INSTRUCTION MANUAL





SIERRA®

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Welcome to *Battle Bugs*™

You may think they're funny, but don't you dare underestimate them. That itsy-bitsy spider bites. That geeky long-legged grasshopper will jump you and kick your guts out. That busy bee will buzz deep behind your lines—after he drops bombs on you, he will sting you until you die. It's nothing personal—it's just their nature. It's what they do.



Meet the Battle Bugs: professional insect soldiers who are tough, skilled, brave, and completely disciplined. They will follow your orders without hesitation, and fight to the death. But so will the enemy bugs—miscue an attack, and the enemy will annihilate all of you without remorse.

As a *Battle Bugs*™ general, you face a campaign of 56 battles that progress from simple Boot Camp exercises to vast, sprawling conflicts such as Dessert Storm. While every battle is winnable, few are easy. There are 22 types of Battle Bug, and the number, type, and deployment of each is different for each battle. When the numbers are against you (and they usually will be), you will need to use terrain, mobility, formations, timing, and special weapons and tactics in your strategy to achieve the mission objective. Sometimes the objective is to capture food, such as Plop Tarts or Excramints. Sometimes, it's to beat the game clock. Sometimes, the only goal is to survive.

The game records your solo campaign victories automatically, and lets you save additional campaigns at any point. With continued success, you will gather a thoraxful of gleaming medals from Queen Elizabug. In GENERAL VS. GENERAL mode, you can face off with a friend on any battlefield, and set "orders time" to balance the odds.

However you choose to play *Battle Bugs*, get ready for hours of intense strategy game play. The pun-filled battlefields and cartoon characters are for fun, but the challenge is for real—don't you dare underestimate it.

GETTING STARTED

Using This Manual

This manual helps you get the most out of *Battle Bugs* quickly: **Getting Started** shows you how to install and start the game.

- **Game Play** provides instructions for the Enlistment and Campaign screens, tours the Battle Screen Control Panel and Command Menus, and ends with a simple Tutorial.
- **Reference** describes the array of bug, ordnance, terrain, and food types, and offers strategy hints.
- **Technical Help** offers troubleshooting, memory configuration, and customer service information.
- **On-Line Help** is available from the TV in the Battle screen. (For details, see page 13.)
- **README** Any changes made to *Battle Bugs* after the manual was printed will be outlined in the README file. To view the file, simply change to the drive and directory where the game is installed, type **README**, and press [Enter].

Controls

Note: *On a three-button mouse, clicking the middle button is the same as pressing [Space].*

All you need to get around in *Battle Bugs* is a mouse and the know-how to use it. Use the mouse to control the pointer, or "cursor," on the screen, and click on buttons, signs, arrows, switches, and bugs to select them or perform an action. For most commands, just point to the item and click the left mouse button once, or "*click*." A few actions require you to "drag" the mouse (hold the left button down while moving the mouse) or use the right mouse button "*right-click*." Many commands also have keyboard shortcuts. Keys are shown in brackets: [Enter], [F1], [Ctrl]+[X] are examples.





System Requirements

To run *Battle Bugs*, you will need the following minimum software and hardware:

- An IBM® PC® compatible computer with an 80386 or better processor, and at least 2 MB of random access memory (RAM).
- Microsoft® MS-DOS® version 5.0 or above.
- Expanded memory manager (EMM386 [included with Microsoft® MS-DOS® 5.0 and above], QEMM-386™, or equivalent).
- A hard disk. *Battle Bugs* takes about 8 megabytes (MB) of space on your hard drive. If your system uses some type of disk compression utility, such as Stacker®, you will need approximately double the indicated hard drive space (since the game files will not compress as much as your compression software will estimate).
- A VGA graphics card and VGA color monitor.
- A Microsoft compatible mouse
- A 1.44 Mb, 3.5" floppy drive.

Recommended

- Sound Blaster® or 100% compatible sound card.
- SmartDrive disk caching software (included with Microsoft MS-DOS 5.0 and above and Windows™ 3.1).
- An SVGA graphics card and SVGA color monitor with VESA driver.

Memory Requirements

Even if you have the minimum 2 MB of RAM, *Battle Bugs* may not run correctly unless the RAM is configured (set up) correctly for the game. You will need at least 587 kilobytes (KB) free conventional memory for 800x600 graphics (577k for 640x480), and 256 KB free *expanded* memory (EMS) for the digitized sound effects. To configure expanded memory, you will need a memory manager such as EMM386 or QEMM386 by Quarterdeck.



If *Battle Bugs* ***DOES NOT*** start correctly, use the MS-DOS **MEM** command to see if you need to free up some of your computer's memory. From your MS-DOS prompt, type **MEM** and press [Enter]. "Largest executable program size" is your free conventional memory; "bytes free EMS" is your expanded memory. If you do not have enough memory, you probably have resident or "background" programs and device drivers taking up memory that the game needs.

The simplest way to set up your system's memory correctly is to use the **INSTALL** program to create a "boot disk."

Installing *Battle Bugs*

Note: *If your system opens Windows on start-up, exit to MS-DOS before installing or running* Battle Bugs.

Important Note: *Do not try to install* Battle Bugs *to your hard drive with "copy" commands. The game files are compressed to save disk space, and will not run unless decompressed by the INSTALL program. If you have trouble running the installation program itself, see the README file on Disk 1 for directions on manual installation.*

The *Battle Bugs* INSTALL software automatically optimizes the game settings according to your computer's speed, graphics, sound board, and input devices. You can use INSTALL to specify the game's default location on the hard drive, change preferences, and make a boot disk.

These instructions assume that you are using floppy drive **A:** and hard drive **C:**. If not, please substitute as appropriate.

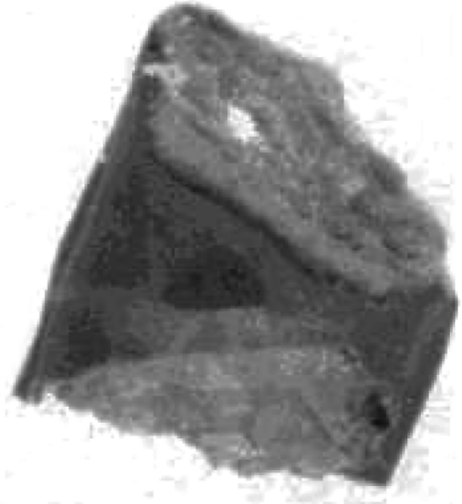
1. After booting your machine, insert the *Battle Bugs* Disk #1 into drive **A:**.
2. Type the appropriate drive letter and press [Enter].
3. Type **INSTALL** [Enter].
4. Follow the on-screen instructions.



Changing System Preferences

After installation, you can change the sound device or display mode the game will use. Follow these steps:

1. Change to the directory where you installed *Battle Bugs*.
2. In the BUGS directory, type **BBCONFIG** [Enter].
3. From the *Battle Bugs* Configuration Selector menu, select the appropriate "Change..." option, and select the new device or mode.
4. When ready, select "Save Current Configuration and Quit" and follow the on-screen instructions.

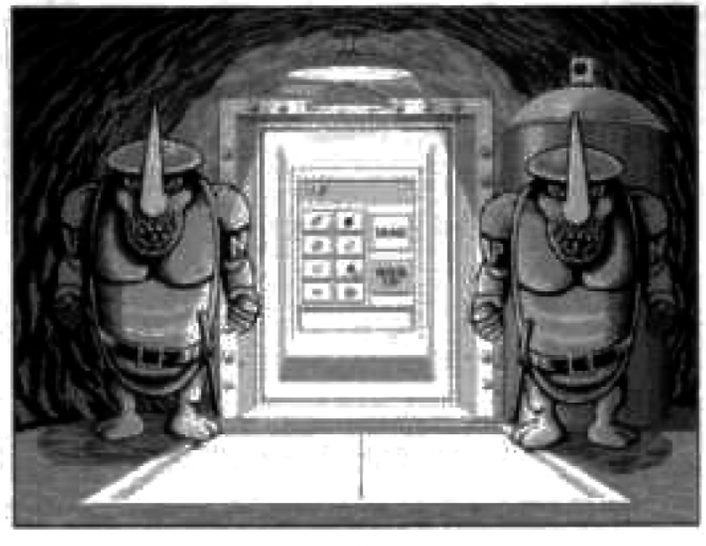


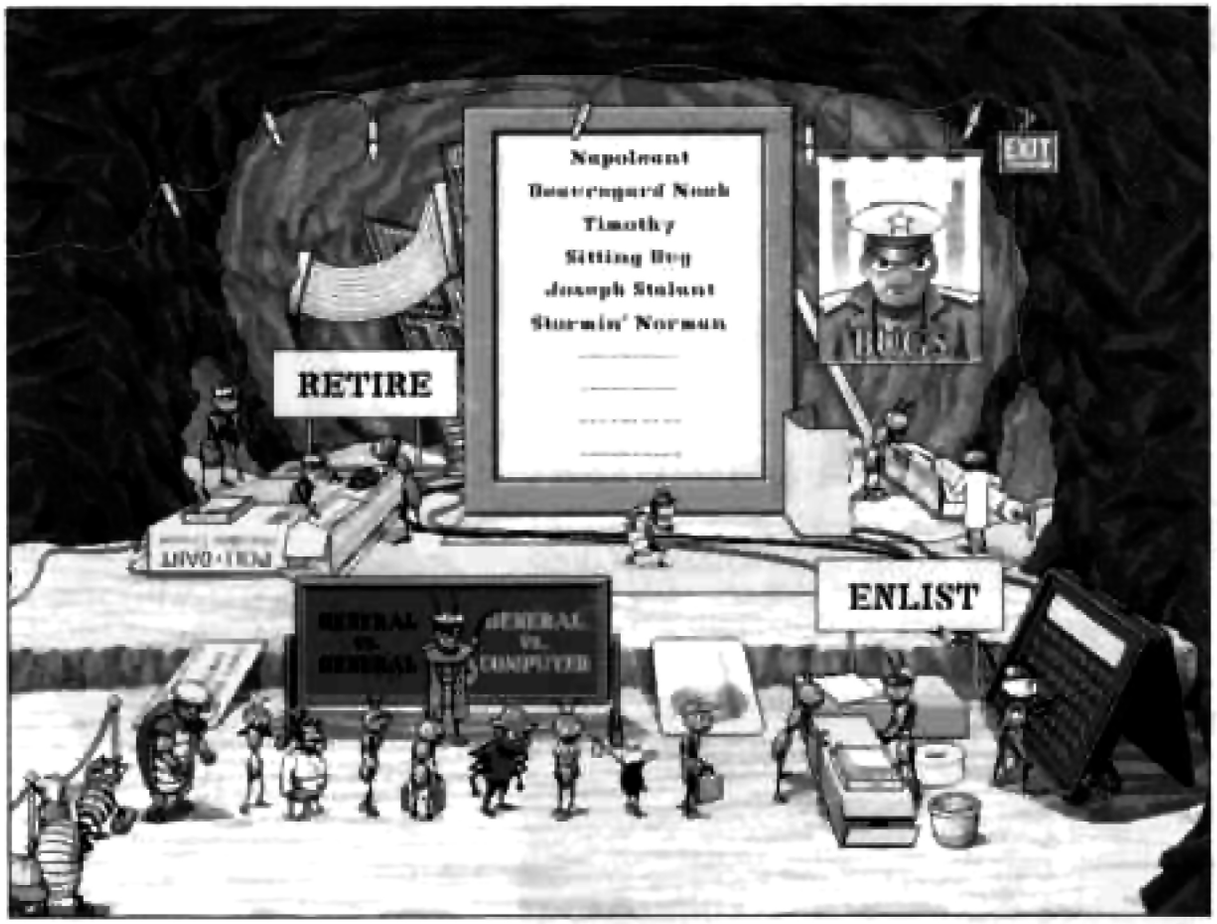
Running *Battle Bugs*

1. Change to the directory where you installed *Battle Bugs*.
2. To run the game, type **BUGS** and press [Enter]. To move past the title screen, click the mouse or press [Enter] or [Space].

Copy Protection

When you start *Battle Bugs*, you come face to face with two surly rhino beetle sentries. You will be asked to enter the symbols on a given page number in this manual. Turn to that page, click on the correct symbols in sequence, and then click DONE. If you click the wrong symbol, use BACK UP to remove it, and then re-enter the correct symbol. You want very much to be correct—once annoyed, rhino beetles stay annoyed.





GAME PLAY

Enlistment Screen

Once you have started *Battle Bugs* and made it past the sentries, select a play mode in the Enlistment screen:

The default mode is GENERAL VS. COMPUTER, which lets you play a solo campaign. With this option, you take on varied computer-controlled enemy forces in a series of battles for specified objectives (the first being survival). Enlist as a new general or select an existing general to go to the Campaign screen.

If you want to play in two-player mode, click on GENERAL VS. GENERAL on the chalkboard. This option lets you play head-to-head with a human opponent commanding the enemy forces. You will then go to the Campaign screen and choose a battle.

Enlist

This option lets you create a new general name for solo campaigns. Click ENLIST, and you will be prompted to type in your new general's name. When the name is typed correctly, click on OK or press [Enter], and the name will be entered on the Duty Roster. Battles won by your general are automatically saved as a campaign.





Retire

This option lets you remove an existing general (and campaign) from the Duty Roster. When you click RETIRE, you will be prompted to select the general on the Duty Roster to retire. Simply click on the general's name on the Duty Roster, and the name will be removed along with all of its saved games.

Note: *You may enlist up to ten generals on the Duty Roster. After that, you will need to retire an existing general before enlisting a new one.*

Exit

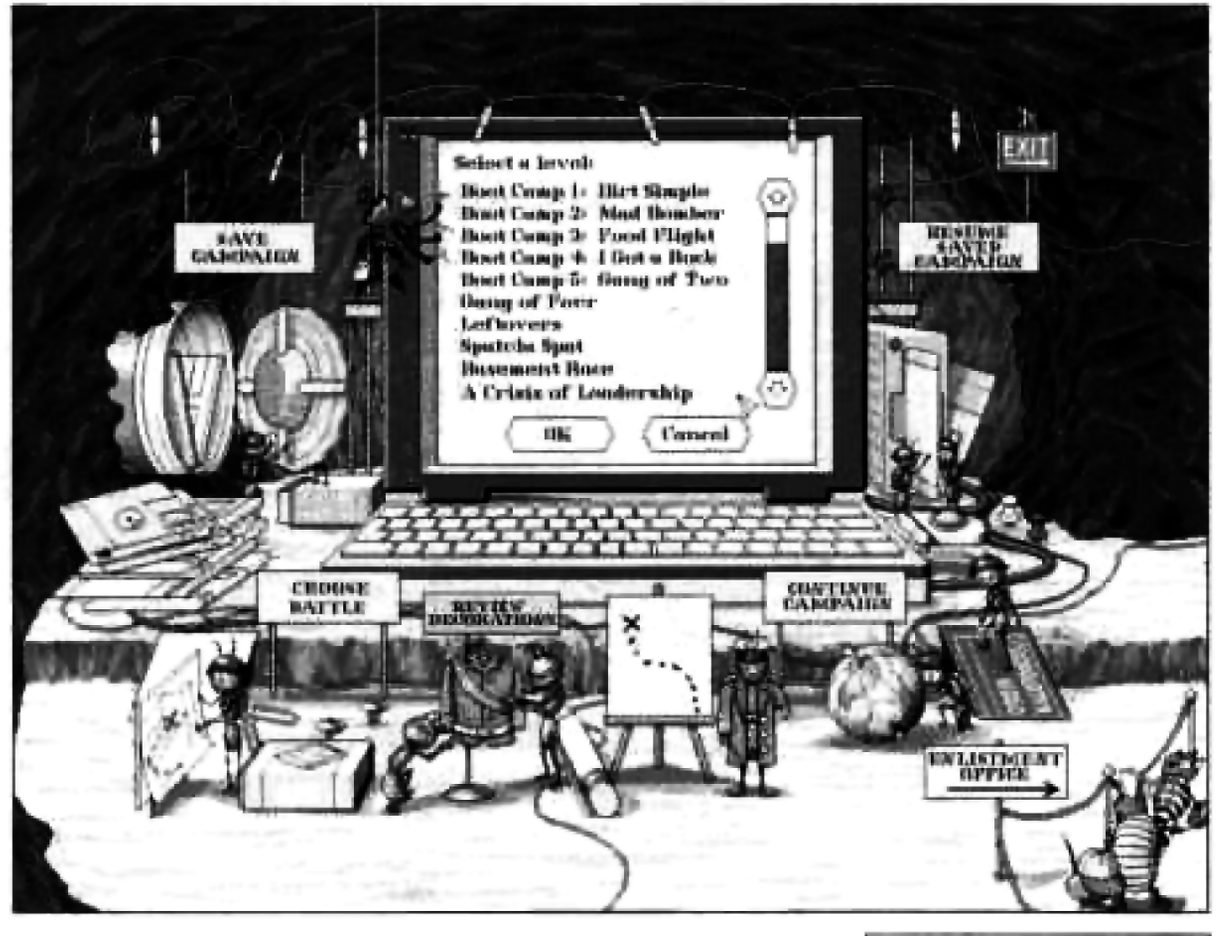
To exit *Battle Bugs* from the Enlistment screen, click the EXIT sign. When prompted "Quit Battle Bugs?" click OK, and you will go directly to DOS.

Campaign Screen

Once you have selected a play mode and a general (for GENERAL VS. COMPUTER mode), you choose a specific battle in the Campaign screen.

In GENERAL VS. COMPUTER mode, you fight a solo campaign. The battles grow progressively more difficult. While you may go back to any battle you have won or saved previously, you cannot skip a battle until you have lost it at least three times. Battles you have skipped are shown in red until you win them.

In GENERAL VS. GENERAL (two-player) mode, there are no campaigns: each battle is separate. This allows you and your human opponent to select a battlefield to contest your skills. See "Choose Battle" on the next page.



Begin Campaign

This is where you start with a new general. Click BEGIN CAMPAIGN to go to the briefing for Boot Camp 1: Dirt Simple. This is the first battle in each new campaign.

Continue Campaign

Your general's victories are saved automatically. If your selected general has already won at least one battle, you will have at least one campaign in progress that you can continue. Click CONTINUE CAMPAIGN to begin the next battle in the campaign.

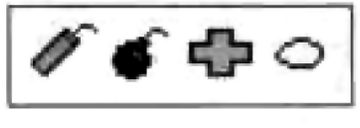
Resume Saved Campaign

You may save multiple campaigns for each general at any point—even in the thick of battle. If you have saved at least one campaign already, you can select and resume that campaign at that point. Click RESUME SAVED CAMPAIGN, select the saved campaign from the list, and click OK. You will re-enter the campaign at the exact point it was last saved.

Choose Battle

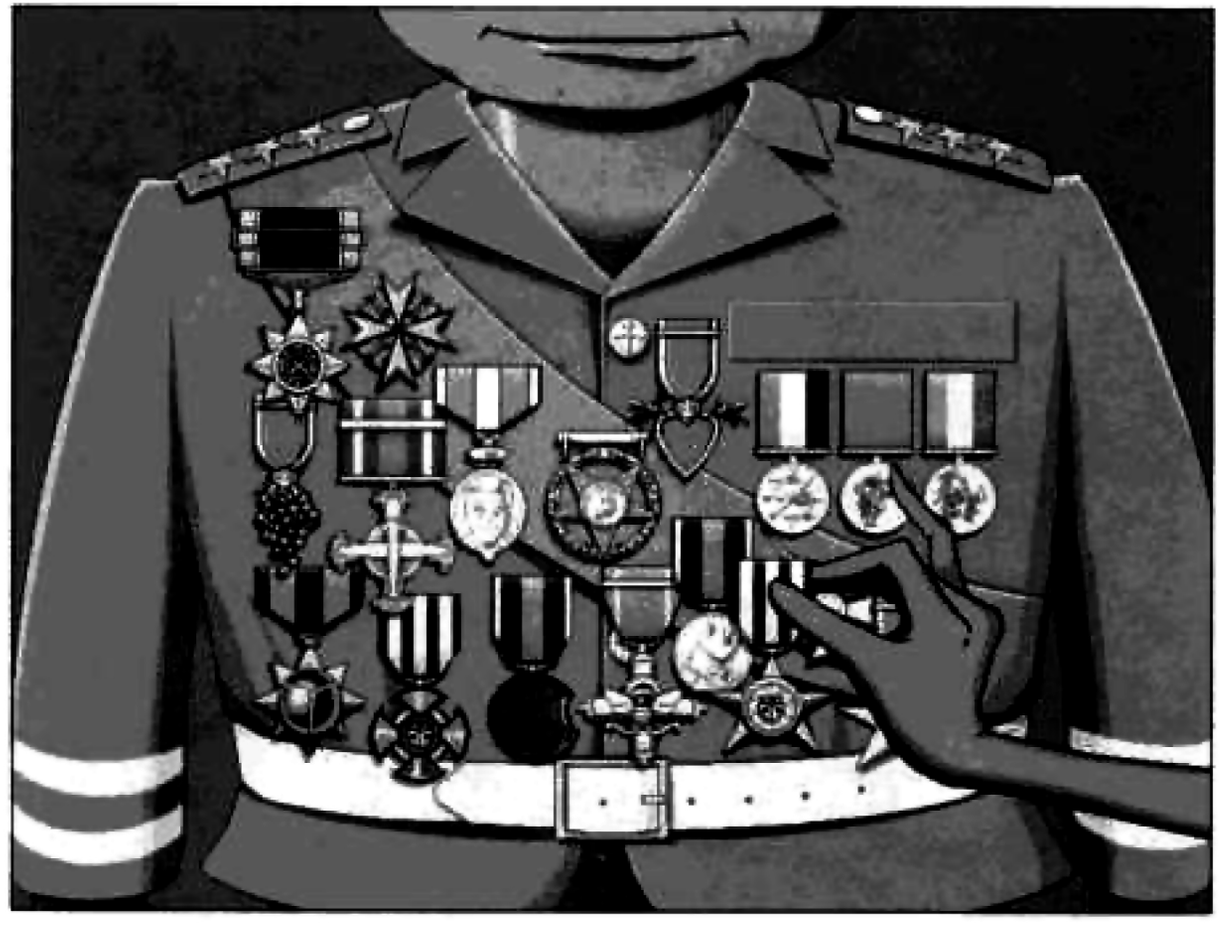
You may replay any battle that you have already won or skipped in a solo campaign. To replay a battle, click CHOOSE BATTLE, select a battle from the Battle Record and click OK, and you will begin that battle from the initial briefing.

For GENERAL VS. GENERAL (two-player) mode, you click CHOOSE BATTLE to select a battlefield for you and your human opponent. You may choose any battle already won or skipped by anyone on the Duty Roster. When the Battle Record opens, simply click on the battle you want, and you and your opponent will go to the Battle Screen.



Review Decorations

Click this option to see the decorations awarded to the current general by Queen Elizabug. With continued success, the sash across your thorax will go from blank to fully festooned.



Save Campaign

You save campaigns from the Battle Screen (via Channel 3 Save Campaign option or the [F3] key.) You will pop out of the Battle Screen to the Campaign screen, and then be prompted to name your saved campaign. Type a campaign name into the text box and click OK to save it. You will then return to the battle.

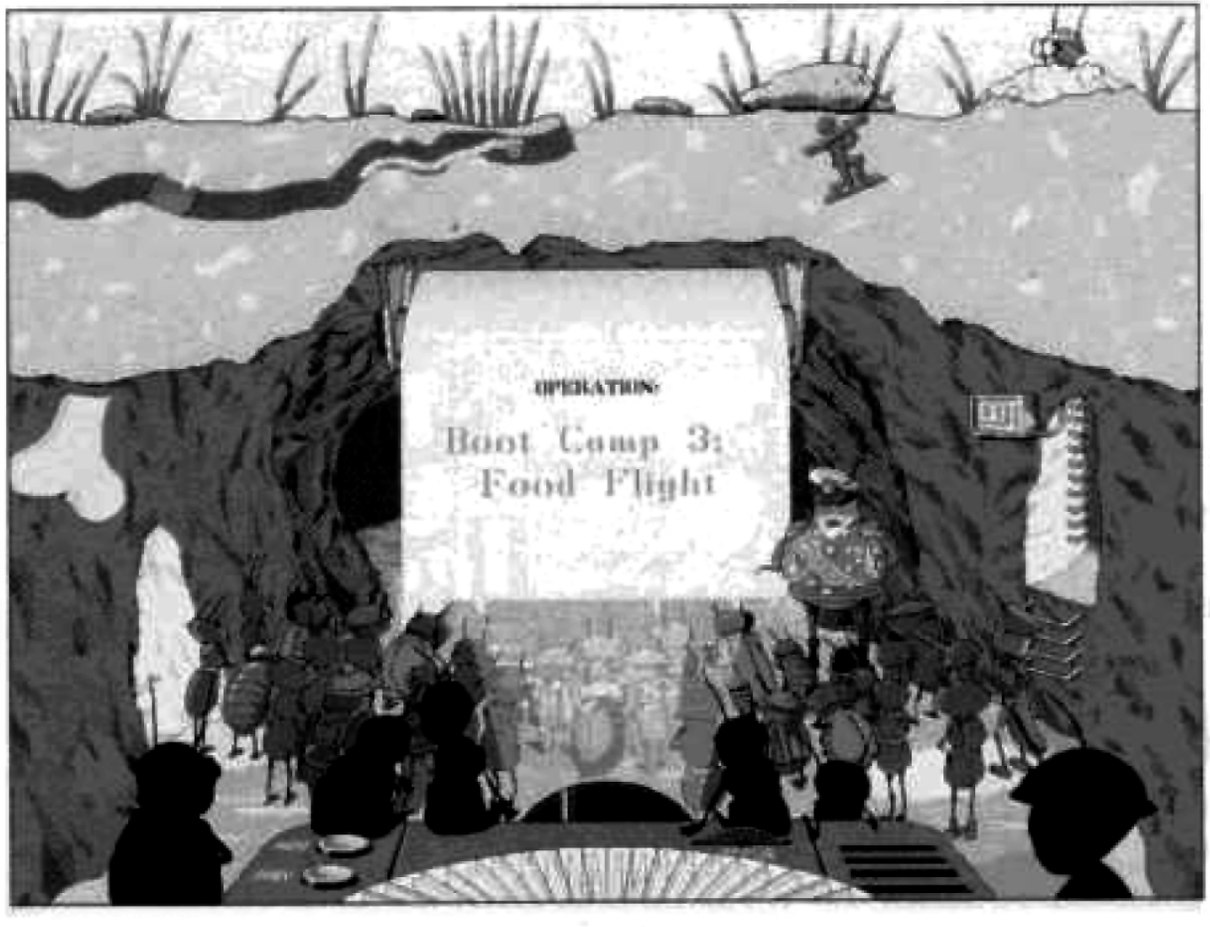
To delete an existing campaign, click on the campaign name from the list and then click DELETE. When prompted to "Delete the campaign...?" click OK.

Enlistment Office

To return to the Enlistment screen to select a different general or player mode, click ENLISTMENT OFFICE.

Exit

To exit *Battle Bugs* from the Campaign screen, click the EXIT sign. When prompted "Quit Battle Bugs?" click OK, and you will go directly to DOS.



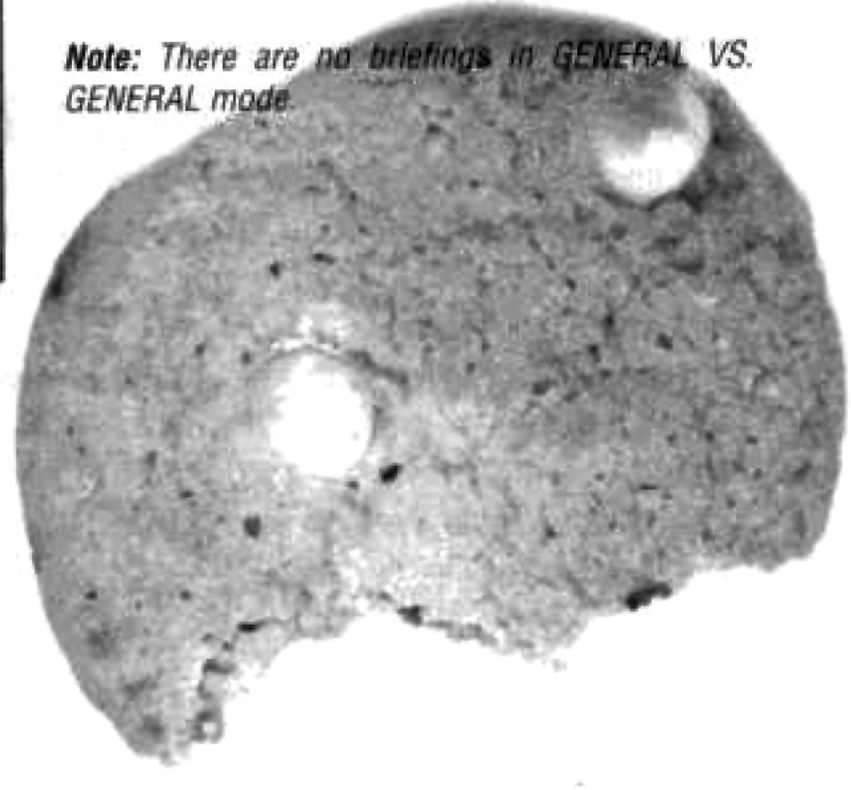
The Battle Screen

The Briefing

When you begin or continue a campaign, you will proceed to the briefing for the next battle. Listen carefully as the win conditions and special food objectives of the battle are explained in the slide show. In many cases, defending or seizing specific objectives is a greater priority than eliminating the enemy.

If you resume a saved campaign, you will re-enter the battle at the point it was saved.

Note: *There are no briefings in GENERAL VS. GENERAL mode.*



Battle Display

This is where all the action takes place. At the top, you see the actual battlefield where you will survey and command your troops. The action is paused until you start it with the Stopwatch on the Control Panel below. Other items on the Panel include the Command TV, Status Display, Bomb Detector button, and Exit sign.

Note: *The [F9] key lets you switch between 800x600 and 640x480 graphics (if your system supports both).*

Once you start the clock, the enemy will move to capture the objectives or annihilate your troops, so have your strategy ready. If you lose the battle, you can RESTART BATTLE right away, or INSPECT the battlefield to analyze the defeat first. If you lose the battle three times, you will get the option to go ONWARD to the next battle.

To move around on larger battlefields, hold the right mouse button down and drag the cursor in the direction you want to go. The screen scrolls when the cursor reaches the edge. You can also use your arrow keys.



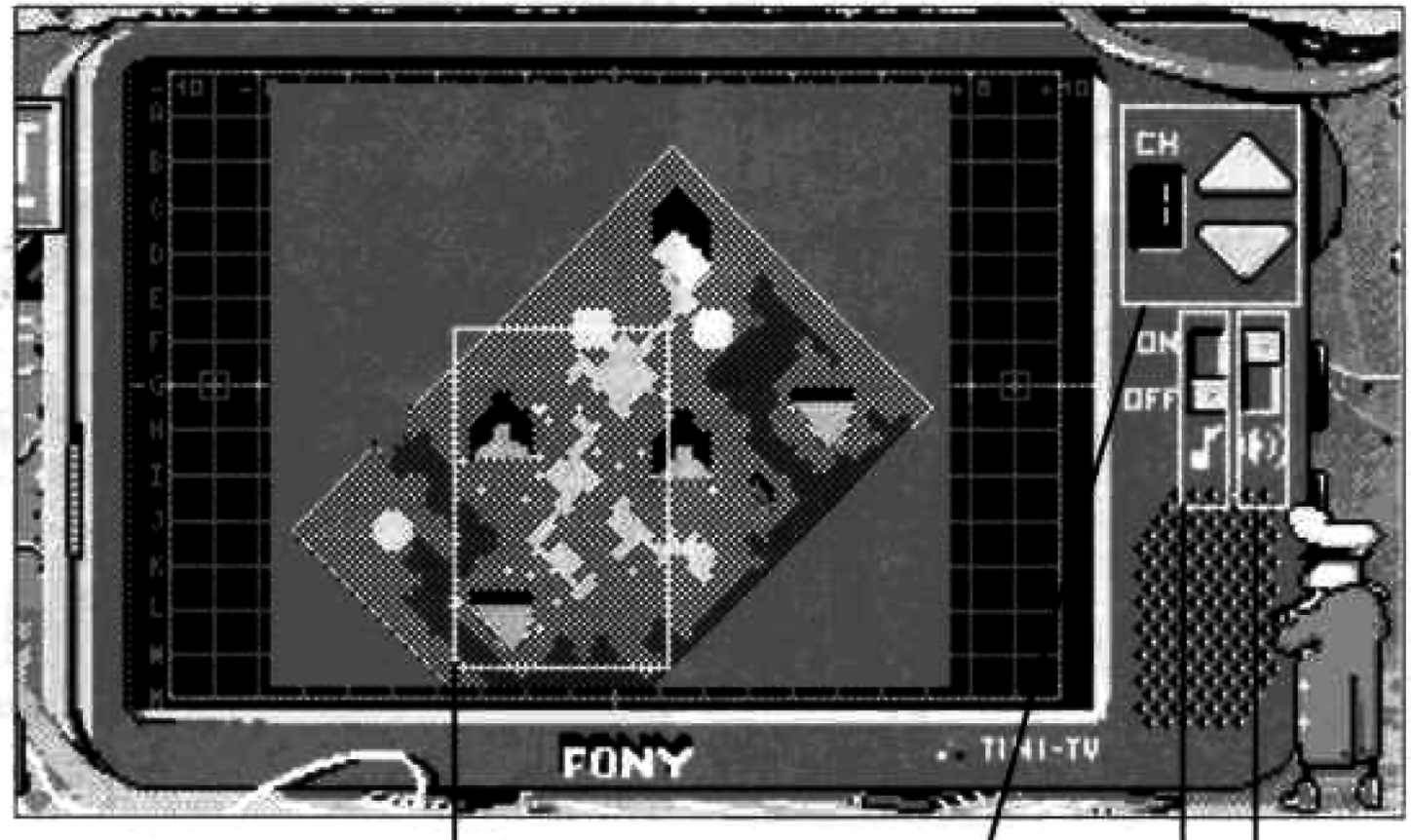




Command TV

Changing Channels. Click on the Up and Down arrows to change the TV channel (CH). You can also press the number keys [1], [2], [3], [4], and [5] to go directly to the corresponding channel.

Music/Sound. Click the "note" or "speaker" switch below the arrows to switch Music and Sound Effects on or off. You can also switch Music on/off with the [M] key, or switch Sound Effects on/off with the [S] key.



Channel 1—Battlefield Map. Overhead view of the battlefield. The green box outlines the area currently displayed: drag the box or click on the map around it to change the view. Blinking red dots indicate enemy units; blinking green dots indicate your forces.

Channel 2—Bug/Food Info. Describes the selected bug or food item's attributes, including walk and jump/flight speed. (If nothing is selected, CH 2 shows local programming.)

Channel 3—Game Options. These include SAVE CAMPAIGN, LOAD CAMPAIGN, RESTART BATTLE, select a NEW BATTLE, or exit to the ENLISTMENT OFFICE. Click on the appropriate sign post for the action you want. You can also use these keyboard shortcuts: RESTART BATTLE [Backspace], LOAD CAMPAIGN [F2], SAVE CAMPAIGN [F3], REPLAY PREVIOUS BATTLE [F4].

Channel 4—Local programming.

Channel 5—Help channel. Click on the yellow arrows to see help screens for the Command Menus, Bombing Menus, Ordnance, Status Display, and Keyboard Shortcuts. You can also tune directly to the last Help screen displayed by pressing [F1].

Note: *Click on a bug to select it (you will see a marker above its head). You can then give or change its orders, see its vital signs on the Status Display, and see its description on Channel 2.*



Stopwatch

In GENERAL VS. COMPUTER (solo campaign) mode, the watch shows battle time remaining. Click on the switch to pause or unpause time while you strategize. (You can also pause time by selecting one of your bugs or pressing the [P] key.) You must achieve victory before the allotted time runs out, or you lose.



In GENERAL VS. GENERAL (two-player) mode, the stopwatch works quite differently. It tracks "orders time" separately for both the generals. Only when your orders time is running can you give or change orders, or select a unit and view its status: click the green button for "Us", and red for "Them." The pause key for "Us" is [Tab], for "Them" is [P]. (See the "General vs. General" section, page 21, for more.)



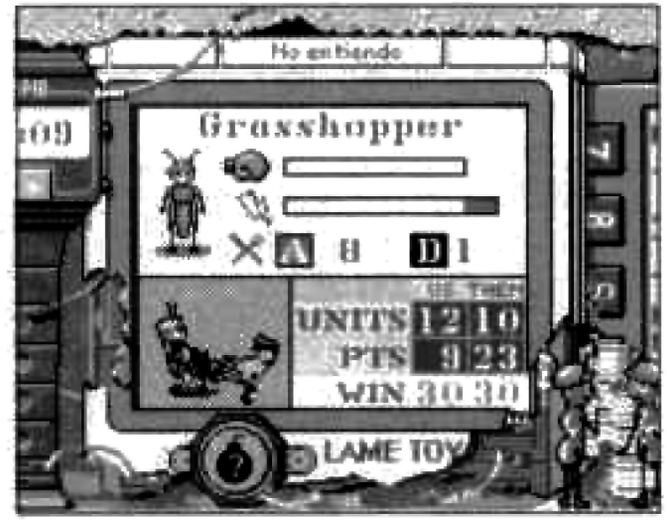
Status Display

The top of this display shows the currently selected bug's vital statistics. The green bar shows Life force remaining. When the Life bar turns completely red, the bug dies and disappears. Injured bugs can heal, but it takes time.

Note: *Flying/jumping bugs can walk or stand and fight without losing energy. All bugs regenerate fastest when standing still.*

Note: *Commander bugs give nearby troops enhanced Attack and Defense strengths.*

Note: *Attack strength measures the relative power of the bug's attack. Defense strength is like armor: a defense of 2 blocks 20% of an attack, 7 blocks 70%, etc.*



The yellow bar shows remaining Energy for bugs that can fly or jump or perform other special tasks. When the Energy bar turns completely red, the bug can no longer fly or jump (but can still walk and fight.) Displayed below the energy bar is the bug's Attack (A) and Defense (D) strengths, plus any 2 point bonus from a nearby commander bug. If the knife and fork icon is displayed, the bug is within the capture region for some piece of food.

For both sides, the Battle Status table at the bottom shows the current number of remaining soldiers, the number of points for captured food objectives, and the points needed to win. (If there is a dash under Win points, that army can win only by destroying the enemy). When one side or the other is assured of victory, the battle ends. The lower left panel displays one of the individual fights going on in the battle—click on this panel to scroll that fight into view on the battle screen.



Bomb Detector

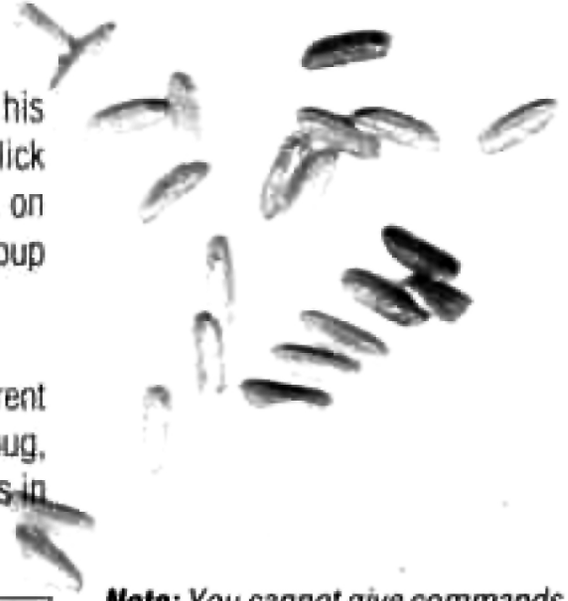
Press on this button, or press [Ctrl] + [Shift] to see which bugs are packing bombs, rockets, cheese, or other ordnance. (Click on a specific bug's bomb pouch to see his exact weapons inventory.)

Exit

To exit *Battle Bugs* from the Battle screen, click the EXIT sign. When prompted "Quit Battle Bugs?" click OK, and you will go directly to DOS. You can also use the [Ctrl]+[X] or [Esc] key.

Giving Commands

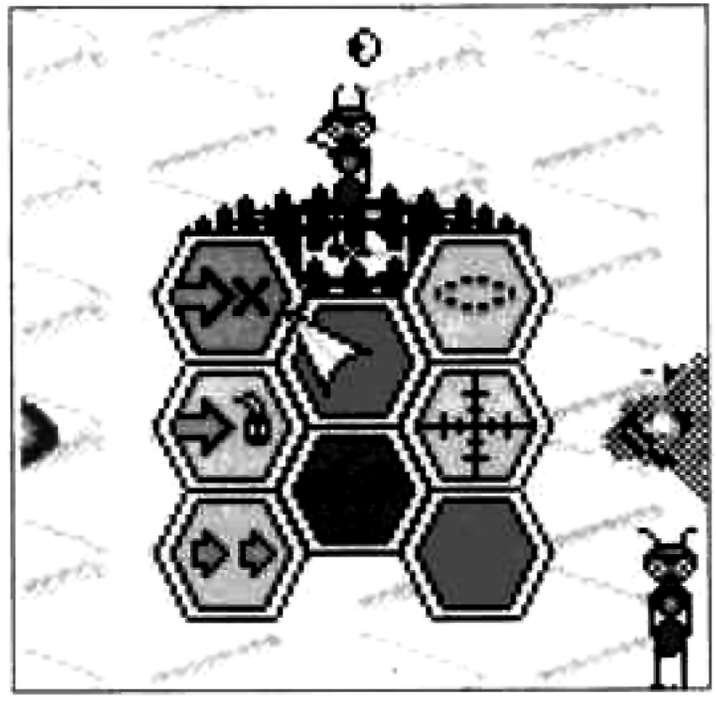
To select one of your bugs in the Battle Screen, click on him. This selects the bug (see the marker over his head?) and pops open his Command Menu. To select a bug in a crowd, hold down the [Alt] key and click to select each bug in sequence. Different bugs will have different commands available, depending on whether they can jump or fly or are equipped with bombs. (Unavailable commands are gray.) See "Group Commands," page 18, on how to select and command groups of troops.



As you move the mouse cursor over the command menu, notice the orange highlight indicating the current selection. When the option you want is highlighted, click. You can give commands by selecting the bug, dragging the cursor to the command you want, and then releasing the mouse button. To cancel orders in progress, press [Space]. Once orders are given, you must re-select the bug to change or stop the order.

Movement Commands

All bugs can move on the ground. Ground movement commands are shown with orange arrows. "Aerial" bugs can also jump or fly through the air as long as they have energy. When movement commands will be carried out by air, they are shown with yellow arrows on the Command menu. Energy consumption by jumpers is non-linear: it takes less energy to make two half-inch jumps than one 1-inch jump.



Note: *You cannot give commands to enemy bugs, but you can still select them and view their status displays.*

Note: *Ground commands have orange arrows. Aerial commands have yellow arrows. Group commands have green arrows.*

Note: *Bugs cannot remember very long or complex paths. Move them in stages, if necessary.*



For aerial units, the Switch Aerial Mode command (orange and yellow arrow) lets you specify ground or aerial movement for the selected bug. By default, flying or jumping bugs will move by air. You can make them walk to save their energy or avoid attacks by skyrockets.

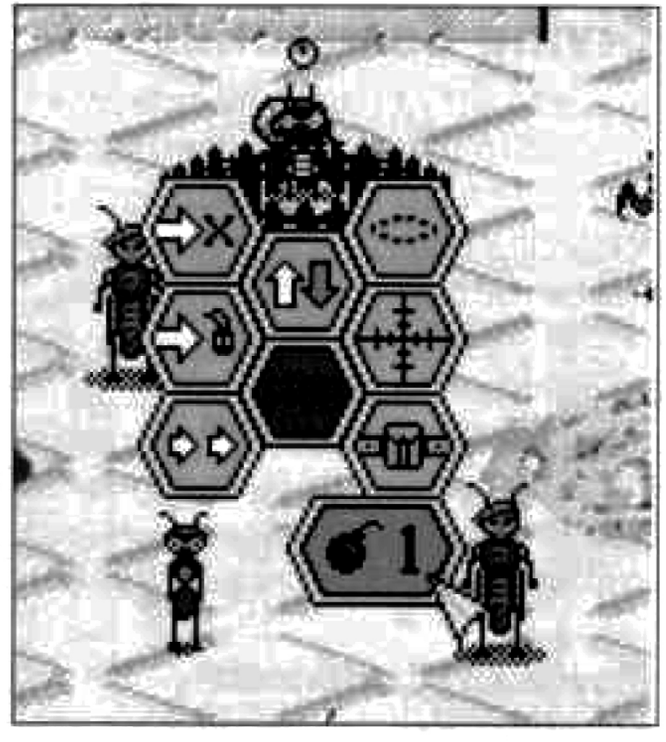


The Go to X command tells the bug to take the most direct path it can to the point you click on next. You can only send it to places it can figure out how to reach on its own (shown by an X cursor). Jumping or flying bugs will travel airborne (yellow arrows) unless you direct them to walk (orange arrows), or they run out of energy.

***Note**: The most direct path isn't always the fastest or safest.*



The Go to Bug command tells the bug to take the most direct path it can to the bug you click on next, and attack it if it is an enemy.





The Custom Path command lets you drag out a custom path for the bug to follow. When you reach the end point of the path, left-click to end it. For some units, you may right-click at points along the path to have the unit perform an action there: take off or land (fliers), jump or land (jumpers) or cut cheese (stink bugs).



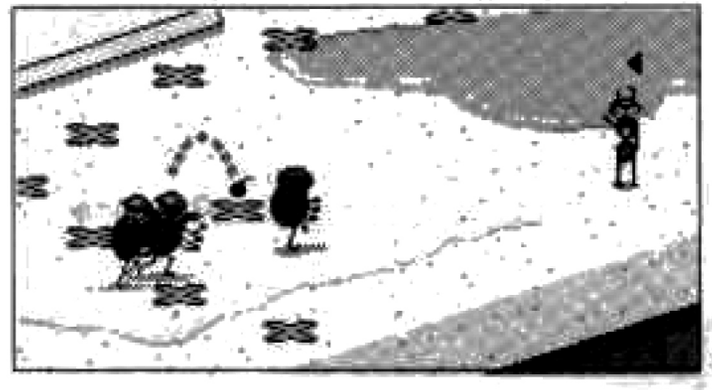
The Moth and Water Boatman are transports that can carry another bug (except for another transport or a rhino beetle). Use the Go to Bug command to have the transport pick up a passenger. At the destination, select the transport and use the Unload Passenger command to drop off the passenger, if the passenger does not unload automatically. If a transport bug is killed, so is any current passenger.

Bombing Commands

Bugs carrying bombs, rocks, cheese, or other weapons have a Bomb command (pouch). (The Bomb Detector button identifies everyone on the battlefield who is carrying bombs.) Only pillbugs and ants can throw bombs. While any flier except the moth may have bombs, it must be airborne to drop them.

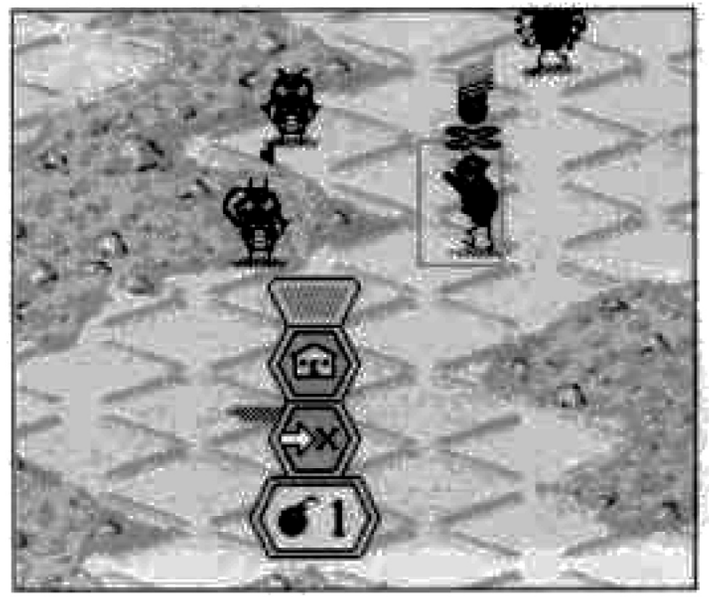


To throw a bomb, select the bug and point to its bombing submenu to select the bomb. You will see a circle around the bug showing its throwing range. Click where you want the bomb to fall. For rocks and skyrockets, you select a specific bug to target. Restart time to trigger the throw.



***Note**: Bombs can hurt your troops, too–aim them carefully.*

To drop a bomb, select the flier, point to the bomb pouch to open the bomb submenu, and click on a bomb. This opens the aerial bomb menu (to move this menu, drag on the gray tab). Click the cursor on the enemy bug you want to bomb. Then select if you want the bug to return to its starting point after the bomb run (click Home) or another spot (Click Go to X, and then the spot).



The Stink Bug alone has a "built-in" bombing ability. Given enough energy, it can let loose the temporary equivalent of a cheese bomb, and turns into a cheese if killed.





Miscellaneous Commands

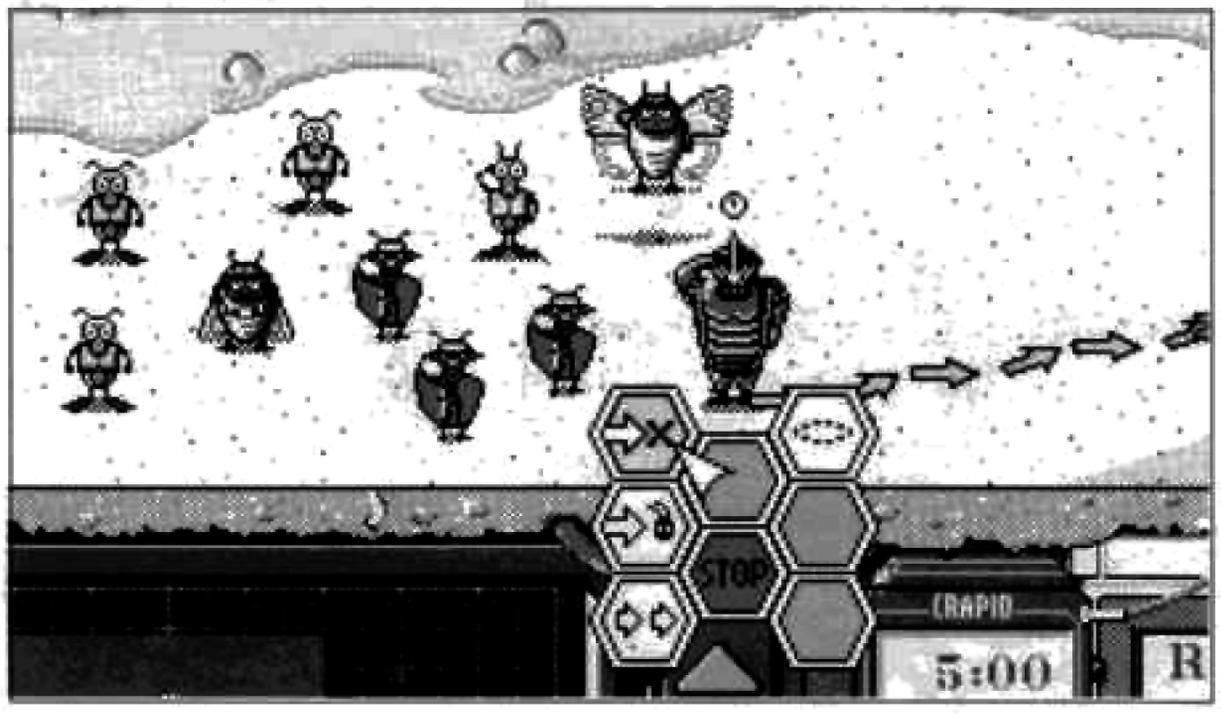
The Stop command tells the selected unit(s) to stand in place, landing if need be.



The Attack mode command (crosshairs) lets you switch between attacking any enemy bug you run into, or attacking a specific bug only (the default mode).



The Adjust Defensive Perimeter command (circle) commands the selected unit(s) to attack the first enemy that comes within a specified circle. Move the mouse to adjust the barbed wire defensive perimeter in or out to cover the area you want defended.



Group Commands

You can select groups of bugs and command them to move, stop, or adjust their defensive perimeter. To give a group command, first select the group by dragging a selection box around the group in the battle screen. Then click on a particular bug in the group to give the command. Notice that the command menu arrows are green for group commands. For movement commands, the group must be able to arrive at the destination in the same formation they are in when you select them. Unless every group member has a valid destination, the command will not take effect.

Tutorial

To take the combat tutorial, first prepare for your combat as described in the preceding Enlistment and Campaign Screen sections. In GENERAL VS. COMPUTER mode, select ENLIST and create a general. When the general's name appears on the Roster, select it and click BEGIN A CAMPAIGN. This will start the first battle, Boot Camp 1: Dirt Simple. The briefing will begin immediately.

When the Battle Screen opens, you will see your troops—the two green ants. You will see the enemy unit as the blinking red dot on the TV's CH 1 Battle Map. You can tour the battlefield by holding down the right mouse button and dragging the cursor where you want the view to go. You can also drag the green outline on the battle map. If you wish, you may click on the TV channel buttons to tour its many channels and help screens.

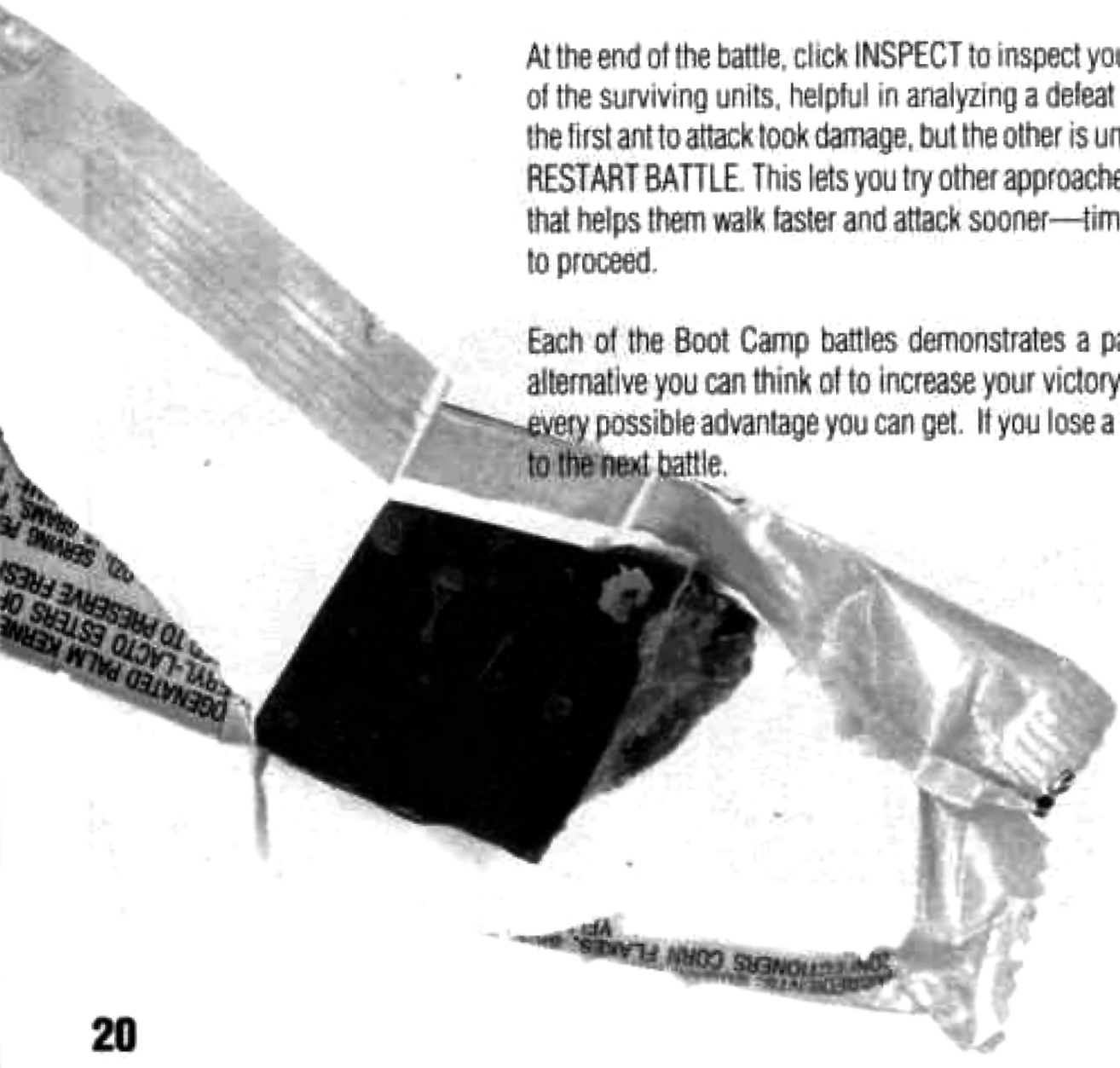


This mission is simple: have your two ants beat up the one enemy ant. Click on one of your ants, and select the Go to Bug command. When the bug head appears on the tip of your cursor, move the cursor to the enemy ant. When you see the orange "target designator" box surround the enemy ant, click. Now when you start the action, your ant will take the most direct route it can to home in on the enemy and attack it. Repeat for your other ant—if they effectively double-team the enemy, they will both survive.

Click the stopwatch to start the time running. Your ants will march over to the enemy and start pounding on him. While the ants are fighting, click on each in turn to see how they are holding up, as shown in the status display. At two-to-one odds, the enemy should not last long.

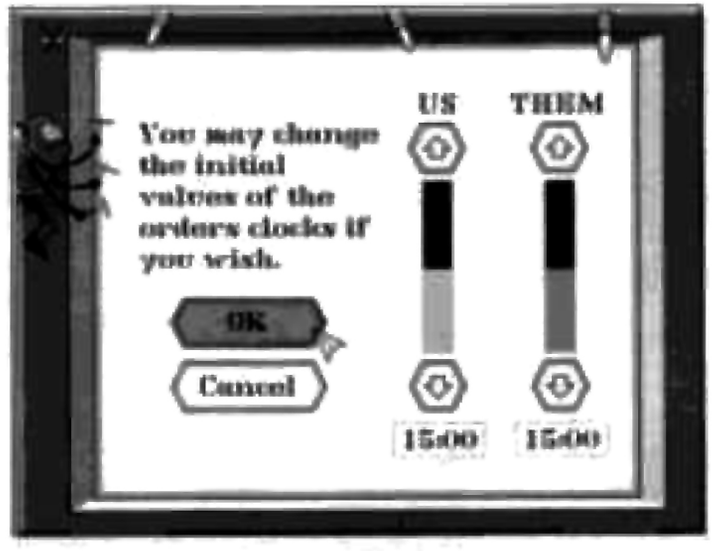
At the end of the battle, click INSPECT to inspect your victorious battlefield. This lets you see the condition of the surviving units, helpful in analyzing a defeat and getting ideas for new tactics. For example, notice the first ant to attack took damage, but the other is unscathed. If you like, you can tune to TV CH3, and select RESTART BATTLE. This lets you try other approaches: for example, try drawing a custom path for your ants that helps them walk faster and attack sooner—time is vital in many battles. When ready, click ONWARD to proceed.

Each of the Boot Camp battles demonstrates a particular tactic or weapon. Replay them, trying every alternative you can think of to increase your victory margin. Be assured that in later battles, you will need every possible advantage you can get. If you lose a battle three times, you will get the option to go Onward to the next battle.



General vs. General Mode

In two-player mode, the Control Panel stopwatch tracks "orders time" separately for both the "Us" (green) and "Them" (red) generals. Both players have a chance to give initial orders. Once the battle starts, you can give or change orders, or select a unit and view its status, only when your orders time is running. If you run out of orders time, you can give no more orders for the rest of the battle, and must rely on your troops' instincts for victory. If both players run out of time, the battle is declared a draw.



When you start a battle, you will have a chance to set the orders clocks for each player. This allows you to "handicap" and balance the odds for different players or forces. Click on the arrows or scroll bars to set the agreed-on allotment of orders time for each player.

Both sides may then give their initial orders, with "Us" forces going first. (Do not peek!) Then the action starts—to pause the action and give orders, click on the green or red button as appropriate for your side. While you are giving commands or viewing troop status, your precious orders time is running—click on your button to stop your orders clock as soon as you are done. Only one general can give orders at a time, so don't hog the mouse.



REFERENCE

Bug Dossiers



Ant: The ant is a fast walker, and can throw bombs farther than the pillbug.
Attack: 6 / Defend: 3



Bee: The bee is a strong fighter with superior range, and makes an excellent long-range bomber.
Attack: 13 / Defend: 4



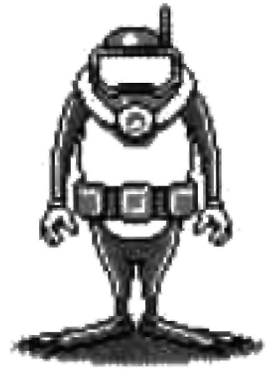
Assassin Bug: This stealthy bug can pass undetected through defensive perimeters and deliver one powerful blow.
Attack: 2 / Defend: 0



Cockroach: A very strong defender, the cockroach is also immune to poison and harmful terrain.
Attack: 6 / Defend: 7



Commander: A commander gives attack and defense bonuses to friendly bugs within his command radius.
Attack: 6 / Defend: 5



Diving Beetle: Of the bugs that can cross water, the diving beetle is by far the best fighter.
Attack: 15 / Defend: 6



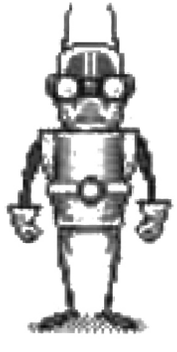
Flea: A fast walker who can make short jumps, the flea is a weak fighter.
Attack: 4 / Defend: 7



Grasshopper: The grasshopper is a very powerful jumper with a moderately potent attack, but is a very weak defender.
Attack: 8 / Defend: 1



Jumping Spider: A weaker jumper but a stronger defender than the grasshopper, and the fastest walker of all.
Attack: 8 / Defend: 4



Lightning Bug: A moderately good fighter, the lighting bug is a stronger flier than the mosquito, but weaker than the bee.
Attack: 10 / Defend: 3



Medic Ant: The medic ant can heal injured bugs, but needs energy to do it. Medics do not fight at all.
Attack: 0 / Defend: 0



Mosquito: The mosquito is the fastest flier and has a sharp bite, but is a weak defender.
Attack: 8 / Defend: 2



Moth: The moth can aerially transport one other bug (except for rhinoceros beetles and other transports). It cannot drop bombs.
Attack: 2 / Defend: 1



Pill Bug: Pill bugs can throw bombs (though not as far as ants). They are tough defenders, and are immune to explosives.
Attack: 7 / Defend: 7



Praying Mantis: This bug has an extremely powerful attack, and can overwhelm any bug except a rhinoceros beetle. It cannot fly.
Attack: 16 / Defend: 5



Rhinoceros Beetle: The most powerful fighter of all, the rhino beetle walks at the same speed, regardless of terrain.
Attack: 16 / Defend: 7

BATTLE BUGS



Robber Fly: This bug can steal bombs from enemies, but can carry only one at a time. It is the only unit that can disengage from battle. It flies.
Attack: 4 / Defend: 2



Spider: This bug is the only unit that can attack multiple bugs simultaneously. It is most effective against a crowd of enemies occupied with another unit.
Attack: 14 / Defend: 4



Stink Bug: As long as it has energy, this bug can break wind, confusing foes. It is immune to cheese bomb fumes, and turns into a cheese itself when killed.
Attack: 4 / Defend: 2



Wasp: The wasp is the most powerful fighter of all the fliers.
Attack: 15 / Defend: 6



Water Boatman: This bug can cross water while carrying one other bug (except for rhinoceros beetles and other transports). It has a reasonably strong attack.
Attack: 10 / Defend: 4



Water Bug: This bug is a weak fighter that walks slowly on land but very quickly on water.
Attack: 4 / Defend: 2

Quick Reference

Start Game	Type **bugs** [Enter] in your \BUGS directory
Change Preferences	Type **bbconfig** [Enter] in your \BUGS directory
Music On/Off	[M]
Sound Effects On/Off	[S]
Skip Animation	[Space]

Dialog Boxes

Highlight Option	[Tab]
Select Highlighted Option	[Enter]
Cancel	[Esc]

Battle Screen

Scroll Display		Arrow keys or right-drag
Select Bug		Left-click
Select Bug in Crowd		[Alt]+Left-click
Cancel Current Order		[Space]
Pause (1-player)		[P]
Pause (2-player)	Us	[Tab]
	Them	[P]
Help(TV CH 5)		[F1]
Tune TV CH 1-5		[1]...[5]
Bomb Detector		[Ctrl]+[Shift]
Load New Campaign		[F2]
Save Campaign		[F3]
Replay Earlier Battle		[F4]
Restart Battle		[Backspace]
Quit to DOS		[Esc] or click Exit
Switch Video Mode (VESA driver req.)		[F9]





Command Icons


Go to X


Go to Bug


Custom Path


Aerial Mode On/Off


Stop


Defensive Perimeter


Attack Mode


Select Bomb


Unload Passenger


Break Wind (stink bug only)


Fly Home

Ordnance

Ordnance is limited and precious. To get the biggest possible bang out of each weapon, first try to get the enemy to bunch up. Then you can hurl or drop in your explosives, poison, or cheese, and spread the pain through the whole crowd. Naturally, the enemy will make great efforts to knock out your weapon-carrying units. Know who and where your bombers are, and protect them until they unleash their weapons.

Only ants and pillbugs can use ordnance on the ground. All fliers except the moth can carry and drop ordnance, but must be airborne to do it. The robber fly can steal ordnance from the other side and then attack with it. (For fliers, keep energy levels and enemy skyrockets in mind.)



Bombs pack a bodacious impact over a good-sized area. Four or five will knock most of the stuffing out of even a rhino beetle or cockroach. Keep in mind that the pillbug is immune to explosives.



Firecrackers are moderate explosives—two or more will kill weaker units.



Limburger Cheese bombs do not harm bugs directly, but will delay or confuse them. Use cheese to stall an enemy advance while you position your forces. Remember—when you cut the cheese, it cuts both ways.



Poison sickens nearby bugs and saps their energy. It is very effective against jumping or flying bugs that need energy for full effectiveness. Only the cockroach is immune to poison.



Rocks are rocks. Simple and direct. They affect only a single target, and have more impact when thrown from a high place.

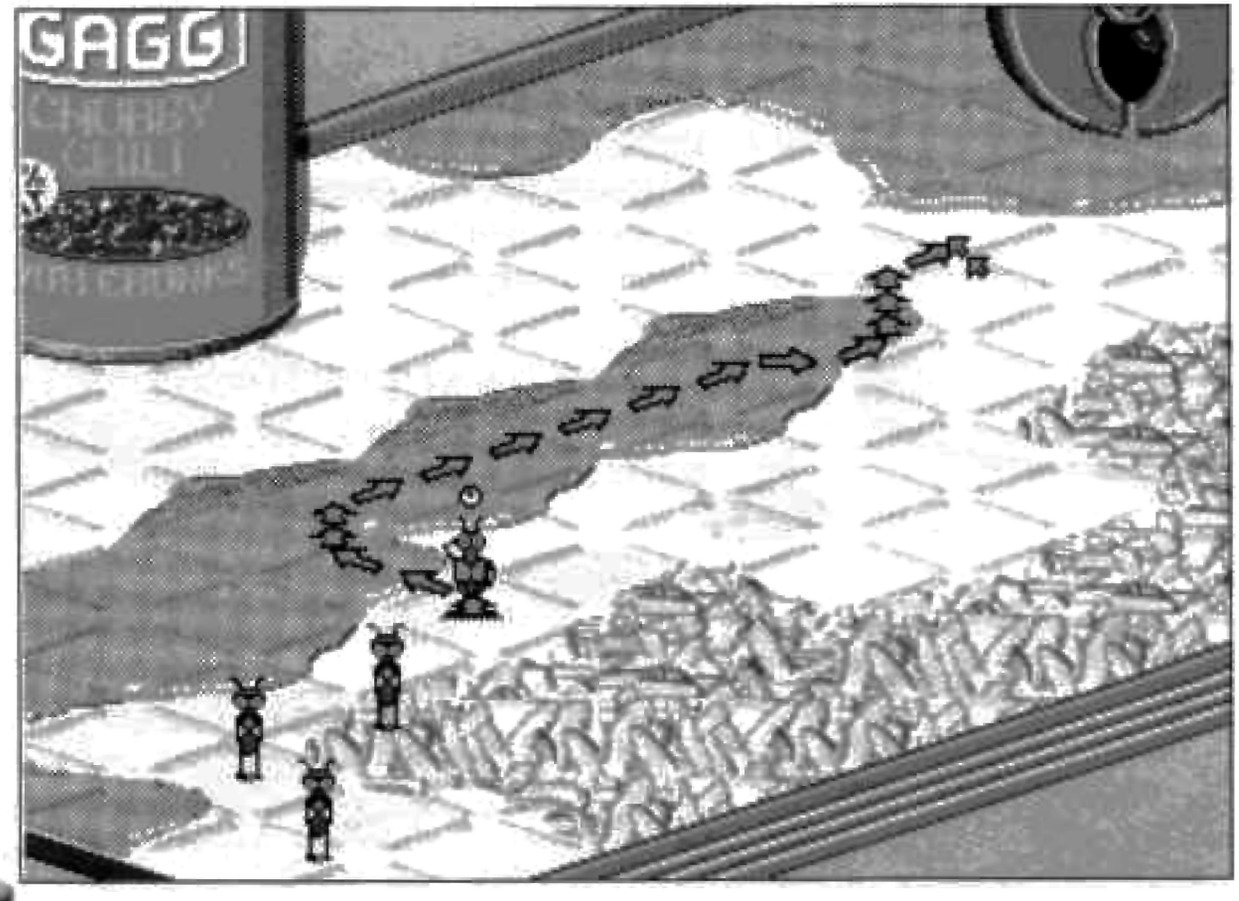


Skyrockets knock down airborne fliers at great distances, and two or more will kill weak or weakened fliers. Find out which enemy fliers are carrying ordnance, and keep rockets to resist their attack. Better yet, knock them down over harmful terrain or strong defenders—the enemy will certainly try to do it to you.

Terrain

Terrain affects different bugs in different ways. Most obviously, only Diving Beetles, Water Boatmen, and Water Bugs can cross liquids. (On the other hand, these bugs are slower on dry surfaces.) Terrain that is not climbable can be crossed only by jumping or flying bugs.

Counter, floor, and cardboard surfaces allow top speed for fast walkers, while grass, mud, cole slaw, tar, and other stickier stuff will dramatically affect walking speed. The ponderous rhino beetle walks at the same pace across any terrain. "Glowing" terrains such as refrigerator glorp or bleach are harmful to all units except the cockroach.

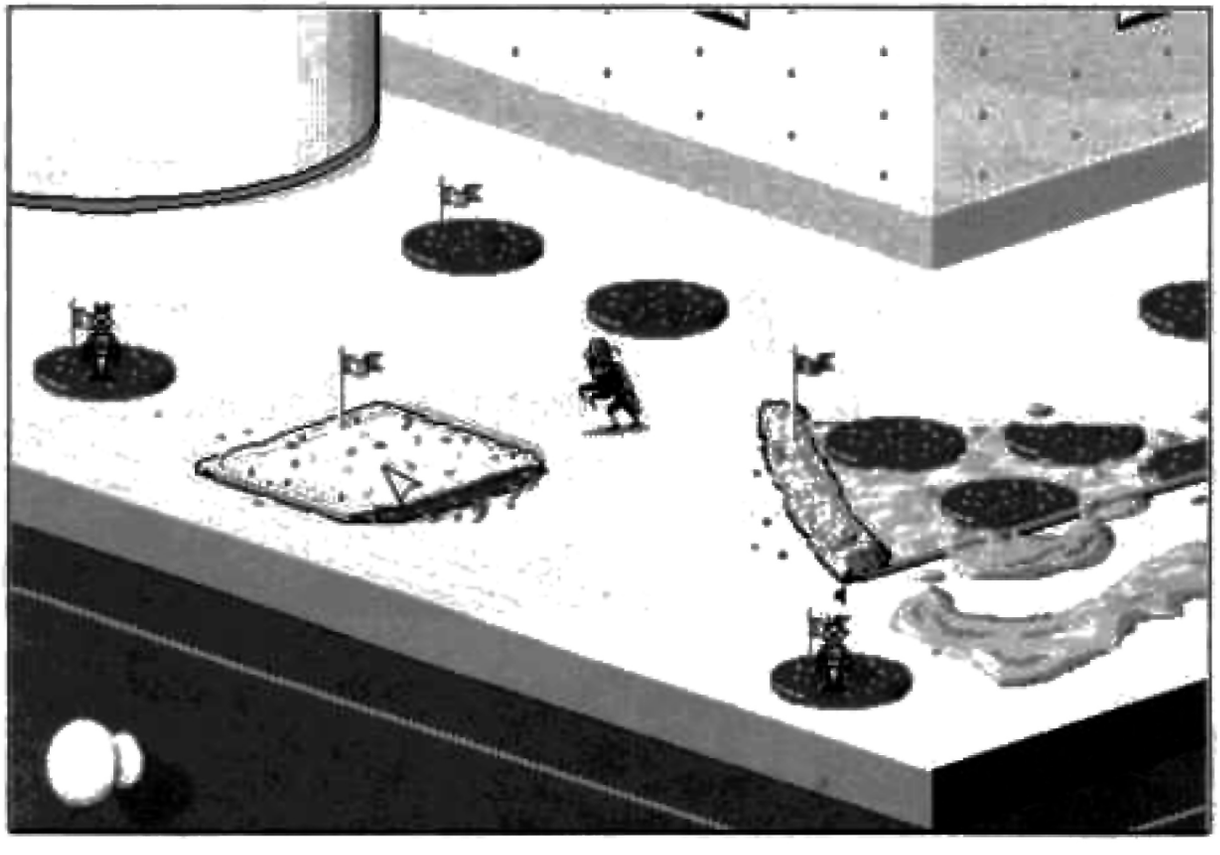




Food

Note: *You cannot capture an unclimbable food item by sitting a jumper or flier on top of it.*

Food is often the mission objective in a battle, as important (if not more so) as taking out the enemy. Different food items have different point values: for example, a pepperoni slice is worth only one point, but a whole Big Buns Burger is worth eight.



To capture food, your troops must move into the food's "capture area" and control the item long enough to raise your flag. If a selected unit is in a food capture area, a knife and fork icon is displayed in its Status Display.

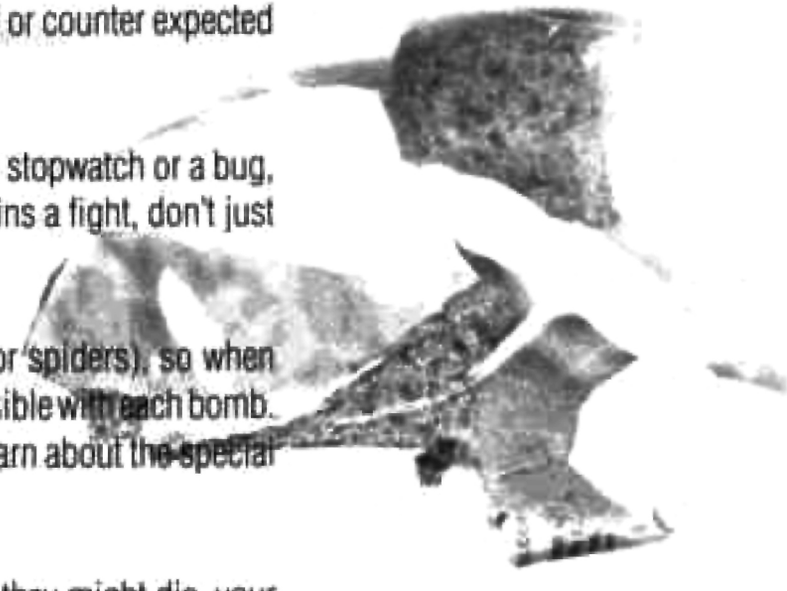
To control the food, all enemy forces must be driven from the capture area. More valuable food items take more time and/or units to control. Nearby enemies will usually drop everything else to keep you from gaining or keeping control of a valuable food item.

Strategy Hints

1. Before starting a battle, evaluate the battlefield. Determine the number and type of troops you have, and compare them to the enemy forces. Are there commander bugs, or any bugs with bombs or other weapons? You may want to focus your attack or defense on them. If there are food objectives, figure out which ones are the most vital in regards to point value or position. Look to see where the terrain will help or hinder the movements of your forces.

2. Develop a strategy to wipe out the enemy or capture the food based on the tactical scenario. Should you attack or defend? Where are the strongest enemy threats, and how will you counter them? Where can you expect the enemy attack? Can you set up traps or diversions? Should you hold back reserve forces? How many? Where? Do you need to annihilate the enemy forces, or just outmaneuver them?

3. Anticipate the enemy with your initial orders. Get your troops in position to head off or counter expected moves, or it may be too late.



4. Monitor the action closely and control the clock. At any time, you may click on the stopwatch or a bug, or press [P] to stop the action and give or change commands. If one of your bugs wins a fight, don't just let it stand there twiddling its antennae—send it to help somewhere else.

5. Attack in coordinated teams. Bugs can fight off only one unit at a time (except for spiders), so when ganging up on an enemy, lead with the strongest defender. Hit as many enemies as possible with each bomb. Where necessary, sacrifice a bug or two to divert or delay enemy forces. Above all, learn about the special abilities of each bug and use them.

6. Remember, you have the ultimate advantage—RESTART BATTLE. As horribly as they might die, your troops will spring back to life, eager as ever to follow a general who is just a little more experienced this time. Good Luck!



Game Credits

Original Concept
Craig Nelson

Design
Dennis Caswell
Craig Nelson
Stephen Lewis
Mark Holmes

Programming
Dennis Caswell

Graphics and Animation
Stephen Lewis
Mark Holmes

Music
Byte-Size Sound

Sound Effects
Halestorm

Voice Characterizations
Dennis Caswell

Internal Speaker Digitized Sound Driver
Craig Nelson

Other Sound and Music Drivers
THE Audio Solution

Design Consultant
Bill Darrah

Special Thanks
Bill Lanphear
Matt Crysdale
Tom MacDevitt
Tom Schumacher

Manual Credits

Writing
Bill Lanphear
Dennis Caswell
Kurt Weber

Editing
Kurt Weber

Design and Layout
Cameron Mitchell

Publications Manager
Kevin Lamb


SIERRA