space atop the White Queen are the same, level 2. The two potential blocking spaces are occupied by White Beetle #1 and White Beetle #2, both of which are also at level 2. A gate is formed at level 2, Case A above applies, and movement directly atop the White Queen is NOT allowed. Black Beetle #1 could move atop the White Queen in two moves. First, climbing atop either of the two blocking bugs, and then, on a later turn, moving atop the White Queen.



^{*}Please note that the diagrams used to illustrate these principles are not from real games and therefore may not portray situations that one would normally see.

Note the similarity with *Figure 10.1.2* in which the White Beetle, both blocking bugs, and the target space are all on ground level. Again, in this case, as per Case A, movement is NOT allowed.



In *Figure 10.1.3*, however, movement IS allowed because Black Spider #1 is at level 1 (lower than White Beetle #2's starting height) and Case B applies.

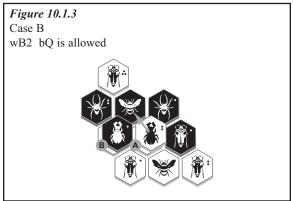
10.1.2 – Beetle Start Height is Above Beetle End Height

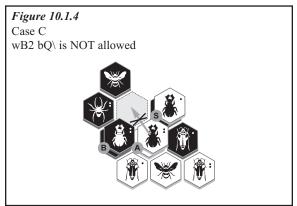
Case C) If BOTH blocking spaces are equal to or higher than the Beetle start height, then movement is NOT allowed.

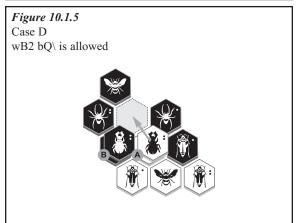
Case D) If EITHER blocking space is lower than the Beetle start height, then movement IS allowed.

Case C is illustrated in *Figure 10.1.4* which is very similar to *Figure 10.1.1* (page 229). In this instance, the starting height of White Beetle #2 (level 2) is higher than its ending height (level 1). The Beetle is climbing down, the Freedom to Move rule applies, and the move is NOT allowed.

Figure 10.1.5 is similar to Figure 10.1.3. White Beetle #2 is moving down. Its starting height is level 2 and its ending height is level 1. One of the potential blocking spaces (the one occupied by Black Spider #1) is lower than the Beetle's starting height and therefore, according to Case D, movement IS allowed.







10.1.3 – Beetle Start Height is Below Beetle End Height

Case E) If BOTH blocking spaces are equal or higher than the Beetle end height, then movement is NOT allowed.

Case F) If EITHER blocking space is lower then the Beetle end height, then movement IS allowed.

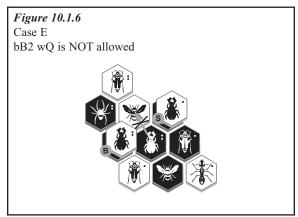
And finally, the next two figures illustrate the cases when a Beetle is climbing up, when its starting height is below its ending height. In *Figure 10.1.6* Black Beetle #2 is starting at ground level (level 1) and attempting to climb atop the White Queen (to level 2). The two blocking bugs are also at level 2, Case E is in affect, and movement is NOT allowed.

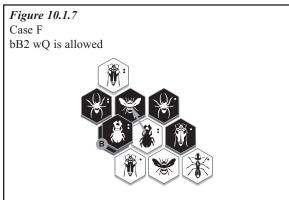
In *Figure 10.1.7*, one of the blocking bugs is at level 1, which is lower than the Beetle's end height. Thus, Case F is applied and movement IS allowed.

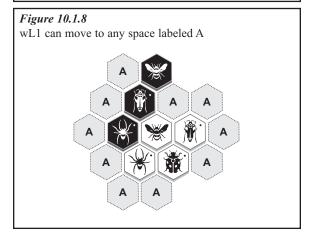
10.1.4 – Ladybug Movement atop the Hive

Due to the unique movement pattern of the Ladybug we will not show examples of all the potential blocking situations. One should suffice to show the basic principle involved.

Figure 10.1.8 illustrates the White Ladybug's normal movement possibilities. Her first move can be atop the White Spider, the White Queen, or the White Hopper. Continuing with her movement pattern, the White Ladybug can finish in any of the spaces labeled A.







But add two bugs atop the hive (in this case two Black Beetles) and the White Ladybug's movement is now restricted. The two Beetles in *Figure 10.1.9* form a gate preventing the Ladybug from crawling immediately atop the White Queen. She can still climb atop the White Queen, but her first move must be atop one of the two Black Beetles. Then on her second move, she can climb atop the White Queen.

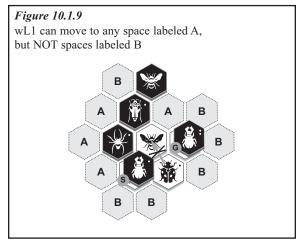
Due to the restrictions of the gate, she can no longer reach any of the spaces labeled B.

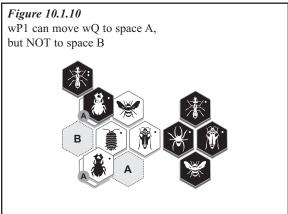
10.1.5 – Pillbug Movement atop the Hive

Even though the Pillbug itself does not move across the top of the hive like the Ladybug does, the existence of a gate may restrict the Pillbug's use of its special power. The Pillbug in *Figure 10.1.10* the Pillbug may pick up the White Queen and move her to space A, but due to the two nearby Beetle stacks, the White Queen cannot be moved to space B.

10.1.6 – Conclusion

Although these situations are rarely encountered in a game of Hive[®], understanding them is vital to becoming a true master of the game.





Chapter 10.2 – Additional Bugs

Many new bugs have been proposed by Hive® players around the world. A few have been chosen to be included in this book. To qualify for inclusion, the new bug must adhere to the One Hive rule and the Constant Contact rule, both of which are fundamental rules of Hive®. Some adjustment to the placement rule is allowed when necessary and the Freedom to Move rule may be ignored when a new bug's movement or special abilities allow it.

10.2.1 - Mosquito Interaction

Interaction with the Mosquito is problematic in two basic regards. First, should the Mosquito take on the special abilities of an expansion bug or should it just take on the movement? And second, if an expansion bug has 'top of hive' movement, how does this affect the Mosquito?

With the introduction of the Pillbug in 2013, it seems that the official answer for the first question is "Yes, the Mosquito does inherit both movement and special power." The designer of each expansion bug may, however, rule differently on this topic.

On the other hand, the subject of 'top of hive' movement is much more complex. On the forums at BoardGameGeek.com there does not seem to be a consensus among Hive® players around the world and until John Yianni and the team at Gen42 Games post an official opinion, this question will not be definitively answered.

The problem arises when one considers a Mosquito, using another bug's movement, climbing atop the hive. When the game only has one bug with this ability (Beetle), the solution is very simple. The Mosquito continues to move like a Beetle as long as it is atop the hive. But, with the introduction of other bugs with this ability, the situation becomes much more complex. If a Mosquito uses another bug's movement and climbs up, how does it continue to move?

There seems to be a general agreement that rules should be as simple as possible, must conform to all basic Hive® rules, and must not require a 'memory factor.'

Bug designers have come up with three different solutions.

The first and simplest seems to be just add a rule that states that the Mosquito can use an inherited bug's movement as long as the movement does not start at ground level and end atop the hive. To illustrate, please look at *Figure 10.2.1*.

The Black Mosquito may use Spider movement to move to either of the spaces labeled S, can use Dragonfly movement to move to either of the spaces labeled D but cannot use Dragonfly movement to move to the space labeled X.

The second solution introduces an entire new class of bugs and modifies the placement rule. This group of bugs only exist atop the hive. Their initial placement is atop a friendly bug and their movement does not allow them to climb down. This solves the problem. A Mosquito cannot use their movement to climb up, but once up, the Mosquito can mimic their movement. *Figure 10.2.2* shows this, using the Moth as an example.

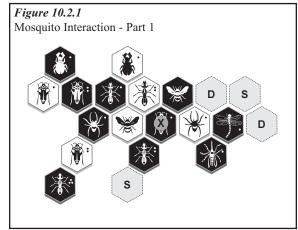
The White Moth has just been placed as shown. These bugs must be placed atop a friendly bug, which itself is not adjacent to any opposing bug. Note that this is the only legal placement location for the Moth because every other White bug has a Black bug adjacent to it.

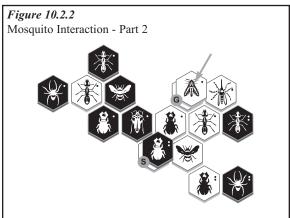
On a following move the White Moth may move across the hive, ending its movement atop an opposing bug. (For more details, see Section 10.2.8.) In this situation the White Mosquito gains no movement from the Moth. Since the Moth never exists on ground level and therefore does not have the ability to climb atop the hive, there is no movement ability for the Mosquito to mimic. If however, the Mosquito were already atop the hive, it could mimic the Moth's movement.

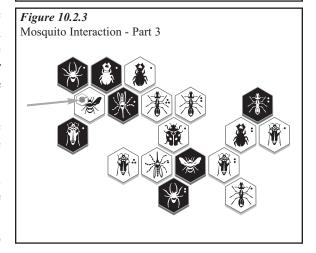
The third solution also introduces a new class of bugs, the Mini-Bugs. These bugs are not full sized, but smaller. Due to their small size, they too must always stay atop the hive. One primary difference is that, due to the difference in size, the Mosquito cannot inherit any movement from one of the Mini-Bugs. *Figure 10.2.3* illustrates this using the Mite.

As we see from this figure, Mini-Bugs are also placed atop friendly bugs, in this case the White Queen. Even though the adjacent Black Mosquito is free to move, it gains no movement ability from the White Mite.

Experience has shown that when two players of equal ability play, there is a small bias toward White. When the Mosquito was introduced, this bias increased slightly. When the Ladybug was introduced, however, this bias increased







dramatically. The concern that some players have is that additional bugs will increase the Mosquito's value and therefore increase this bias even more. This bias toward White is the primary reason why the Mosquito must be considered in the design of all expansion bugs.

10.2.2 – **Dragonfly** - **D***



The Dragonfly moves in a special pattern reminiscent of the Knight in chess. But in addition to its unique movement, it has the ability to pick up and carry other bugs, both friendly and opposing.

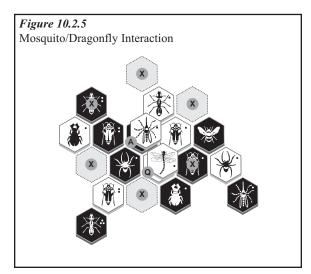
Movement – The Dragonfly moves exactly two spaces. The first space may be in any direction, but it must be atop another bug. The second space will then be either forward-right or forward-left. As with other bugs, the One Hive and the Constant Contact rules must be obeyed. But, like a Beetle, it may land atop the hive. (See *Figure 10.2.4* where the White Dragonfly is atop the hive.)

Placement – Placement of the Dragonfly must obey all standard placement rules.

Special Rules – When atop another piece, the Dragonfly may pick up the piece immediately below it and transport it to the Dragonfly's destination space. To use this special transporting ability, the Dragonfly's destination space must be empty and the piece below it must be free to move. To clarify, if a Dragonfly starts its move atop another piece, that piece is free to move without violating the One Hive rule, and the Dragonfly's destination space is empty, then the Dragonfly may transport the piece with it.

In *Figure 10.2.4* the Black Dragonfly may move to space A or atop the Black Queen. The White Dragonfly may move to any of six spaces. These are space A, space B, atop the Black Queen, atop White Ant #2, atop Black Hopper #2, or atop White Hopper #2. If moving to space A or space B the White Queen may be transported. If moving to any of the other four spaces the White Queen may not be transported.

Interaction with Mosquito — When playing with both the Mosquito and Dragonfly, the Mosquito may acquire the movement of the Dragonfly, as long as the Mosquito does not use the Dragonfly's movement to climb atop the Hive. When



^{*}concept, design, and art by Christian Sperling a.k.a. Eucalyx at BoardSpace

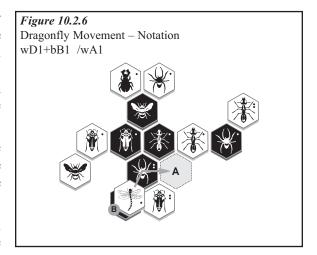
Figure 10.2.4
Dragonfly Movement

a Mosquito is atop the hive and adjacent to a Dragonfly (either atop the hive or at ground level), it may choose to use the Dragonfly's movement and/or transport ability. Take a look at *Figure 10.2.5* on page 235. The White Mosquito, using Dragonfly movement may move to any of the six spaces marked X. If the destination space is vacant, the White Mosquito may transport the Black Ant below it.

Notation – When a Dragonfly transports another bug, the identity of the Dragonfly and the bug being carried are separated by a '+' followed by standard notation of the destination space. (See *Figure 10.2.6*.)

Strengths – The Dragonfly, if properly used, can be an extremely strong bug. Offensively, it can fly into an otherwise inaccessible space, or alternatively drop another bug into that space. Defensively, it can rescue a partially surrounded Queen or remove a piece adjacent to and threatening the friendly Queen.

Weaknesses – Extreme care must be given when initially placing a Dragonfly. Due to its unique movement pattern, it may only land on approximately 1/3 of the spaces in the hive. If improperly placed, the Dragonfly may not be able to reach its intended destination and fulfill its mission.



10.2.3 – Scorpion - Sc*

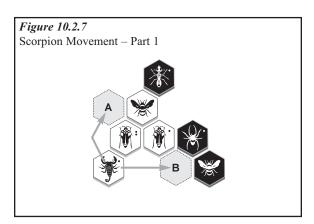


The Scorpion derives its uniqueness, not from any special movement but from its ability to sting and paralyze other bugs. The Scorpion can be used as both an offensive or defensive weapon in the hands of a Hive® Master.

Movement – The Scorpion moves in a standard manner and must move exactly two spaces. As with other bugs using standard movement, it must conform with the Freedom to Move and One Hive rules. In *Figure 10.2.7* the White Scorpion can move to either of the two labeled spaces.

Placement – Placement of the Scorpion must obey all standard placement rules.

Special Rules – At the conclusion of its move, the Scorpion has the special ability to sting and paralyze one adjacent bug, friendly or opposing. The Scorpion must move in order to sting another bug. If the Scorpion is adjacent to a stack



^{*} initial idea proposed by Gordon Watson, expanded by Jason Wallace a.k.a. DrRaven at BoardSpace, and completed by Jaroslaw Szczepanik a.k.a. Svartisen at BoardSpace.

of bugs, it stings the topmost, visible bug in the stack. In *Figure 10.2.8* the White Scorpion has just moved. It may choose to sting White Hopper #2, Black Spider #1, or the Black Queen.

The bug that is stung is flipped over and cannot move until a turn is spent to clear the paralysis. Paralyzed bugs that are adjacent to an uncovered, unparalyzed, opposing Scorpion may not have their paralysis cleared. *Figure 10.2.9* shows after the White Scorpion has moved and stung Black Spider #1.

Bugs with 'top of hive' movement may not pass or end their movement atop a paralyzed bug. In *Figure 10.2.10*, Black Beetle #1 may not approach the White Queen because the Black Spider has been paralyzed.

The Scorpion may not sting another Scorpion.

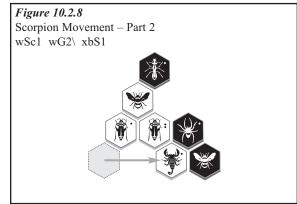
Interaction with Mosquito – The Mosquito inherits the two space movement of the Scorpion but does not inherit the Scorpion's stinging ability. In *Figure 10.2.11* the White Mosquito may move to any of the four labeled spaces. Using the movement of the adjacent Black Queen, it may move to the two spaces labeled Q. Using the movement of the adjacent White Scorpion, it may move to the two spaces labeled Sc.

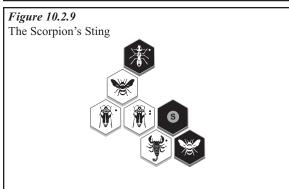
Notation – In addition to the Scorpion's normal movement notation, we must note when a bug has been stung. This is done by following the standard movement notation with an 'x' and the identity of the bug stung. (See *Figure 10.2.8*.)

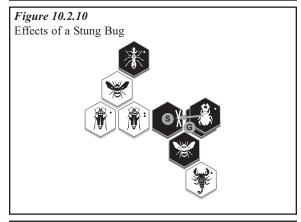
The release of a paralyzed bug is notated by the identity of the bug followed by the notation 'REL.'

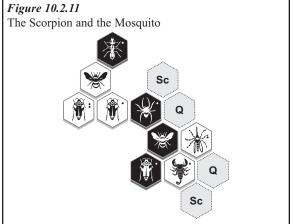
Strengths – The ability to immobilize another bug is a very powerful weapon. On defense, a Scorpion can immobilize an attacking enemy bug or block the approach of an attacking Beetle. On the attack, a bug defending the opposing Queen can be rendered immobile and useless for defense. And in addition, the tempo spent releasing an immobile bug can be a game changer.

Weaknesses – The slow movement of the Scorpion and the danger of being pinned or blocked are this bug's biggest weakness.









10.2.4 – **Honeycomb** - **H**



The Honeycomb is not a bug in the usual sense. It is a special two-sided (White on one side, Black on the other) piece that may be played by either player and provides either Queen with the possibility of escape from a bad situation.

Movement – Once placed, the Honeycomb may not move.

Placement – The player who places the Honeycomb does so with his color showing. Placement must conform to all standard placement rules as they apply to the placing player, i.e., it must be in contact with a friendly bug of its own color and must not be in contact with an opposing bug. In *Figure 10.2.12* Black places the Honeycomb on turn 42. Note that the Honeycomb is placed black side up to indicate that the Black player placed it in the hive.

Special Ability, Queen Escape – The Honeycomb has the special ability to provide either Queen special movement in the form of an escape. To qualify for this special movement, the Queen must not be covered by any bug and must not already be adjacent to the Honeycomb. In addition, removing the Queen from its current location must not violate the One Hive rule. It can, however, violate the Freedom to Move rule as it applies to the Queen.

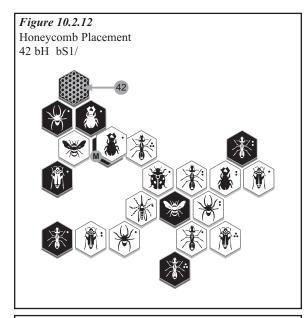
Figure 10.2.13 shows Black taking advantage of the special Queen movement introduced by the Honeycomb. Notice how, when White threatened to win by bringing in Hopper #3, the Black Queen escaped from an otherwise surrounded position to a space adjacent to the Honeycomb.

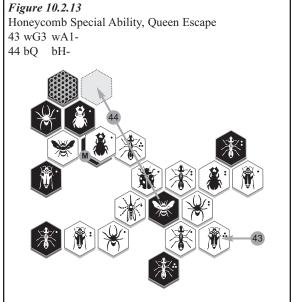
In the situation shown in these two figures, the White Queen cannot use this special movement because doing so would disconnect Black Hopper #1 from the remainder of the hive, thus violating the One Hive rule.

Special Rule, Drawn Games – Once the Honeycomb is played, the game can no longer end in a draw. Instead of a draw, the player who played the Honeycomb (indicated by its visible color) loses.

Interaction with Mosquito – Since the Honeycomb has no movement ability, it does not interact with the Mosquito at all. A Mosquito adjacent to no other piece other than the Honeycomb will be immobile.

Movement Notation – No special notation is required for both placement of the Honeycomb and movement of the Queen to the Honeycomb.





Strengths – The strength of the Honeycomb is its ability to rescue one's Queen.

Weaknesses – When the Honeycomb is placed, three things occur that may cause problems. First, since it is immobile, it will more than likely permanently pin the friendly bug that it was placed adjacent to. Second, it will open the possibility of the opposing Queen being rescued. And third, to win all the opponent must now do is play for a draw.

10.2.5 – Mantis - Ma



In real life, the Mantis is a voracious predator, constantly looking for its next meal. Here, in our hive, it captures another bug and flies off with it, temporarily removing itself and the other bug from the game.

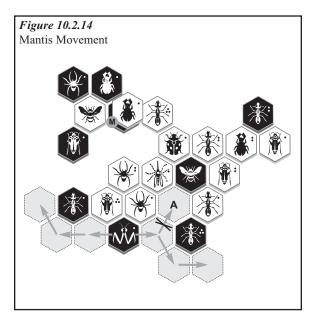
Movement – The Mantis moves one, two, or three spaces in a standard manner, except when using the special movement ability mentioned below. It may not climb atop the hive and while moving within the hive, it must conform with the One Hive and Freedom to Move rules. In *Figure 10.2.14* the Black Mantis can move to any of the shaded spaces, except space A. It is prohibited from moving to space A by the Freedom to Move rule.

Placement – Mantis placement must obey all standard placement rules.

Special Rules – The Mantis has the special ability to remove itself and an adjacent bug (friendly or opposing) from the hive. In order to do this the One Hive rule must not be violated, but the Freedom to Move rule may be ignored as it applies to both the Mantis and the bug being removed. If adjacent to a stack of bugs, the Mantis removes only the topmost, visible bug. In order to take advantage of this special movement ability, the Mantis must remove another bug, it may not leave the board by itself.

In *Figure 10.2.15* (page 240) the Black Manits may remove White Spider #1 but not White Hopper #3. White Hopper #3 is prohibited from moving by the One Hive rule and therefore may not be removed by the Mantis.

The Mantis is immediately returned to the reserve and can be reintroduced to the hive on a later turn. Friendly bugs are also returned immediately to the reserve.



Different rules, however, apply to opposing bugs removed in this manner. If the opposing Queen is removed, she is returned to the opponent's reserve immediately. Any other opposing bug is not returned to the opponent's reserve until the Mantis is reintroduced to the hive. When the Mantis is played into the hive, the opposing bug is returned to the reserve and can then once again be played into the hive.

In the opening moves of a game, a player may not move any bugs until the Queen has been played into the hive. That same rule applies here; if a player's Queen is removed by a Mantis, none of that player's bugs may be moved until the Queen is reintroduced to the hive. There is no limit as to the length of time that a Queen may be withheld. But a player may not pass. If a valid placement is available, a bug from the reserve must be brought into the hive. If the Queen is the only bug remaining in the player's reserve, she must be played.

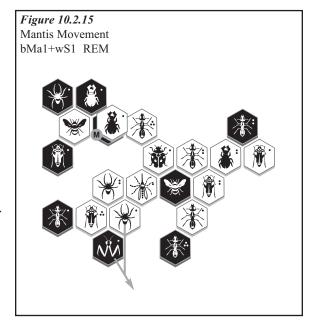
The rules for victory are not changed. A player wins by surrounding the opposing Queen. A player cannot win unless the opposing Queen is in the hive.

Interaction with Mosquito – The Mosquito inherits the Mantis' moving ability, both the standard movement and the special movement. The only difference is that an opposing bug removed by the Mosquito is immediately returned to the opponent's reserve.

Movement Notation – The removal of a Mantis from the hive is notated by 'REM.' The Mantis and the bug removed are both noted, separated by a '+'. (See *Figure 10.2.15*.)

Strengths – The Mantis can be used both offensively and defensively. The Mantis can remove a dangerous attacking bug and keep it out of play indefinitely. Or defensively, the friendly Queen can be removed from a dangerous position and brought back into play in a safer place. When tempo is not critical, it can also be used to remove and reintroduce a bug to a more beneficial spot.

Weaknesses – The only glaring weakness of the Mantis is the possibility of being pinned or blocked.



10.2.6 – Rhinoceros Beetle - R



The actual Rhinoceros Beetle is a very strong and powerful bug. In our hive, this powerful bug is a pushing bug, burrowing under adjacent bugs (or a stack of adjacent bugs) pushing them out of its way.

Movement – The Rhinoceros Beetle (commonly referred to as the Rhino) moves one space in any direction, obeying all standard movement rules except as noted below. Unlike its Beetle cousin, it cannot move atop the hive. Using its normal movement ability the Rhino in *Figure 10.2.16* can move to either space A or space B.

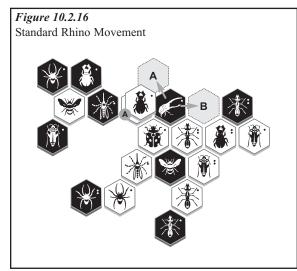
Placement – The Rhino placement must obey all standard placement rules.

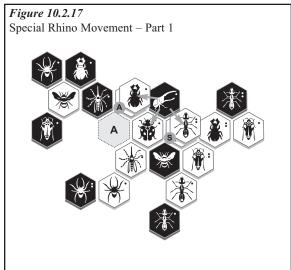
Special Rules – The Rhino has the special ability to burrow under an adjacent bug, or stack of bugs, and then push that bug or stack of bugs to a vacant, adjacent space. A Rhino may not end its turn under another bug. Each bug must be displaced to an adjoining space. The bug or bugs displaced may be placed in the space just vacated by the Rhino.

If it burrows under a stack of bugs, the bugs may be moved as a stack to one space or each bug may be moved independently to different spaces. Naturally, only bugs with 'top of hive' movement are allowed to end the turn atop other bugs.

Now let's look at *Figure 10.2.17*. The One Hive rule applies to the Rhino at all times, even when using its special movement ability. However, the Freedom to Move rule does not apply when burrowing under an adjacent bug. The Black Rhino may burrow under the White Ladybug, even though under normal movement conditions the Rhino could not fit between the two stacks of bugs.

The movement of bugs displaced by the Rhino, however, must conform to the Freedom to Move rule. Again looking at the same figure, if the Rhino burrows under the White Ladybug, it must be displaced to space A. With no 'top of hive' movement, the Ladybug must end its turn on ground level. But due to the Freedom to Move rule as it applies to bug movement atop the hive (Chapter 10.1), the Ladybug is not allowed to move between the two stacks of bugs, and thus cannot be displaced to the space just vacated by the Rhino. It is possible that this restriction may, in rare instances, prohibit the Rhino from burrowing under a specific bug.





In *Figure 10.2.17* (page 241), for instance, if space A had been occupied, the Black Rhino could not burrow under the White Ladybug, because the White Ladybug would not be able to be displaced without violating a Hive® rule.

Figure 10.2.18 shows the options after the Rhino has burrowed under the White Ant. The White Ant must now be moved to either space A or space B. Figure 10.2.19 shows the position after the move has been completed. The Black Rhino has moved in next to the Black Queen and White Ant #2 has been pushed out.

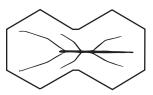
Interaction with Mosquito – When adjacent to a Rhino, the Mosquito may move exactly like the Rhino, including its special bug pushing ability.

Movement Notation – When the Rhino uses its special movement to burrow under another bug and displace it, the movement of each bug is noted, starting with the Rhino. The movement of each bug is separated by a colon. (See *Figure 10.2.19*.)

Strengths – The most important strength of the Rhino is its ability to rescue the friendly Queen from a dangerous situation.

Weaknesses – It is slow moving and will probably take a while to get into position to use its powerful special ability.

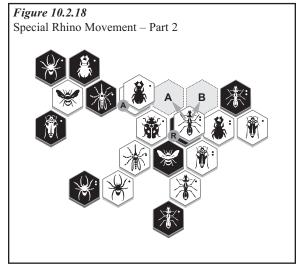
10.2.7 – Walking Stick - W

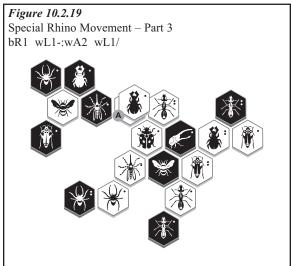


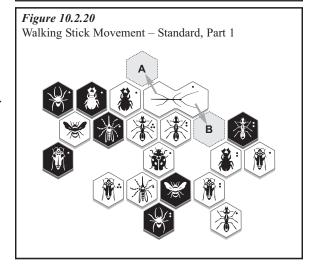
The Walking Stick is our first two space bug. It is slow, but its two hex size allows it to cross an open gate, move into a blocked space, or fill two spaces with its initial placement.

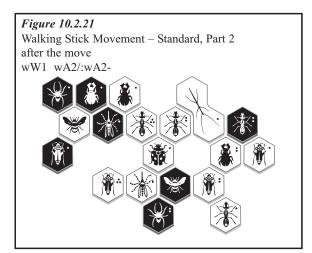
Movement – The Walking Stick is a very unique bug starting with its most obvious feature. It is a double sized bug, it occupies two adjacent hexes in the hive. At the conclusion of its move, both halves of the Walking Stick must be in contact with the hive.

The Walking Stick moves one space in either of two ways. It may slide along the outside edge of the hive, moving one space in either direction. In *Figure 10.2.20* the White Walking Stick can move to either space A or to space B. Moving to space B will result in the position shown in *Figure 10.2.21* (page 243).









Or it may pivot on one of its two hexes while moving its other hex into a new space. In *Figure 10.2.22*, the White Walking Stick, pivoting on its lower right hex, may move the upper left hex into space A. This move results in the position as shown in *Figure 10.2.23*.

Placement – Walking Stick placement must obey all standard placement rules. Additionally, when initially placed, both halves of the bug must meet the placement requirements. This means that both halves of the bug must be placed adjacent to a friendly bug, and neither half of the bug may be in contact with an opposing bug. In *Figure 10.2.24* the gray, labeled spaces are all available for White new bug placement. Any two adjacent spaces could be used for placement of a Walking Stick. Included in this is the pair D-F. Note, however, that a Walking Stick cannot be placed in space I because there is not a second, adjacent space that meets the requirements for new bug placement.

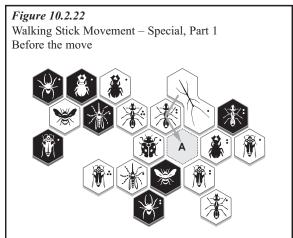
Special Rules – The Walking Stick may not climb atop the hive. If either half of the Walking Stick is covered by a Beetle, it is rendered immobile.

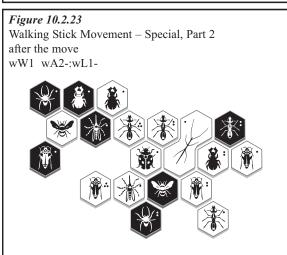
Interaction with Mosquito – Due to its unique movement pattern, it does not convey any special movement to the Mosquito. When adjacent to a Walking Stick the Mosquito inherits a one-space, standard movement ability.

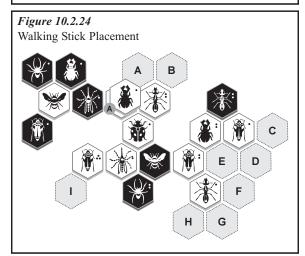
Movement Notation – Two reference spaces, separated by a colon, are needed to notate a Walking Stick's movement. See *Figure 10.2.21* and *Figure 10.2.23* for examples.

Strengths – The Walking Stick has the ability to fill two spaces with only one bug. This is particularly usefull when the opposing Queen is covered and a direct drop is possible.

Weaknesses – The Walking Stick is slow moving.







10.2.8 - Moth - Mo*



In nature, the moth is nocturnal, attracted to light, and flies all about. In our hive, the moth lives only atop the hive, attracted, not to light, but to bugs of the opposite color. It starts and remains atop the hive, flying from bug to bug.

Movement – The Moth moves from bug to bug across the top of the hive, stopping when it finds itself atop a bug of the opposing color. It may not stop on a bug of its own color. It must stop on the first bug of the opposing color. On succeeding turns, it may proceed, again stopping on the first bug of the opposing color.

The Moth has a maximum movement range of three spaces. If the nearest opposing bug is more than three spaces away, the Moth may not move.

In *Figure 10.2.25* the White Moth may move as indicated by the arrows. It may stop atop any of the four Black bugs noted: Black Ant #2, Black Beetle #2, Black Beetle #1, or the Black Queen. It may pass over, but may not stop on, any of the White bugs. With movement limited to three spaces, it can not reach Black Ant #3.

Placement – The Moth is initially placed atop a friendly piece as shown in *Figure 10.2.26*. The friendly piece, must not be adjacent to any opposing pieces. In this figure, the Moth was placed in the only legal position. Each of the other White bugs is adjacent to at least one Black bug, and is, therefore, not legal initial Moth placement positions.

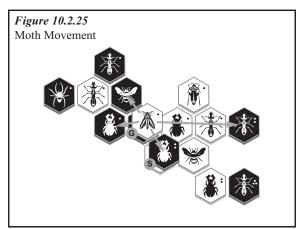
Special Rules – The Moth may never descend off the hive to ground level.

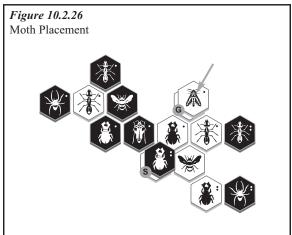
Interaction with Mosquito – If the Mosquito is already atop the hive and adjacent to a Moth, it may move using the Moth's movement ability.

Movement Notation – No special movement notation is required for the Moth.

Strengths – As a 'Top of Hive' bug, the Moth is able to move very quickly across the hive.

Weaknesses – The placement rules for the Moth restrict its usefulness in some ways. The inability to climb down off the hive cause it to be a primarily defensive bug.





^{*}concept, design and art by Jaroslav Szczepanik a.k.a. Svartisen at BoardSpace

10.2.9 - Mite - Mt*



In real life, mites are tiny creatures that live in many different locations. Our Mite lives atop the hive, infects the bugs below it, and keeps them immobile. It is too small to attack the Queen so it must be used defensively.

Movement – The Mite moves one space at a time across the top of the hive. In *Figure 10.2.27* the White Mite may move atop any of the four adjacent Black bugs.

Placement – The Mite enters the game atop the Queen of its own color.

Special Rules – When the Mite moves, its destination space must be atop the Queen of its own color or atop a bug adjacent to the Queen of its own color. In *Figure 10.2.28* the White Mite may not move atop either White Beetle #1 or White Ant #3.

The Mite is smaller than a standard bug. The color of the bug beneath the Mite is still visible. For placement purposes, the color of the stack remains the color of the top most full size bug (not the Mite).

When a Mite enters a space it is placed atop all existing bugs already in the space. This includes other Mites. Bugs beneath a Mite may not move.

When a standard, full-size bug with 'top of hive' movement enters a space already containing a Mite, the moving bug is placed under the Mite.

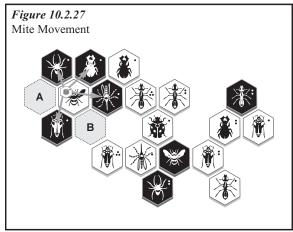
The Mite may not descend to ground level. In *Figure 10.2.27*, the White Mite may not move to either space A or space B.

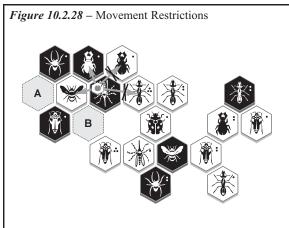
This defensive ability of the Mite is shown in *Figure 10.2.29*. White has just played Beetle #1 as shown to begin a very common Beetle attack, hopefully leading to a cover of the Black Queen. By moving the Mite as in turn #10, Black has placed a barrier to the advance of the White Beetle. If it should move atop the White Spider, the White Beetle would end its movement under the Black Mite, and thereby be immobilized.

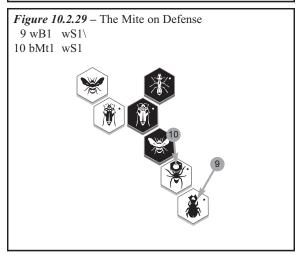
Interaction with Mosquito – The Mosquito gains no movement ability from the Mite, but does gain movement from the full-size bug immediately below the Mite.

Movement Notation – No special movement notation is required for the Mite.

*concept and design by Herman Jacobs a.k.a. Chlorix at BoardSpace, art by Jaroslav Szczepanik a.k.a. Svartisen at BoardSpace







Strengths – The Mite has been designed as primarily a defensive bug. Its strength comes from its ability to defend the Queen, particularly against approaching Beetles.

Weaknesses – As a mini-bug it does not restrict placement of opposing bugs or allow placement of friendly bugs.

10.2.10 - Flea - F*



In real life, fleas are tiny little bugs that hop around, from animal to animal. Their bite, although not dangerous, can be very irritating. Our Flea is one of the weakest bugs in the hive, existing only atop the hive.

Movement – The Flea moves exactly two spaces, in a straight line. In order to move, it must hop over an adjacent bug or stack of bugs, not an empty space. In *Figure 10.2.30* the White Flea can make any of the three moves as shown. It may not move to any of the spaces labeled X. Even though these three spaces are exactly two spaces away, either the move would take the Flea off the hive or intervening space is not occupied.

Placement – The Flea is initially placed atop a friendly piece as shown in *Figure 10.2.31*. The friendly piece, must not be adjacent to any opposing pieces. In this figure, the Flea was placed in the only legal position. Each of the other Black bugs is adjacent to at least one White bug, and is not legal for initial Flea placement.

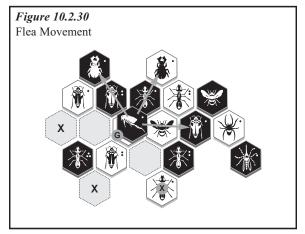
Special Rules – The Flea may never descend off the hive to ground level.

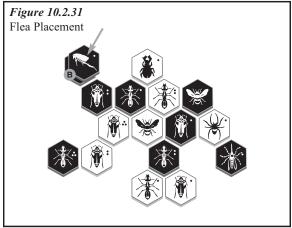
Interaction with Mosquito – If the Mosquito is already atop the hive and adjacent to a Flea, it may move using the Flea's movement ability. In *Figure 10.2.32* the Black Mosquito can use the Flea's movement and cover White Hopper #3.

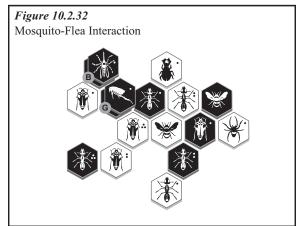
Movement Notation – No special movement notation is required for the Flea.

Strengths – The Flea can move into position and cover an opposing bug quicker than a Beetle.

Weaknesses – The movement restrictions placed on the Flea weaken it, even though it does have 'top of hive' movement ability. Care must be taken when placing the Flea to make sure that it can reach its destintion space.







^{*}concept and design by Calvin Daniels a.k.a. Dulok44 at BoardSpace, art by Jaroslav Szczepanik a.k.a. Svartisen at BoardSpace

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U!HV	weronika	ringersoll	2010-12-11-1459	LM	7.9.4 (page 129), 7.14.3 (page 165)
U!HV	weronika	ringersoll	2011-01-11-2256	S	7.12.3 (page 151)
U!HV	Sutured	ringersoll	2013-07-27-1636	S	6.5.1 (page 57), 6.5.2 (page 59), 6.5.3 (page 61), 6.5.4 (page 63), 6.5.6 (page 65)
U!HV	wisewol	ringersoll	2013-05-21-1808	P	7.15.2 (page 171)