

# ***Fishy 2002:***

**A Windows-Sensitive Computer Program for Pond-Raised  
Catfish Production Management Decisions and Reports**

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## PREFACE

The development of the Windows-sensitive version of Fishy has been an evolutionary process, beginning in the late 1970s and early 1980s. It began with the idea that catfish farmers could benefit greatly from computer technology due to the many details that successful fish farmers must record and analyze to stay on top of their fishery operations. Some of the Fishy pioneers during those years included MSU Department of Agricultural Economics researcher John Waldrop and MSU Computer Science graduate student Lee Fouché.

Fouché (at that time a recent Ag Economics graduate) and Waldrop, along with myself and others, developed the original code for Fishy. It was first published in 1980. The program was written in BASIC and ran on Radio Shack TRS-80 computers. Subsequent major revisions of Fishy were published in 1985, 1992, and 1995 (1,2,3). In 1995, I rewrote Fishy in Clipper, a database management programming language. Keith King, CFO for Dillard and Company in Leland, Mississippi, was a great help in shaping this version of Fishy.

In 1993, a special steering committee made up of catfish producers, processors, MSU Extension specialists, and MSU researchers was convened at the Catfish Farmers of America headquarters (thanks to Hugh Warren) in Indianola, Mississippi, to give guidance in shaping Fishy to benefit catfish producers most. This committee has been re-convened as necessary as Fishy has been revised to meet ever-changing needs.

I don't know if John Waldrop or Lee Fouché would recognize the Fishy program that we have today. Many improvements have been made, usually at the request of fish farmers. If you see features that need to be added to Fishy, e-mail me (Killcreas@agecon.msstate.edu) or send a letter, and I promise that I will look at it. If the change is deemed beneficial and resources are available, it will probably be made.

Many people have contributed to this version of Fishy. There are several people I would like to especially thank for helping in the development of Fishy 2002. They include King, who provided many ideas on the structure of Fishy 2002; Jim Steeby, area MSU Extension specialist in Belzoni, Mississippi, who has promoted Fishy via workshops for years and was a great help in defining problems during the shakedown stage of Fishy 2002; Terry Hanson, an Ag Economics associate professor, who served as a sounding board for many ideas in Fishy 2002; Jimmy Avery of the Thad Cochran National Warmwater Aquaculture Center in Stoneville, Mississippi, who did promotional work for Fishy workshops; Charlie Hogue, area MSU Extension specialist in Noxubee County, who aided in workshops and in setting Fishy up for fish farmers; Maria Hastings of Aqua Pro in Sunflower, Mississippi, who found several errors in the first release of Fishy 2002; John Johnsey, Ag Economics Department LAN manager, who installed software and debugged several systems problems pursuant to Fishy development; and Jeremy Caton, Ag Economics Web master, who puts Fishy up on the Internet and maintains the forms used to capture user information from those who download Fishy. King, Steeby, Hanson, Avery, and former Ag Economics editorial assistant Emily Hardin reviewed the manuscript for this bulletin and offered many useful suggestions. Thank you all for your super help. It is my hope that Fishy 2002 will become an important tool for all U. S. catfish farmers.

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# ***Fishy 2002:***

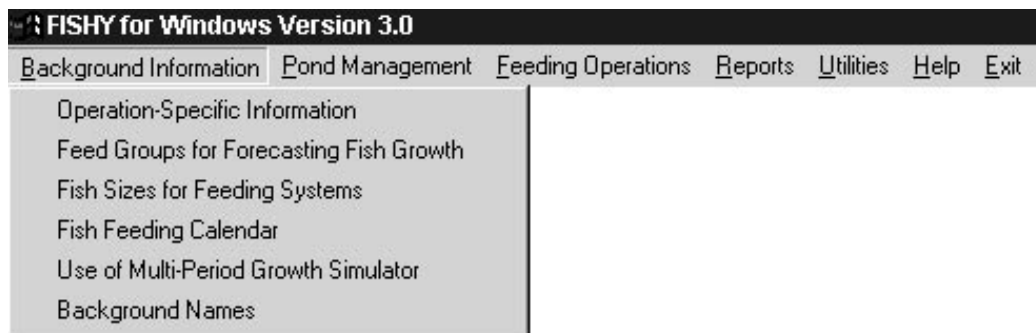
## **A Windows-Sensitive Computer Program for Pond-Raised Catfish Production Management Decisions and Reports**

### **INTRODUCTION**

Fishy 2002 is a Windows-sensitive catfish production management computer program that is written in Visual FoxPro (4). Developed in Windows 98 (5), it will run on microcomputers that use Windows 95/98/NT/Millennium/2000. The computer system should have a CD-ROM drive or have access to the Internet to download Fishy from the Web ([www.agecon.msstate.edu/wek/fishy.htm](http://www.agecon.msstate.edu/wek/fishy.htm)). The Fishy file is about 4 MB. Detailed installation

instructions are included in the “Getting Started” section of this bulletin.

An interactive Main Menu is used to control Fishy 2002. Main Menu items usually lead to sub-menus (An example submenu is shown in **Figure 1** under the Main Menu item, ***Background Information***). Explanations and illustrations of all Fishy 2002 menu items are given in the section entitled “Fishy User’s Guide.”



**Figure 1. Fishy 2002 Main Menu, with *Background Information* submenu selected.**

## Features

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Fishy 2002 has many features that allow you to tailor Fishy operations to reflect *your* management style. Some of the most important features are listed and explained below:

- If you currently use the DOS version of Fishy, you can quickly and painlessly **convert** your DOS Fishy files to Fishy 2002 files (See the *Convert Earlier Fishy Files* menu item under *Utilities*).
- All Fishy commands are activated via pull-down menus. Pull-down menus work very similarly to the menu system on the “Start” button on your Windows desktop. Position the mouse on the desired menu item, such as *Background Information* or *Pond Management*, and click.
- Fishy background tables and user data may be updated to fit **your** operation. Fishy contains data that (1) describes **personal data** for your fish farm, such as name and address, which is printed in reports (see *Operation Specific Information* under *Background Information*); (2) defines the percent of body weight fed, the feed conversion ratio, and estimated future mortality for various **fish sizes by feeding groups** — brood, food, fingerling, stocker, etc. (choose *Background Information*, then *Feed Groups for Forecasting Fish Growth*); (3) allows you to define harvest fish **sizes** and fish sizes that you want to see in reports, such as the size analysis report (under *Background Information*, choose *Fish Sizes for Feeding Systems*); and (4) provides a way for you to define a **feeding calendar for each feeding group**, using percentages of “full feed” (look at *Fish Feeding Calendar* under *Background Information*). You may also update data on those with whom you do business, as well as define how you describe fish losses (choose *Background Information*, then *Background Names*).
- A growth simulator allows you to simulate future fish growth for 10 years or more into the future using growth parameters that you defined. This information can help you determine the feasibility of building more ponds. One of the growth simulator options allows you to define cost screens for fixed costs, equipment costs, and annual operating costs. If you supply information from your operation in these cost screens, Fishy will supply harvesting value, feed cost, and fingerling cost, which can be used to create a report that details total profit for each year simulated. See *Background Information*, and then choose *Use of Multi-Period Growth Simulator*.
- Fishy 2002 provides all supporting computer code and visual objects needed to enter and update events that are likely to occur on a working catfish farm. Such events include (1) **adding** or removing **ponds**, (2) **adding** or removing batches of **fingerlings** from ponds, (3) **harvesting** fish, (4) updating fish processor **sales records** after a harvest, (5) entering/updating records of observed **fish losses**, (6) entering/updating inventory adjustments for fish losses that were not observed (black hole syndrome), (7) **moving** fish from one pond to another, (8) **combining batches** of fish in the same pond, and (9) **draining** a pond. *Pond Management* also allows you to view/print all pond identifications (pondid’s) in the operation. See the *Pond Management* sub-menu (**Figure 2**).



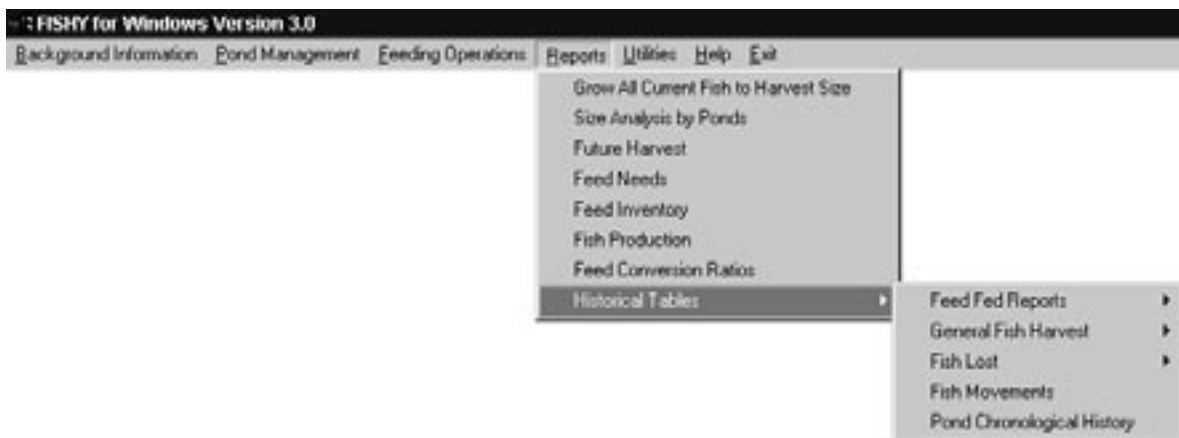
Figure 2. Fishy 2002 Main Menu with *Pond Management* submenu selected.

- The *Feeding Operations* submenu allows you to generate a report of estimated **feed needed** for each pond, to “**feed**” one or more of your ponds, and to “**purchase**” loads of feed for your ponds (**Figure 3**).



**Figure 3. Feeding Operations submenu in Fishy 2002 Main Menu.**

- Fishy 2002 provides more than 37 different reports to help you keep track of the management of the entire fish farming operation. General reporting categories include the **size analysis** report, handy for making decisions on stocking, harvesting, moving, etc.; the estimated **future harvest** report, useful for scheduling seining crews; the **feed needs** report, which can be used for “book-ing” feed; the **feed inventory** report, useful for tracking feed use; and the **fish production** report, useful in determining which ponds are performing well and which ones are not. The **feed conversion ratios** report will help to determine how efficiently your fish are utilizing feed to gain weight. The **historical databases** reports give a blow-by-blow description of important historical events that have occurred in your fish operation during whatever time period is selected. These events include feeding, harvesting, fish losses, and fish movements. The pond chronological history report describes all events related to a particular pond, in date order. Most Fishy reports are found in the *Reports* submenu (**Figure 4**). Feeding reports are available as soon as fish have been fed. Also, simulation reports and supporting data reports are available under *Background Information*.



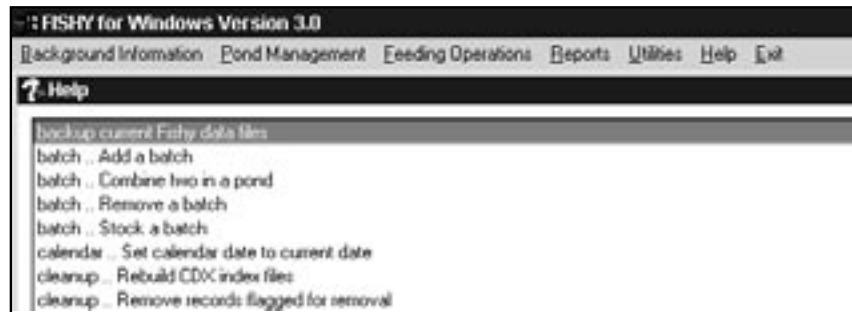
**Figure 4. Fishy 2002 Main Menu with Reports submenu and Historical Tables sub-submenu selected.**

- The *Utilities* submenu will convert DOS-based Fishy files to Fishy 2002 format, periodically “clean up” Fishy files by removing previously deleted records, initialize Fishy files for the beginning of a new fiscal year, back up Fishy data for “calamity” prevention, restore Fishy files after a “calamity” has occurred, change the name of a pond that was perhaps inadvertently misnamed, and change fish feeding calendar dates to prepare for a new fiscal year. See the Fishy 2002 *Utilities* submenu shown in **Figure 5**.



**Figure 5. Fishy 2002 Main Menu with *Utilities* submenu selected.**

- Get online help by clicking the *Help* menu item and choosing a topic that you need to know more about. A help topics list is shown in **Figure 5A**.



**Figure 5A. Partial help topics list.**



## **Getting Started**

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### **Screen Resolution**

Fishy 2002 runs best on a screen of 800 by 600 pixels. Click your Windows “Start” button and go to “Settings,” then “Control Panel.” In the Control Panel window, click the “Display” icon, and then select the “Settings” tab on the “Display Properties” window. After you set the screen size, you will need to click “OK.” On some systems, you will need to reboot.

### **Windows Taskbar**

Run Fishy 2002 with the Taskbar **hidden**. Click the Windows “Start” button and go to “Settings,” then “Taskbar and Start Menu.” In the window that opens, check the “Auto Hide” option and click “OK.” Many important tool tip messages from Visual FoxPro programs are written on the Taskbar line.

### **Memory Requirements**

Fishy 2002 needs 21-25 MB of disk space. RAM memory requirements are a minimum of 64MB, but that is just to run Windows (95/98/NT/2000) well.

### **Fishy Downloads and CDs**

Fishy downloaded files are in a folder called “Fishy2002Dist.” The folder on a Fishy 2002 CD is also called “Fishy2002Dist.” When you will click on “Fishy2002Dist,” four files will appear. Click on the “InstallFishy” file to begin Fishy 2002 installation. Detailed installation instructions are in the following sections.

### **Pond Identification**

If you have 10 or more ponds and used pondid’s like 1, 2, 3, 4A, and 5, you should add leading zeros to these numbers (for example, 01, 02, 03, 04A, and 05.) Virtually all pond lists in Fishy 2002 are sorted by pondid, and it is important for ponds to be in correct collating sequence. Adding the leading zeros will not take long and will pay dividends in the long run. If you use numeric pondid’s greater than 99 in a particular operation, you will need two leading zeros on ponds identified as 1-9 and one leading zero on ponds identified as 10-99 (for example, 001, 020, 035A, and 112). Pondid’s cannot be longer than six characters, and they should not include special characters (such as -, =, +, &, etc.). Click “exit form” to change the pondid selected to the name entered and “undo” to cancel.

## FISHY 2002 INSTALLATION AND USE

### *Fishy 2002 Installation from CD*

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- (1) Close all open tasks before installing **any** software program. If the folder into which you are installing Fishy 2002 already **contains** the exact copy of Fishy that you are installing, you should **delete** it. Or, you can choose **“Remove All.”** If you are installing a **newer** version of Fishy (usually the case), you can install it into a different folder and leave the old folder intact.
- (2) Place the Fishy compact disk — label side up — in your computer’s CD tray and close the CD carrier.
- (3) Click the **“Start”** button in the lower left-hand corner of your Windows desktop. Click on the **“Run”** option.
- (4) Key in the device address of your CD drive. It will likely be “D:” or “E:”. Click **“Browse.”**
- (5) You should see a folder called **“Fishy2002Dist.”** Double click it. You will then see a file called **“InstallFishy.”** Select it, and click **“Open.”** You will likely see a directory path like **“C:\Fishy2002Dist\InstallFishy.Bat.”** Click **“OK”** in the **“Run Dialogue”** box.
- (6) You will see an icon on the desktop (that is the Fishy shortcut) and a reference to FishySetup. Next, the screen will display a WinZip Extractor dialogue box with **“C:\Fishy2002”** as the default **“Unzip to”** path. If you need to, change the **“Unzip to”** path to a different directory. When the **“Unzip to”** path is set up as desired, click **“Unzip.”** If you change the **“Unzip to”** folder, you will need to update the Fishy shortcut to point to your new folder. **Also, if you have a Windows 2000 system, you must drag the Fishy shortcut out to the desktop.** You should see a message saying that 119 files unzipped. You can exit from WinZip Extractor.
- (7) You will end up in a black DOS window. After reading the messages it contains, you can exit from the DOS window. Fishy installation is complete at this point.

### *Fishy 2002 Installation from a Downloaded File*

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- (1) Copy the **“FISHY.EXE”** download file to a folder of your choice from the MSU website: [www.agecon.msstate.edu/wek/fishy.htm](http://www.agecon.msstate.edu/wek/fishy.htm)
- (2) Locate **“FISHY.EXE”** using the Windows Explorer. Double-click on it. Follow steps 6-7 from the CD installation instructions.

## ***Fishy 2002 Troubleshooting Guide***

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### **(1) “My computer will not read the Fishy 2002 CD.”**

We could have given you an **unreadable CD**, or your **CD drive could be malfunctioning**. Test your drive by reading a different CD. If the drive is working correctly, call us at (662) 325-2672 and we will send you another CD.

### **(2) “I have entered several ponds, but I can only see one pond.”**

You are likely in a screen that has several blue buttons on the bottom left. **The right and left arrow buttons allow you to move forward and backward through your ponds**. See “Navigation Buttons” in the “Fishy User’s Guide” for an explanation of Fishy buttons.

### **(3) “I can’t get Fishy 2002 to grow my fish.”**

There are several problems that could cause this. First, check your **fish feeding calendar**. Make sure that the last date in the calendar is the last day of the year (like 12/31/2002). Also, check to see if the year is correct. You can go to *Utilities* and set it up easily — *Set Calendar Dates to Current Year*. If you **added a feed group**, (1) make sure the last entry in the group is 99999, and (2) make sure that you add a calendar entry to go along with the new feed group. **Make sure that you do not have a batch of fish with 0 pounds or 0 fish, or that you do not have fish that weigh, say 25 pounds each.**

### **(4) “When I try to bring Fishy 2002 up, I get an ‘Access Denied’ message.”**

You likely have a **minimized version of Fishy** running. **Cancel** the setup giving you the error, and check your taskbar for Fishy 2002. If you see it, click it to make it active. **You can have only one copy of Fishy running at a time.**

### **(5) “When I do a ‘Size Analysis’ report, I don’t see any size categories at the end of the report.”**

Go to *Background Information* menu item *Fish Sizes for Feeding Systems*. If you select “**Load a Diets file...**” and choose “Sizanal1” from the combo box that appears, a set of sizes will be automatically selected for you. You can use the “Sizanal2” and “Sizanal3” files to define other size classes if desired.

### **(6) “I can’t feed my fish.”**

Make sure that you have **stocked batches** of fish in your ponds. Check your **calendar** and your **feed groups** (see #3). Make sure that you do not have a **blank pond entry** (see #8).

### **(7) “Fishy gives errors when I try to convert my DOS operation to Fishy 2002.”**

If you have a version of Fishy for DOS that is **over 5 years old**, the names of processors, feed producers, and mortality reasons are limited to 10. Fishy 2002 expects to see more than 10. **You may be able to ignore these errors**. Double check the **background names** under *Background Information* after Fishy 2002 is installed and running.

### **(8) “When I try to update a file, I get the error, ‘Failed to update – unique index violation.’”**

You probably inadvertently added a **blank record** to a file (pond records are the most common). You must **first delete the blank record** (blanks are always at the top of the list). Then, go to the *Utilities* menu and click *Remove Deleted Records, Rebuild Tag Indices*.

# Fishy User's Guide

## NAVIGATION BUTTONS



Figure 6. Example Fishy navigation buttons.

The **Navigation Buttons** on all Fishy screens usually work the same way. An example set of navigation buttons is shown in **Figure 6**.

**Button 1**, which looks like a clipboard with paper, is the **save file button**. It will cause the currently selected file to be saved in a temporary file. If the filter button (**button 7**) has been used to create a subset of the selected file, the subset will be saved in the temporary file. The file type saved is a DBF file.

**Button 2** (Excel icon) is similar to **button 1**, except that the file type saved is **Excel** (XLS file type). Spreadsheets allow you to do additional calculations with Fishy data.

**Buttons 3-6** are used for moving forward and backward through the selected (and possibly filtered) file. **Button 3** moves control to the **beginning** of the file. **Button 4** moves control **backward** one screen (usually one pond). **Button 5** moves **forward** one screen. **Button 6** moves to the **end** of the file.

**Button 7**, which looks like a set of binoculars, is the **filter button**. The purpose of it is to select subsets of the original file. For example, if you have 67 ponds, numbered 01-67, and want to work on ponds 11-30, you can easily accomplish that with filtering. **Any** variable in the selected file can be used for filtering purposes. When you click the filter button, a dialogue box appears (**Figure 7**).

Notice that you can sometimes change Tables (files) or sorting **orders** before filtering. These options are used more when filtering before doing reports. Decision lines are the most important part of the dialogue box. Each decision line consists of a selected variable (shown as a pull-down menu beginning with pondid), a decision pull-down (less than, greater than, etc.), and a data field. For example, you can make a decision like "PONDID >= 01." Pondid would be the variable; >= (greater than or equal to), the decision; and 01, the data field. After finishing a decision line, click the "**Add**" button to add it to the filter dialogue

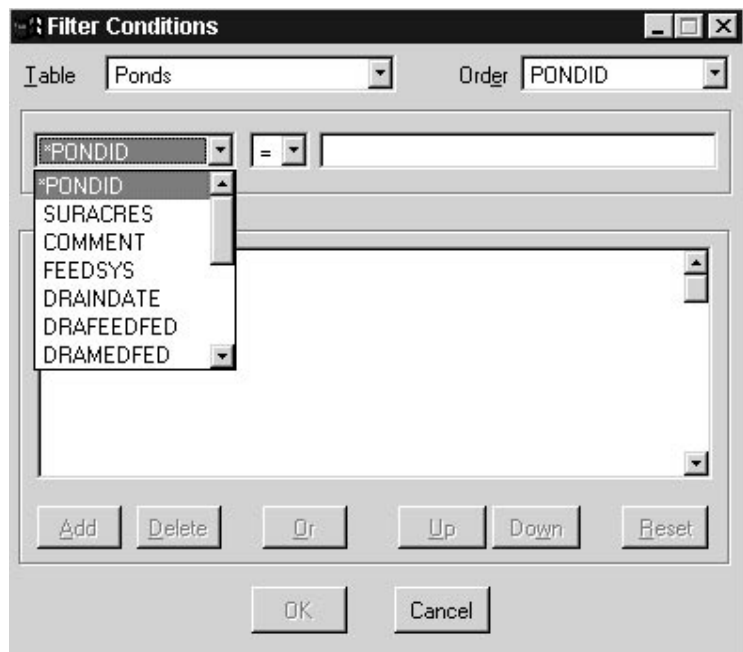
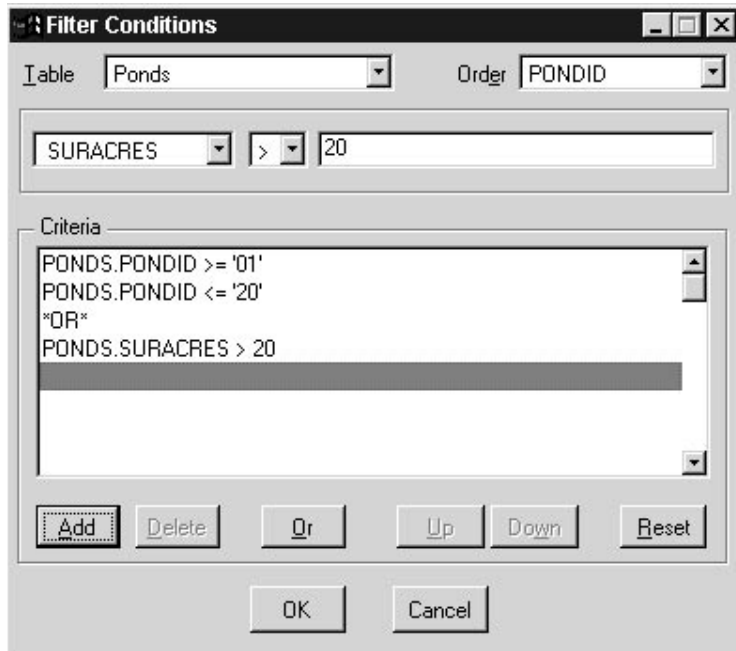


Figure 7. Empty filter dialogue box.

box. You can add more than one filter decision line to a dialogue box. Logical “ands” (like PONDID >= 01 **AND** PONDID <= 06) mean that you want all ponds between pond 01 and pond 06, including ponds 01 and 06. “And” decisions are made **by adding new decision lines to the box**. “Or” decisions are made by clicking the “Or” button between decision lines. **Figure 8** contains both “And” (true only if both decision lines are true) and “Or” (true if either decision line is true). Click “OK” to apply the decisions added. When “OK” is clicked, you will notice that the number of records in the new subset of the file will briefly appear in a small window. Decisions made in Figure 8 would select all ponds with pondid’s between 01 and 20, **or** all ponds with more than 20 acres in them.



**Figure 8. Filter dialogue box with decision lines.**

**Button 8**, represented by a printer icon, is the **print button** (Figure 6) used for creating reports. Although the *Reports* menu item is where most reports are found in Fishy, most screens containing print buttons will create a report. When a report is done, it will reflect any filtering done in the session prior to report creation.

**Button 9** serves two purposes: It is both the **new record button** and the **save record button**. Initially, button 9 displays a “blank sheet” icon, which is the **new record button** — used for adding new records to files. When it is clicked, button 9 changes to a “diskette” icon, which is the **save record button**. In “parent-child” file structures, you must **always add a parent record before** adding a child record that “belongs” to that parent. In Fishy, the “parent” is usually a pond, and the “child” is a batch within the pond. After all information has been entered correctly on the new record, click the **save record button** (diskette) to actually save it to the file.

**Button 10** also serves two purposes: it is both the **edit button** and the **undo button**. Initially, button 10 displays an icon that looks like a grid with a pencil; this is the **edit button**. It is **absolutely necessary** to click edit prior to updating (adding or changing data) information on an existing record. When the **edit**

**button** is clicked, button 10 changes to a blue “backward arrow” icon, which is the **undo button**.

**Button 10** also converts into the **undo button** (backward arrow) after **button 9** is clicked. Likewise, **button 9** converts into the **save record button** (diskette) after **button 10** is clicked.

When you are finished editing an existing record or adding a new one, click the **save record button** (diskette) icon to **save the new entries**. To **ignore** the edits or to **cancel** a new record, click the **undo button** (backward arrow).

**Button 11**, which includes a red “X,” is the **delete button**. **It should be used with care!** If you click this button, you will be prompted with “Are you Sure?” If you answer “Yes,” the record will be deleted. Otherwise, the record will not be deleted. **After deleting a record, go to Utilities and click Remove Deleted Records, Rebuild Tag Indices.**

**Button 12**, which looks like a folder, is the **exit form button**. It is used to terminate the screen normally after data have been correctly entered into the record. For many operations in Fishy, it is necessary to click **button 12** to get your work applied, as opposed to clicking the “X” in the upper right-hand corner, which is similar to clicking “Cancel.”

## BACKGROUND INFORMATION

Each Fishy Main Menu item will be explained in the order that it appears in the menu. The first Fishy 2002 Main Menu item is *Background Information* (Figure 9). *Background Information* includes six submenu items: (1) *Operation-Specific*

*Information*, (2) *Feed Groups for Forecasting Fish Growth*, (3) *Fish Sizes for Feeding Systems*, (4) *Fish Feeding Calendar*, (5) *Use of Multi-Period Growth Simulator*, and (6) *Background Names*.



Figure 9. *Background Information* pull-down menu.

### Operation-Specific Information

*Operation-Specific Information*, the first submenu item under *Background Information* (Figure 9), brings up a screen similar to Figure 10. *Operation-Specific Information* is used to “personalize” reports. This option opens in add/update mode and can be added to or changed at any time. Operation name, address, city, state, and zip code will appear on major Fishy reports. Target percent of body weight fed values are used in daily feeding reports. Tons of feed carryover is computed, but it may be adjusted if necessary. Feed available is also computed. Feed prices are relatively variable and can be adjusted as necessary.

A screenshot of the 'Operation-Specific Info' window. The title bar reads 'Operation-Specific Info'. The main heading is 'Enter Operation-Specific Information, Click X above.' The form contains several input fields: 'Operation Name' (filled with 'Dilled & Co. Inc. - Six Mile Fisheries, Inc.'), 'Operation Address 1' (filled with 'P.O. Box 251'), 'Statecode' (filled with 'MS'), 'City', 'Zipcode' (filled with '39756'), 'Leland', 'Target % Body Weight Fed Per Day' (with sub-fields for 'Lower Feed' at 1.500 and 'Upper' at 3.000), 'Tons of Feed Carryover is from Previous Fiscal Year' (filled with 0.00), 'Regular Feed' (filled with 0.00), 'Medicated Feed' (filled with 0.00), and 'Tons of Feed Currently Available, With Default Price/Ton' (with sub-fields for 'Regular Feed' at 111.27 and 'Default Price' at 200.00, and 'Medicated Feed' at 0.00 and 'Default Price' at 500.00).

Figure 10. Example *Operation-Specific Information* screen.

## Feed Groups for Forecasting Fish Growth

*Feed Groups for Forecasting Fish Growth*, the second submenu item under *Background Information* (Figure 9), brings up a series of screens similar to **Figure 11**. One of the special features of this Windows version of Fishy is that each individual feeding group can have a unique set of fish feeding parameters, such as feed conversion ratios and percent of body weight fed by fish size. There is a target fish harvest size, a feeding limit, and winter feeding date defined for each feeding group. To update a feed group, click the **edit button** (grid with pencil). (See “Navigation Buttons” [Figure 6] for a description of the navigation buttons and how they operate.) When your edits are done, click the **save record button** (diskette) to keep them, or click the **undo button** (blue arrow) to cancel them. To add a new feed group, click the **new record button** (blank sheet) and **add to parent**. Be sure to add a unique name to the key record field for the new feed group name. The data at the top of the **Figure 11** screen is for parent information. Click the **save record button** to save the parent information, then

click the **new record button** and enter a “child” record. Enter size class, conversion ratio, and percent body weight fed into this record. This process is repeated for each child record. The size class for the last child record should be 99999. Do not forget to add a *Fish Feeding Calendar* entry for the new group (Figure 9).



Figure 11. Example feed group by fish size screen.

## Fish Sizes for Feeding Systems

*Fish Sizes for Feeding Systems*, the third submenu item under *Background Information* (Figure 9), brings up a screen similar to **Figure 12**. Choose *Fish Sizes for Feeding Systems* to update harvest sizes for each feeding group and size classes for each feeding group that are to be used in reports (particularly the size analysis report). Notice that all size classes are expressed in pounds **per fish**, except for the **fingerling** size class, which is expressed in pounds per **1,000 fish**. If you decide to update the size class table (**Figure 12**), it is important to enter sizes 1-6 in **ascending order**. It is possible to save up to three sets of fish sizes to conform to different size class distributions. Names chosen for the size distributions are “Sizeanal1,” “Sizeanal2,” and “Sizeanal3.” Screens just before and just after the **Figure 12** size class distribution screen prompt to

see if you wish to read a different size class file, or to save a new one. Having several size class files is useful for size analysis reports for NASS reporting, and for multiple internal size analysis reports.

Feedsys	Harvsize	Size1	Size2	Size3	Size4	Size5	Size6
BROOD FISH	5.00	1.00	2.00	3.00	4.00	5.00	8.00
FINGERLINGS	0.25	3.10	8.80	19.10	25.30	58.80	91.00
FOOD FISH	1.25	0.10	0.50	0.75	1.00	1.50	3.00
FOOD FISH EX	1.25	0.15	0.40	0.60	0.80	1.00	2.00
WINTER	1.25						

Figure 12. Example harvest sizes and fish sizes for use in size analysis reports.

## Fish Feeding Calendar

*Fish Feeding Calendar*, the fourth submenu item under *Background Information* (Figure 9), brings up a screen similar to **Figure 13**. The *Fish Feeding Calendar* is the mechanism that Fishy uses to adjust feeding rates to different seasons of the year. When you click on the calendar, you will first be prompted to update your fiscal year. The fiscal year defined can be different than the calendar year, or they can be the same, as shown in **Figure 13**.

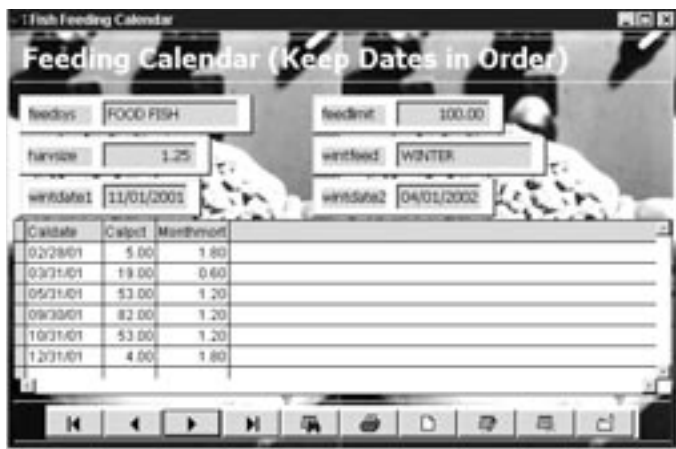
An important addition to Fishy 2002 is the ability to define different **fish feeding calendars** for each feed group that you define. Each feeding group (**Figure 14**) has access to a separate feeding calendar. This allows fingerlings to be fed on a different schedule than food fish, brooders, etc. The example table shown is for food fish. The **feed limit** for each group is expressed as maximum pounds per acre per day. Each calendar also includes harvest size (pounds per fish) for the group, a field into which you enter the word “WINTER” if winter feeding is to be done for the group, and starting and ending **dates** for winter feeding



**Figure 13.** Example fiscal year definition screen.

(if “WINTER” is defined). In the table (grid) part of **Figure 14**, **caldate** is the **ending calendar date**, with the last caldate entry corresponding to the ending date for the fiscal year previously defined. The beginning date for the first calendar period is always the beginning date for the fiscal year (in this example, the first period runs from 01/01/01 through 02/28/01). Subsequent periods begin on the day after the previous ending date (in this example, the second period runs from 03/01/01 through 03/31/01).

The **calpct** field shown is **percent of full feed** for the group during each caldate period. It is used in estimating future feed consumption in simulations and in calculating estimated feed needs. You would not define 100% of full feed for a period unless you expect **no** adverse conditions for the entire period. When producing an estimated feeding calendar for your farm, it is possible to override the fish feeding calendar. Any problem, such as cold or inclement weather, wet levees, sick fish, etc., can cause the estimated percent of full feeding to be decreased. The **monthmort** values in the table are estimated percent mortality per month. These values are used in simulating future fish growth.



**Figure 14.** Example feeding calendar for food fish.



## Use of Multi-Period Growth Simulator

*Use of Multi-Period Growth Simulator*, the fifth submenu item under **Background Information** (Figure 9), brings up a screen similar to **Figure 15**. The multi-period growth simulator is a very strong feature of Fishy 2002. This simulation routine will simulate fish growth for your entire fish farm, for ponds that you select, or for a single pond. A set of reports — from a blow-by-blow report to a yearly summary report — can be optionally produced.

The **starting simulation date** should usually be set to the current date, but it can be set forward in time if desired. The **ending simulation date** should always be later than the starting date, and generally it would be set to at least a year into the future. Click boxes are used to support reporting options. They include **week-by-week**, **harvest-by-harvest**, and **yearly** summary. When a box is checked, the corresponding report will be done. Click the **exit form button** (file folder) to continue the simulation, or click the **undo button** (blue arrow) to cancel the simulation.

If you check the box by “I want to change the background financial modeling values...,” three additional cost screens will appear. They are designed for you to enter cost data for your operation.



**Figure 15. Example setup screen for Multi-Period Growth Simulator.**

The first screen is for **Fixed** costs, the second is for **Equipment** costs, and the third is for **Annual** costs. Although some default data are provided in these screens, the associated profitability reports will be far more meaningful if you enter your own data. See the **Help** menu item under “**Cost Screens**” for help in entering cost data.

When you continue the simulation, you will see a screen (**Figure 16**) that allows you to scroll through all the ponds and decide which to include in the simulation.

Use the filtering methods (outlined in “**Navigation Buttons**” under the description of button 7, the filter button) to filter out the group of ponds that you wish to simulate. After you apply the filter, scroll through the resulting ponds to make sure the filter worked correctly. Click the **exit form button** (file folder) to complete the simulation and create the report(s) that were checked in the setup screen. **Click the “X” in the upper right-hand corner to cancel.**



**Figure 16. Example growth simulation filtering screen.**

When the simulation is completed, all reports checked in the growth simulation setup menu (Figure 15) will be printed. All Fishy 2002 reports are created in browse mode, which means that you can view each report and decide whether you wish to print it. Figure 17 contains an excerpt from a “harvest-by-harvest” report for the simulation of two ponds for three years. It is possible to simulate your entire operation forward in time for 10 or more years. Notice the print toolbar on Figure 17. This feature allows the Fishy 2002 user to scroll through the report, then print all of it, none of it, or any sequence of adjacent pages from it. To print any Fishy report, click the print button on the toolbar. Do not delete the print toolbar, because that removes your means of printing the report. If you check the Net Value report, Fishy will

Batch	Stockdate	Stknumber	Stkweight	Feedfed	Nummort	Lbmort	Harvsum	Harvwt
<b>FINGERLINGS</b>								
<b>Feed: 03</b>								
1	05/23/00	2550000	228	375200	196574	11784	2352072	35329
1	06/23/02	2550000	228	630483	311819	18472	2317647	35328
1	08/31/04	2550000	228	196341	276863	3614	2352583	18291
Average For 03:		2550000	228	467341	261218	8623	2348767	26983
Total For		7650000	684	1402024	783656	25871	7022302	8894
FINGERLINGS:								
Average For		2550000	228	467341	261218	8623	2348767	26983
FINGERLINGS:								
<b>FOOD FISH</b>								
<b>Feed: 02</b>								
1	05/19/00	111952	10215	196423	770	548	111118	11584
1	08/07/01	111952	10215	278156	5222	1593	186668	11044
1	09/17/02	111952	10215	273855	6079	2107	185751	10580
1	12/09/03	111952	10215	265477	7411	3304	184481	10538
1	05/31/05	111952	10215	183552	4648	1926	187222	6541
Average For 02:		111952	10215	237892	4830	1896	187048	10057

Figure 17. Excerpt from harvest-by-harvest report from growth simulation.

compute the value of the simulated harvest. The program will then subtract feed costs, fingerling costs, and one year’s worth of all cost centers developed from the Fixed, Equipment, and Annual cost screens, thus yielding a Net Value for that year of simulation. If you simulate all of your ponds, the Net Value would represent the Net Value of operating your fish farm for one year.

### Background Names

*Background Names*, the sixth submenu item under *Background Information* (Figure 9), brings up a screen similar to Figure 18. *Background Names* provides tables for listing feed producers, fish processors, and diseases or adjustments that could destroy fish. As shown in Figure 18, you can print a report of background names. These lists can be changed at any time, but beware of removing entries from the lists after data have been entered. When you delete entries from these lists, be sure that data pertaining to the “old” entries have also been deleted. You must add new background names before they can be used in fish data entry. To enter a new background name, find the next empty space in the list, and key it in. Make sure that the code and name entered are unique. Codes and names do not have to be entered in alphabetical order; Fishy combo boxes and menus will present them in order by code and name, regardless of how they are entered.

Feed Producers and Fish Processors, as well as Mortality Reasons		
Mortality Reasons	Feed Producers	Fish Processors
A Adjustments Only	PR Producers Feed	CF ConFish
B Brown Blood	DW Delta Western	DP Delta Pride
C EDC	FB FishBell	FF Farm Fresh
H Hamburger Oil	AF Arkal	OC Oudry Catfish
I Icing	SF SF Services	SP Southern Pride
O Adjust/Over Sls	UK Unknown	CS County Skillet
U Adjust/Under Sls		AC America's Catch
X Oxygen Loss		SI Simmons Farms-Ra
		OT Other Processor

Figure 18. Example list of background names.

## POND MANAGEMENT

The second Fishy 2002 Main Menu item is *Pond Management* (Figure 19). *Pond Management* includes 10 submenu items: (1) *View/Add/Edit/Delete Ponds and/or Batches*, (2) *Delete a Batch*, (3) *Harvest a Pond*, (4) *Add/Edit Sales Records After a*

*Harvest*, (5) *Enter Death Losses*, (6) *Enter Inventory Adjustment Losses*, (7) *Move Fish from one Pond to Another*, (8) *Combine Batches*, (9) *Drain a Pond*, and (10) *View/Print Ponds*.



Figure 19. *Pond Management* pull-down menu.

### ***View/Add/Edit/Delete Ponds and/or Batches***

*View/Add/Edit/Delete Ponds and/or Batches*, the first submenu item under *Pond Management* (Figure 19) is a screen similar to Figure 20. To perform the various functions listed in the submenu name, use the features described under “Navigation Buttons.” (NOTE: Although the submenu name implies that this function will delete batches of fish, that is not the case; the second submenu item, *Delete a Batch*, should be used for that purpose.)

To delete a pond, click the **delete button** (grid with red X), and answer “Yes” to the “Are you sure?” prompt. When you see this prompt in Fishy, it is usually a serious thing that you are about to do! Deleting a pond causes it

to be deleted from ponds and batches tables, but it does not affect the historical tables such as feedfed, harvest, movefish, and death.

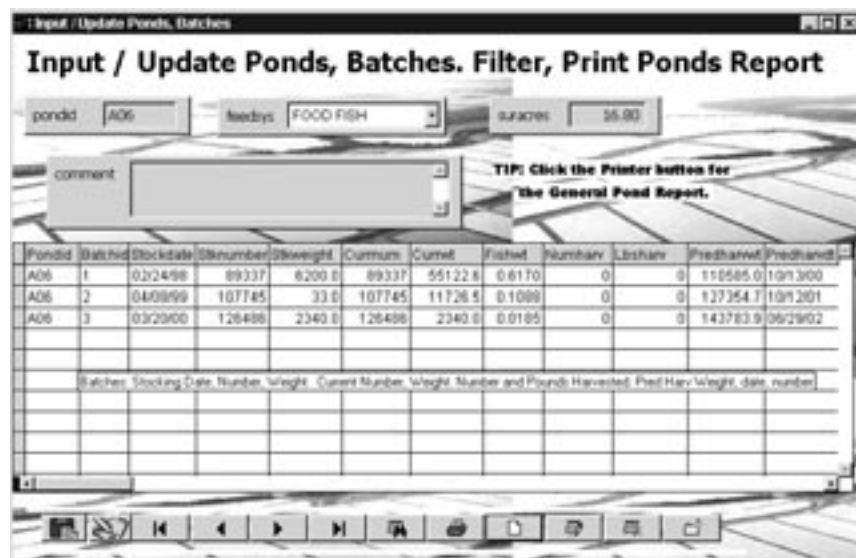


Figure 20. Pond/batch input/update screen.



Figure 20A. Example window for adding records to a table.

To add a new pond, click the **new record button** (blank sheet), which will open a window similar to **Figure 20A**. Select the option, “**Add record to parent only.**” This option adds the pond, and you will later add the batches. Enter a **unique pondid** for the **key value field**, and click “Add.” **See the tip on assigning numeric pondid’s under “Getting Started.”** Enter new pond information in the input/update table, and click the **save record button** (diskette) to save the new pond (or click the **undo button** to cancel the new entry). To add a batch to an existing pond, click the **new record button**, choose “**Add record to child (grid) only,**” and click “Add.” Notice that you only need to add batchid, stockdate, stocknumber, and stk-

weight to the input/update table. After the prompt alerts you that batch entry is complete, click the **save record button**. To edit a pond or batch, click the **edit button** (grid with pencil), and use the mouse to get control into any block in the pond record (info above the grid) or batch records (info in the grid). After updates are complete, click the **save record button**.

The **save file button** (clipboard with paper) can be used to create a DBF file of the current set of all batches in every pond selected. When you select **View/Add/Edit/Delete Ponds and/or Batches**, you will have **all** the ponds selected. If you **filter** a subset of the ponds before clicking the **save file button**, you will save only the subset to a DBF file. This process also applies to the **Excel button**, which saves all batches of all selected ponds in an Excel spreadsheet. The **print button** (printer icon) can be used to print a report of the selected ponds — the “**General Pond Report.**” However, you will probably scan it more often on-screen than in print. **Figure 20B** is an excerpt from such a report, which contains all information collected by Fishy for a specific pond.

PondID	Surface	Comment	Food	Spk			
007	16.78	FINGERLING 4/71/99 MILLY EDGE EDGE		7000			
Fiscal Year Fiscal Year Fiscal Year Fiscal Year Fiscal Year Fiscal Year							
Food Fed Fed Food Fed	Use Stocked	Use Stocked	Use Stocked	Use Stocked			
0	0	0	0.0	0.0	0.0		
Stocked Stocked Stocked Harvest Harvest Lost Lost Use Food Current Current Fish Harvest Harvest Harvest							
Date Number	Weight Number	Weight Number	Weight Number	Weight Number	Weight Use Prod Use Prod LBS Prod Date		
0 04/21/99 45827	3499.4	75537 84788.8	0	0.0	33837 45827 81534.0 0.97 45492 104465.1 83/01/00		
0 04/21/99	111634	2618.0	0	0.0	0	0.0	27677 111634 18104.4 0.16 104511 132475.0 83/04/01

Figure 20B. Excerpt from a general pond report.

## Delete a Batch

**Delete a Batch**, the second submenu item under **Pond Management** (Figure 19), brings up a screen similar to **Figure 20**. Locate the pond containing the **batch to be deleted** by scrolling or filtering, click anywhere on the batch row, and click the **exit form button** (file folder). The screen will display a prompt similar to **Figure 21**. Clicking “Yes” will result in the batch being deleted, but clicking “No” will cause the batch to be retained. As stated previously, the **Delete a Batch** function should be used for this purpose, rather than **View/Add/Edit/Delete Ponds and/or Batches**.



Figure 21. Example decision prompt for deleting a batch of fish.

## Harvest a Pond

*Harvest a Pond*, the third sub-menu item under *Pond Management* (Figure 19), brings up a screen similar to **Figure 22**. As the title of the screen indicates, scroll or filter to select the pond to harvest, click the desired batch to harvest fish from, and click the **“Harvest this Batch”** button. Once the batch is selected, a screen similar to **Figure 23** will appear.

When this screen comes up, the “grayed-out” areas such as pond and batch to be harvested are choices and information that have already been defined and are shown for information only. You can perform several functions at this screen: (1) change the harvest date, (2) harvest all or part of the batch, (3) specify the pounds harvested if a partial harvest was chosen, (4) optionally set the average fish size harvested, and (5) specify the number harvested. When a “pounds harvested” value is defined, the number harvested is estimated. If you define the average fish size, this can change the estimated number of fish harvested. **It is important to complete the pounds harvested field before entering average fish size or number harvested.** If you specify that the **entire** batch has been harvested, Fishy 2002 will “harvest” exactly the pounds and number that you specify, whether you harvest more fish or less fish than Fishy records show. Therefore, if the entire batch has been harvested, click **“Harvest the Entire Batch,”** regard-

less of the number and pounds of fish **actually** harvested. The processor field on the form is a “combo box.” The options defined in the combo box are dependent upon the processor names defined as described under *Background Names* (Figure 18). Click the arrow on the right side of the box to view the various options, and select (highlight) the desired option. (**All combo boxes in Fishy work the same way.**) Finally, the hauling fee is a data field that expects the number of dollars. To **update** harvest records with the data entered, click the **exit form button** (file folder); to cancel the harvest, click the **undo button** (blue arrow). **Any time you see these two icons together, the exit form button will be to proceed, and the undo button will be to cancel.**



Figure 22. Example harvesting selection screen.



Figure 23. Example fish harvest summary screen.

## Add/Edit Sales Records After a Harvest

*Add/Edit Sales Records After a Harvest*, the fourth submenu item under *Pond Management* (Figure 19), brings up a screen similar to **Figure 24**. The main purpose of the sales records item is to account for differences between pond-bank fish weight and the fish weight that the fish producer actually ends up selling. Reasons for differences include differences in weight recorded at the pond bank and at the processing plant, differences due to undersized or oversized fish, fish that were dead on arrival, or trash fish. This screen also enables you to record sales information, such as the date that you were paid for your fish. The first fields on the screen (**Figure 24**) are data that were collected at harvest (“Pondid,” “Batch,” “Feedgroup,” “Datesold,” “Feedfed,” etc.). The fields beginning at “Scalediff” may be updated by clicking the **edit button** (grid with pencil). Then, click the **save record button** (diskette) to **apply** the update and the **undo button** (blue arrow) to **cancel** the update. (See “Navigation Buttons” [Figure 6] for a description of the navigation buttons and how they operate.) There

Pondid	Batch	Feedgroup
A04	2	FOOD FISH

Datesold	Feedfed	Medfeeded
04/18/2000	26,000.0	0.0

Ponderweight	Handlines	Scalediff
7,700.0	0.000	0.0

Teasmall	Toobig	Trashfish
0.0	0.0	0.0

Dns	Planteweight	Numsold
0.0	0.0	690

Saleprice	Datepaid	Processor Id
0.000000	//	

Total Payment: 0.00 (click to view)

Figure 24. Example sales records after harvest screen.

are, of course, reports that support sales records after they have been entered. Notice that after you have entered a price per pound for the fish sold, you can click the “total payment” box to view the value of the sale.

## Enter Death Losses

*Enter Death Losses*, the fifth submenu item under *Pond Management* (Figure 19), brings up a screen similar to **Figure 25**. Losses recorded here should be observed losses only. There is a separate item for inventory adjustment losses. As noted in the screen title, you should scroll or filter to find the pond in which fish died, then click the batch number to which the losses are to be applied. It is difficult to ascertain the exact batch to which losses are to be applied, but this is the absolute best time to try to define them. After defining where the losses have occurred, click the **exit form button** (file folder) to record the losses.

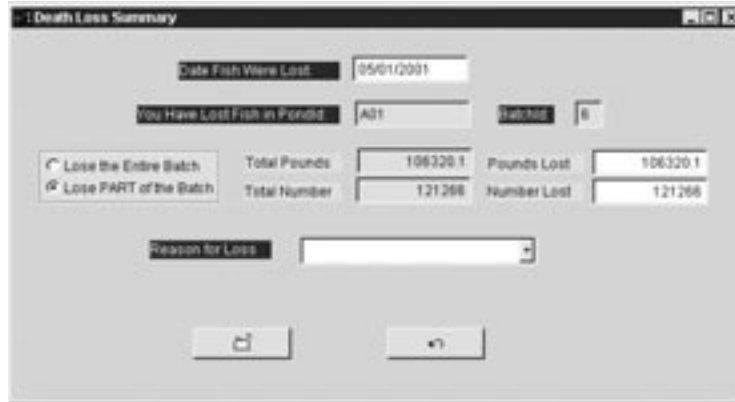
pondid	losses	feedys
A05	35.80	FOOD FISH

comment

Batchid	Stockdate	Stknumber	Stkweight	Nummort	Lbsmort	Cumnum	Cumwt	Fishwt
1	03/24/98	89337	6200.0	0	0.0	89337	55122.8	0.6170
2	04/08/99	107745	33.0	0	0.0	107745	11728.5	0.1088
3	03/20/00	126486	2340.0	0	0.0	126486	2340.0	0.0185

Figure 25. Example death losses pond and batch selection screen.

The screen shown in **Figure 26** will appear at that point. This screen allows you to enter the loss date, to “lose” the entire batch or part of the batch, and to select the reason for the loss from a combo box. Note that as with *Add/Edit Sales Records After a Harvest*, you can “lose” more fish than you “have” in a batch. The options defined in the combo box are dependent upon the mortality reasons defined as described under *Background Names* (Figure 18).

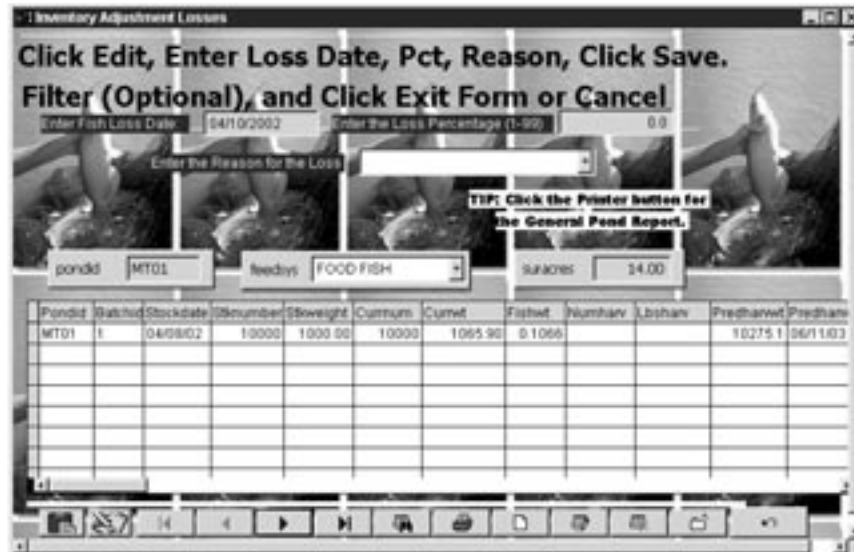


**Figure 26.** Example death loss summary screen.

## Enter Inventory Adjustment Losses

*Enter Inventory Adjustment Losses*, the sixth sub-menu item under *Pond Management* (Figure 19), brings up a screen similar to **Figure 27**. Inventory adjustment losses are fish that were not observed to be lost, but are “losses” that are entered based on past experience of the fish manager. Such losses frequently constitute the majority of fish losses on a fish farm. Notice that losses are applied as a percentage of the current inventory and that a range of ponds can be

selected to apply the losses to. Click the **edit button** (grid with pencil) and update the loss date, percent lost, and reason for loss. Then, click the **save button** (diskette). The reason for such losses is usually “A Adjustment,” but other reasons can be chosen if desired. You may filter ponds to which losses are to be applied by clicking the **filter button** (binoculars icon). Click the **exit form button** (file folder) to apply the losses or the **undo button** (blue arrow) to cancel.



**Figure 27.** Example inventory adjustment losses screen.

## Move Fish from one Pond to Another

*Move Fish from one Pond to Another*, the seventh item under the *Pond Management* submenu (Figure 19), brings up two selection screens similar to **Figure 25**. The first screen selects the **source pond** and batch from which fish are being moved. The second screen selects the **destination pond** and batch (or a new batch can be added for the fish) to which fish are being moved. After the source and destination ponds and batches have been selected, a screen similar to **Figure 28** appears. Notice that the date of the move can be entered, and the desired number of pounds and the number of fish can be defined. Select the appropriate button to decide whether to “Move the Entire Batch” or to “Move PART of the Batch.” If the entire batch is moved, it will be totally removed from the source pond, **regardless** of the number of pounds and fish entered. There is also a check box that will allow you to define a new batch number in which to place the fish in the destination pond. Also note that you can move **more** fish than you “have” in a particular batch. After the move has been completed, **both** the source pond and the destination pond are displayed so that you can observe them after the move has

**Figure 28.** Example move fish summary form.

been made (fish deleted from the source pond and added to the destination pond). Finally, a movement file (movefish) is updated, so that reports of all moves over a user-selected time period can be printed (see *Historical Records Reports* in *Reports* main menu).

## Combine Batches

*Combine Batches*, the eighth item in the *Pond Management* submenu (Figure 19), brings up a screen similar to **Figure 29**. As its name implies, its purpose is to allow you to combine two batches in the same pond into one batch. To use the **Figure 29** screen, scroll or filter to select the pond in which batches are to be combined, and key in the two batchid's that you wish to combine (notice that the two batchid's are separated by a space), then click the **exit form button** (file folder). You will get an “Are you sure?” prompt, after which the batches will be combined. A final screen will appear, showing you the contents of the pond after the batches have been combined.

Batchid	Stockdate	Stockwt	Currtans	Curmt	Fishwt	Predbatchwt	Predbatchid	Usharw	Ushort	Fee
1	03/23/1998	1256.8	86110	12319.0	0.7647	20818.7	08/07/2000	82548	0	0.0215
4	03/23/1998	2339.9	34411	25059.0	0.7282	42745.5	08/15/2000	0	0	0.0180
5	03/23/1998	1459.9	54070	28200.4	0.5216	88982.4	10/02/2000	0	0	0.0153
2	02/28/2000	3686.2	59455	3886.2	0.0620	78468.5	08/24/2001	0	0	0.0
3	02/28/2000	1123.4	15389	1123.4	0.0730	18246.8	08/16/2001	0	0	0.0

**Figure 29.** Example *Combine Batches* screen.



## Drain a Pond

*Drain a Pond*, the ninth item in the *Pond Management* submenu (Figure 19), brings up a screen similar to **Figure 30**.

As its name implies, it is used to “remove all” fish from a pond. When the select screen appears, scroll or filter to select the pond to be drained and click the **exit form button** (file folder). At that point, an additional, smaller window will appear, giving you an opportunity to enter a different drain date than the current date. When this is done, click the **exit form button** on the smaller window. You will see an “Are you sure?” prompt. If your answer is “Yes” to the prompt, the pond will be drained in

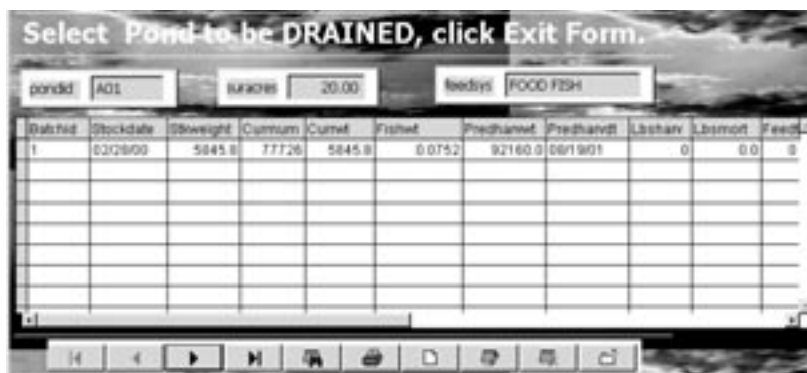


Figure 30. Example screen to drain a pond.

Fishy records. **If you plan to delete a pond in Fishy, drain it first, to remove all entries from the Batches table.**

## View/Print Pondids

*View/Print Pondids*, the last item in the *Pond Management* submenu (Figure 19), enables the Fishy 2002 user to view all the pondid’s in an oper-

ation (usually on one screen) and/or print a one-page report of all the pondid’s. This concludes *Pond Management* menu explanations.

## FEEDING OPERATIONS

The third Fishy 2002 Main Menu item is *Feeding Operations* (**Figure 31**). *Feeding Operations* includes four submenu items: (1) *Create a Weekly Feed Schedule*; (2) *Feed One*,

*All or a Range of Ponds*; (3) *Buy Loads of Feed*; and (4) *Print Extra Copies of the Last Feeding Reports*.

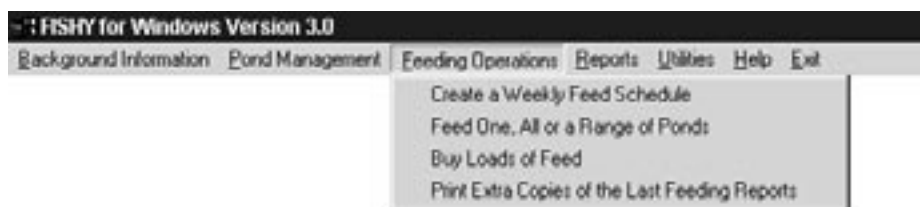


Figure 31. *Feeding Operations* Main Menu item.

## Create a Weekly Feed Schedule

*Create a Weekly Feed Schedule*, the first submenu item under *Feeding Operations* (Figure 31), brings up a screen similar to **Figure 32**. Notice that the feeding schedule reporting date can be changed with this form. Also, if you want to override the feeding calendar (which is usually done when a week of pretty weather has been predicted), you can click the override check box. If you check this box, the grayed-out override rate data entry “window” will turn white, allowing you to enter an override feeding rate (1-100). After completing this form, click the **exit form button** to continue. At that point, a selection screen similar to **Figure 33** will appear. Click **exit form** to select **all of the ponds** for the feeding report, or click the **filter button** (binoculars) to select a subset of ponds, then click the **exit form button**. At that point, a report similar to **Figure 34** will appear. The number shown after “Calendar:” is percent of full feeding as extracted from the fish feeding calendar. Notice the printing toolbar, which enables you to print the entire report, to view but not print the report, or to print selected pages of the report.

The screenshot shows a window titled "Form1" with the following elements:

- Text: "Enter Beginning Date of Weekly Feeding Period"
- Text input field: "05/01/2001"
- Text: "Check here to OVERRIDE the Weekly Feeding Calendar"
- Text: "Enter OVERRIDE Rate: [ ]"
- Button: "Exit Form" (represented by a square icon)

**Figure 32. Weekly feeding schedule date and override form.**

The screenshot shows a window titled "Feeding" with the following elements:

- Text: "Select Ponds for Feeding Report; click Exit Form"
- Text input fields: "pondid: A01", "lbrack: 20.00", "feedst: FOOD FISH"
- Table with columns: "Batchid", "Stockdate", "Stweight", "Curmm", "Curwt", "Fishwt", "Predharwt", "Predhandt", "Lbshar", "Lbsmot", "Fe"
- Table row 1: "1", "02/28/00", "5845.8", "77728", "5845.8", "0.0752", "82160.0", "581901", "0", "8.0"
- Toolbar at the bottom with various navigation and action icons.

**Figure 33. Feeding schedule pond selection screen.**

Estimated Feed Needs Report		Week Beginning on: 05/01/2001								
BAJA		Calendar: 50.00								
Pond ID	Acres	Lbs/Day	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Totals
A01	29	109								
A02	19	765								
A03	21	1187								
A04	19	1006								
A05	17	742								
A06	17	851								
B01	9	275								
B01A	9	294								
B02	16	1093								
B03	18	1078								

**Figure 34. Example recommended feeding report.**

## Feed One, All, or a Range of Ponds

*Feed One, All, or a Range of Ponds*, the second submenu item under *Feeding Operations* (Figure 31), brings up a screen similar to **Figure 35**. If you select a **check box**, that operation (“default days,” “medicated feed,” “daily feeding,” etc.) **will be done**. Click the **exit form button** to feed the fish, or the **undo button** to cancel. If you click **exit form**, a selection screen similar to **Figure 33** will appear. Then, you can click the **exit form button** to select **all** the ponds, click the **find button** (binoculars) to select a subset of the ponds, or click the “X” in the upper right-hand corner to cancel.

When you click **exit form**, if you “checked” the daily feeding check box in Figure 35, a **daily feeding** screen similar to **Figure 36** will appear. This screen is used for entry of each day’s feeding. After all daily feedings have been entered for each pond, you can create a summary report (with both day and pond totals) by clicking the **printer button** at the bottom of the form. Click the **undo button** to cancel the feeding operation, or click the **exit form button** to continue.

If the undo button was not checked, you will see **Figure 37**. If daily feeding data were entered in Figure

Figure 35. Feeding setup screen.

Ponds	Tue 04/09	Wed 04/10	Thu 04/11	Fri 04/12	Sat 04/13	Sun 04/14	Mon 04/15	Totals
IL22	0	0	0	0	0	0	0	0
IL23	0	0	0	0	0	0	0	0
IL24	0	0	0	0	0	0	0	0
IL25	0	0	0	0	0	0	0	0
IL26	0	0	0	0	0	0	0	0
IL27	0	0	0	0	0	0	0	0
IL28	0	0	0	0	0	0	0	0
IL29	0	0	0	0	0	0	0	0
IL30	0	0	0	0	0	0	0	0
IL31	0	0	0	0	0	0	0	0
IL32	0	0	0	0	0	0	0	0
KR01A	0	0	0	0	0	0	0	0
KR01B	0	0	0	0	0	0	0	0
KR02A	0	0	0	0	0	0	0	0
KR02B	0	0	0	0	0	0	0	0
KR03A	0	0	0	0	0	0	0	0
KR03B	0	0	0	0	0	0	0	0

Figure 36. Example Daily Feeding Screen.

36, the “feedfed” field in Figure 37 will contain the sum of the daily feedings entered in Figure 36. If the daily feeding data entry screen was not used, the “feedfed” field will be blank. In either case, weekly feeding data can be entered or updated in Figure 37. Also, if medicated feed was checked in Figure 35, a column for entering weekly medicated feed is provided.

Note the grayed-in analysis date and calendar percentage — provided for information only — followed by the grid of pondid, acres, feeding system, feed recommended (usually for one week), feed fed (the main thing you enter if Figure 36 was not used), the medicated feed fed, and the feeding days (this week) for each pond. After entering all feeding data, you can scroll forward and backward to check your work, and click **exit form** to apply the feed fed to your ponds, or

click the **undo button** to cancel. After you have completed the feeding of the fish, up to three feeding reports will be created. An example feeding report is shown in **Figure 38**.

In addition to the report shown, two other reports are available. One of them is very similar to the report in **Figure 38**, except that it is sorted into descending order by percent of fish body weight fed per day. The other report groups the ponds fed by feeding system used, such as food fish, fingerling, or brood. Averages for the feeding system report are computed by feeding groups. Either (or both) of these reports can be selected via the check boxes on the screen shown in **Figure 35**. **Note that multiple copies of all reports are available on the printing toolbar on each report.**

Pondid	Suracres	Feedings	Feeder	Feedfed	Medifed	Daysfed
A01	20.00	FOOD FISH	450.64			6
A02	19.20	FOOD FISH	4588.57			6
A03	20.60	FOOD FISH	7122.87			6
A04	19.40	FOOD FISH	6033.06			6
A05	16.80	FOOD FISH	4454.61			6
A06	16.80	FOOD FISH	5188.60			6
B01	9.00	FOOD FISH	1647.80			6
B01A	8.70	FOOD FISH	1763.15			6
B02	16.70	FOOD FISH	6955.49			6

Figure 37. Excerpt from a fish feeding form.

Pond ID	No. of Batches	Number Acres	Number Fish	Pounds Fish	Pounds Feed Fed	Days Fed	Avg Lbs /Day	Avg Lbs /Acres/Day	% BW Fed/Day
A01	1	20.0	77726				115.7	5.8	1.06
A02	5	19.2	179435				787.3	41.0	1.09
A03	4	20.6	385761	97288	7408	6	1234.7	59.9	1.27
A04	6	19.4	349304	93622	6281	6	1046.8	54.0	1.12
A05	4	16.8	322356	53147	4642	6	773.7	46.1	1.46
A06	3	16.8	323568	71513	5303	6	883.8	52.6	1.24
<b>Totals</b>		<b>117.00</b>	<b>1638150</b>	<b>394123</b>	<b>29052</b>	<b>36</b>			
<b>Avg</b>		<b>18.80</b>	<b>273025</b>	<b>63687</b>	<b>4842</b>	<b>6</b>	<b>807.0</b>	<b>42.9</b>	<b>1.23</b>

Figure 38. Excerpt from a Fishy 2002 weekly feeding report.

## Buy Loads of Feed

*Buy Loads of Feed*, the third sub-menu item under *Feeding Operations* (Figure 31), is a screen similar to **Figure 39**. This screen is used to enter loads of feed as they are purchased. Data entered are date feed was purchased, tons of feed purchased, price per ton, producer from whom feed was purchased (a combo box), and type of feed (**R** = regular, and **M** = medicated). It is necessary to enter all the above data to track feed use. The “tons fed” and “last date fed” are filled in by Fishy as the feed is consumed. The “oldest” load(s) of feed are “fed” by Fishy first during feeding operations. The “feed available” fields are updated as feed is fed to your ponds. To “buy” a new load of feed, click the **new record button** (blank sheet). When you click this button, a smaller prompt window appears, asking whether you want to add a new record to the parent table. Always respond with “**Yes**” to the prompt, because you are always adding to the parent table. After you respond, Fishy adds a blank load to the table. Enter the date purchased (use leading zeros with single digit months or days), tons purchased, price, and feed type (**R** or **M**), then click the **save record button** (diskette) to save the new load, or click the **undo button** (blue arrow) to cancel. To **edit** existing loads of feed, just click the **edit button** (grid with pencil). When edits are complete, click the **save record button** or the **undo button**. Notice that **all** loads of feed are sorted in **descending** order by date of purchase. That causes the

Date Purch	Tons Purch	Price/Ton	Feed Producer	Feed Type	Tons Fed	Last Fed Date
01/01/2020	0.0000	0.99 0	Z	0.0000	04/03/2002	
04/11/2002	5.0000	356.00	PR Producers Feed	M	ff	
04/10/2002	30.0000	190.00	CW Delta Western	R	ff	

**Figure 39.** Example *Buy Loads of Feed* screen.

last load(s) of feed bought to appear **first** in the table. Click **exit form** after entering the new load of feed.

When *Print Extra Copies of the Last Feeding Report* (sub-menu item four under *Feeding Operations*) is chosen, the “weekly” feeding report will automatically be queued to the printer for preview or printing. You will also be prompted to print the optional feeding reports, which are the weekly feeding reports sorted in descending order by percent of body weight fed, and a report that groups the ponds fed by feeding groups, such as food fish, fingerlings, etc.

**NOTE:** Never, under any circumstances, delete the “Feed Type Z” record.

## REPORTS

The fourth Fishy 2002 Main Menu item is **Reports (Figure 40)**. *Reports* includes eight submenu items: (1) *Grow All Fish to Harvest Size*, (2) *Size Analysis by Ponds*, (3) *Future Harvest*,

(4) *Feed Needs*, (5) *Feed Inventory*, (6) *Fish Production*, (7) *Feed Conversion Ratios*, and (8) *Historical Tables*.

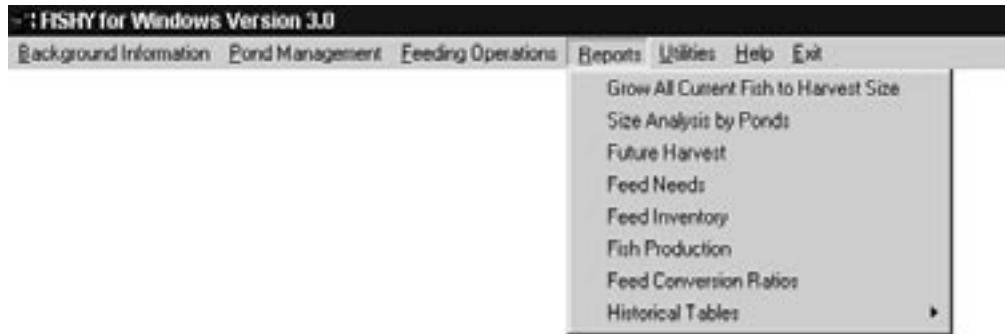


Figure 40. *Reports* submenu.

### **Grow All Current Fish to Harvest Size**

*Grow All Current Fish to Harvest Size*, the first submenu item under *Reports* (Figure 40), should **always** be selected when you begin a reports session. It simulates future harvest dates for all ponds in the operation. When all ponds have been grown to harvest, a screen similar to **Figure 41** will appear. This screen confirms that all ponds have been successfully grown to harvest size.



Figure 41. Simulated fish growth to harvest confirmation.

## Size Analysis by Ponds

*Size Analysis by Ponds*, the second submenu item under *Reports* (Figure 40), is used to produce the size analysis report. This report gives both numbers and pounds for all batches of fish in every pond selected. It also uses the fish size classes that are defined in the *current* size class table as shown in *Fish Sizes for Feeding Systems* under *Background Information* (Figure 12). If you choose a different table (you can have up to three different tables), your size class report will change. As soon as a size class report is chosen, a report selection screen similar to Figure 42 will appear.

To do a size analysis report for all the ponds, click the **print button** (printer icon). To select a subset of the ponds, click the **filter button** (binoculars), select the ponds you wish to include in the report, and click the **print button**. You will then notice the small prompt screen to overwrite temppond. **You do want to overwrite temppond. There are several such prompts in Fishy 2002. Usually, you should overwrite the temporary file, because the report will go there.** At that point, you will notice the size analysis report in preview mode, similar to Figure 43.

Pondid	Batchid	Stockdate	Stocknumber	Stockweight	Cumsum	Cumwt	Number	Lbshar	Predharwt	Predhandt	Predhar
E01	2	05/28/98	17289	434.8	24027	31004.3	45210	74770	31004.3	05/03/01	24027
E01	3	07/09/99	48919	7487.9	46535	40936.3	0	0	56843.5	06/30/01	45221
E01	4	09/17/99	12352	2099.8	10509	5751.9	0	0	12451.7	08/20/01	9958
E01	5	02/07/00	31103	1437.0	29875	3780.4	0	0	31675.8	04/09/02	25244

Figure 42. Example size class report selection screen.

Notice the scrolling arrows (top, bottom, left, and right) for viewing a large report. The size analysis report organizes all fish-specific information by feeding system. This report describes two fingerling ponds and their totals, followed by food fish ponds. Because this example report is lengthy — for operations of around 50 ponds, the report would be up to five pages — **Figure 44** skips to the end of the report. This excerpt from the report begins with numbers of fish by feeding

group and switches to pounds of fish by group at the end.

Notice that when you return from the print preview of the report or print the report, control returns to the **Figure 42** selection screen. That allows you to scroll through the ponds more or even filter out a different group of ponds and print another size analysis report. Terminate the screen by clicking the **exit form button** (file folder).

Pond Batch	Id	Date	Stocking Head	Stocking Pounds	Current Pounds	Surface Lbs/Fish	Surface Acres	Per Acre Head	Per Acre Pounds	Lost	Total
<<< Feeding System: BROOD FISH Feed Limit: 100.00 Harvest Size: 5.00 Pounds Per Fish											
BROOD FISH Totals			0	0	0	0.000	0.0	0	0	0	0
<<< Feeding System: FINGERLING Feed Limit: 100.00 Harvest Size: 250.00 Pounds Per 1000											
F1	1	01/19/00	208172	3179	193985	10736	55.344	3.0	64662	3579	562 218
F2	1	01/19/00	295903	4518	273562	9987	35.979	6.0	46260	1664	609 248
FINGERLING Totals			504075	7697	471547	20722	43.946	9.0	52394	2302	1172 466
<<< Feeding System: FOOD FISH Feed Limit: 100.00 Harvest Size: 1.25 Pounds Per Fish											
E01	2	05/28/98	17399	435	24027	31084	1.290	10.0	2403	3100	1915 1683
E01	3	07/09/99	49919	7488	46535	48936	0.880	10.0	4654	4094	1889 692
E01	4	09/17/99	12352	2100	10509	5752	0.547	10.0	1051	575	426 78
E01	5	02/07/00	31103	1437	29075	3780	0.127	10.0	2908	378	88 39
E01	*		110773	11459	110946	81473	0.734	10.0	11095	8147	4309 2486
E02	2	03/28/98	33921	848	30642	49721	1.623	10.0	3064	4972	2255 2069

Figure 43. Excerpt from the beginning of a size analysis report.

Ponds Which Contain No Fish

E13 12.0

Total Empty Acres 12.0

Size Analysis Matrix. All Headings are Lbs Per Fish, Except FINGERLING, Which are Lbs Per 1000

Current Numbers

	< 1.00	1.00- 2.00	2.00- 3.00	3.00- 4.00	4.00- 5.00	5.00- 8.00
BROOD FISH	0	0	0	0	0	0

Current Pounds

	< 1.00	1.00- 2.00	2.00- 3.00	3.00- 4.00	4.00- 5.00	5.00- 8.00
BROOD FISH	0	0	0	0	0	0

Figure 44. Excerpt from the end of a size analysis report.



## Future Harvest

*Future Harvest*, the third submenu item under *Reports* (Figure 40), is the next report discussed. The selection menu before and after the report is almost the same as the size analysis report. An example future harvest report is shown in Figure 45. Notice that this report is too wide to fit on a screen. It, like most Fishy 2002 reports, is printed in landscape format, which allows the report to be printed on 8.5 x 11 paper and present around 140 columns of information. This report is grouped by feeding groups and then grouped in ascending order by harvest date. The advantage of the ordering of information in the report is that you can look at the **nearest to farthest** harvest date

in fingerling ponds, then repeat the process for food fish, brood fish, or stockers, depending on the feeding groups that have been defined for the farm.

Stocking Date	Stocking Number	Stocking Weight	Current Number	Current Weight	Current Fish Size	Predicted Harv No.	Predicted Harv Wt.	Predicted Harv Date	Predicted Fish
<b>FISH Harvest Weight: 5.00</b>									
<b>LINGS Harvest Weight: 0.25</b>									
01/19/00	208172	3170.8	193985	10735.9	0.055	198082	19722.1	06/14/01	0.10
01/19/00	295983	4510.4	277562	9986.5	0.036	278391	27243.5	06/25/01	0.10
	504075	7697.2	471547	20722.4	0.044	468393	46965.6		0.10
<b>ISH Harvest Weight: 1.25</b>									
05/28/98	17399	434.6	24027	31004.3	1.290	24027	31004.3	05/03/01	1.25
05/28/98	33921	848.1	30642	49721.3	1.623	30642	49721.3	05/03/01	1.62
03/22/99	18092	1015.0	17204	20833.4	1.211	17145	21544.3	05/10/01	1.25
07/09/99	48893	7334.0	46493	54734.9	1.177	46218	58002.3	05/15/01	1.25
09/17/99	28146	170.0	1143	1269.2	1.110	1130	1419.4	05/26/01	1.25
07/28/98	49374	3226.2	45390	50842.2	1.103	44855	56242.7	05/27/01	1.25
08/17/98	33386	1990.5	31630	34207.0	1.084	31211	39116.3	05/30/01	1.25

Figure 45. Excerpt from *Future Harvest* report.

## Feed Needs

*Feed Needs*, the fourth submenu item under *Reports* (Figure 40), brings up a setup menu similar to Figure 46. Most report dates in Fishy 2002 are preset to the date the report was done, but you can reset the date if necessary. Next, you can choose to compute feed needs “from analysis date until the end of the fiscal year” or “from analysis date for one full year.” Finally, check boxes offer three report options: (1) week-by-week totals for all ponds selected; (2) totals for the period chosen, for each pond; and (3) pond-by-pond **and** week-by-week, which reports all ponds selected, for all weeks.

To continue with the report, click the **exit form button** (folder). To cancel, click the **undo button**. If you continue with the report, a selection screen similar to Figure 42 will appear. Click the **print button** immediately to report all ponds. Or filter to select the ponds desired and click the print button. At that point,

Figure 46. *Feed Needs* report setup screen.

you will see preview screens for all of the reports selected in the *Feed Needs* setup screen. **Figure 47** contains an excerpt from a week-by-week feed needs report. Notice that the columns of the report are weekly totals for each feeding group defined. This report can be used for booking feed. Reporting different totals for each fish feeding group should make booking different types of feed for different sizes (or even species) of fish feasible.

End Date	BROOD FISH	FINGERLINGS	FOOD FISH	FOOD FISH EX	Totals
05/09/01	0.000	2.280	47.137	0.000	49.418
05/16/01	0.000	2.361	46.585	0.000	48.946
05/23/01	0.000	2.343	45.064	0.000	48.408
05/30/01	0.000	2.754	48.665	0.000	51.419
06/06/01	0.000	3.150	56.744	0.000	59.894
06/13/01	0.000	3.150	60.223	0.000	63.373
06/20/01	0.000	3.150	62.269	0.000	65.419
06/27/01	0.000	3.150	64.821	0.000	67.971
07/04/01	0.000	3.150	64.239	0.000	67.389
07/11/01	0.000	3.150	67.411	0.000	70.561
07/18/01	0.000	3.150	70.381	0.000	73.531
07/25/01	0.000	3.150	68.153	0.000	71.303
08/01/01	0.000	3.150	70.191	0.000	73.341
08/08/01	0.000	3.150	68.978	0.000	72.128

Figure 47. Excerpt from a week-by-week *Feed Needs* report.

## Feed Inventory

*Feed Inventory*, the fifth submenu item under *Reports* (Figure 40), creates a report similar to Figure 48. The purpose of this report is to balance feed purchases against feed actually fed using Fishy. When you change fiscal years shown in the report, you may find it necessary to adjust the feed carryover from the previous year. First, go to the *Feeding Operations* main menu item, then to the *Buy Loads of Feed* submenu item. You will see what the feed carryover is calculated as. **Enter carryover amounts (regular and medicated) into the appropriate cells under the *Operation-Specific Information* submenu item under**

Week that Ends on	Tons Regular Feed Bought	Reg. Feed Avg. Price	Tons Reg. Feed Fed	Reg. Feed Running Tot.	Tons Med. Feed Bought	Med. Feed Avg. Price
04/01/2001	44.000	208.00	10.435	33.565	0.000	0.00
04/08/2001	35.000	205.00	44.343	24.222	0.000	0.00
04/15/2001	36.000	209.00	46.250	13.973	0.000	0.00
04/22/2001	36.000	208.00	45.254	4.718	5.000	356.00
04/29/2001	33.000	204.00	0.000	37.718	4.000	360.00
05/06/2001	70.000	209.34	0.000	107.718	0.000	0.00
<b>Totals</b>	<b>254.000</b>	<b>206.25</b>	<b>146.282</b>	<b>107.718</b>	<b>9.000</b>	<b>357.78</b>

Figure 48. Example *Feed Inventory* report.

**the *Background Information* main menu item.** If there are differences (perhaps due to losses during the winter), they can be accounted for at this time.

## Fish Production

*Fish Production*, the sixth submenu item under *Reports* (Figure 40), creates a report that computes the pounds of fish that each pond actually produced during the production period chosen, usually fiscal year to date. Computing actual fish production is a formidable task, because fish are over-wintered, moved into ponds, moved out of ponds, lost to mortality, and harvested. For these reasons, the Fishy 2002 production report is based on entries in a new background harvest support file. **This report will not be entirely valid until a season of production has been entered into Fishy 2002.** When *Fish Production* is chosen, a pond selection and date range screen will appear (Figure 49). When the **print button** is clicked on the pond selection screen, a fish production report similar to Figure 50 will appear.

Notice that the pounds of fish produced in the example report are negative in some cases. The reason

for this is that Fishy 2002 is not including previous harvests that were done in DOS Fishy. This problem will be automatically corrected when a season's worth of harvest data are collected in Fishy 2002. In the meantime, reports generated in *Historical Databases* (eighth submenu item under *Reports*) can be used instead of the fish production report.

Figure 49. Pond selection and analysis dates for production report.

Fish Production											Wallace E. Kilbreath	
06/07/01											Box 5187	
											MS State	
											MS 39762	
Pond	Batch	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Watt		
Id	Id	Stocked	OverWintered	Harvested	Moved Out	Moved In	Lost	On Hand	Produced	Accr		
E01	2	435	0	0	0	0	0	33172	32737	10		
E01	3	7488	0	0	0	0	0	45004	38316	10		
E01	4	2100	0	0	0	0	0	6642	4543	10		
E01	5	1437	0	0	0	0	0	4998	3561	10		
E01	2	435	0	105774	0	0	1915	0	105339	10		
*		11894	0	105774	0	0	1915	98615	184495	10		
E02	2	848	0	0	0	0	0	52115	51267	10		
E02	3	170	0	0	0	0	0	1392	1222	10		
E02	4	8884	0	0	0	0	0	16496	7613	10		
E02	5	2396	0	0	0	0	0	18383	7987	10		
*		12298	0	0	0	0	0	88386	68089	10		
E03	2	3226	0	0	0	0	0	54791	51365	10		
E03	3	580	0	0	0	0	0	2933	2353	10		
E03	4	2365	0	0	0	0	0	7443	5078	10		
E03	5	3833	0	0	0	0	0	11007	7174	10		
*		10904	0	0	0	0	0	76174	66170	10		

Figure 50. Excerpt from *Fish Production* report.

## Feed Conversion Ratios

*Feed Conversion Ratios*, the seventh submenu item under *Reports* (Figure 40), brings up a screen similar to Figure 51. This report works from a new Fishy 2002 file called "HarvConv." HarvConv contains only entries from complete Fishy 2002 harvests. Only conversion ratios computed from complete harvests should be very reliable.

The Conversion Ratios screen will compute fingerling-to-harvest feed conversion ratios (pounds of feed fed divided by pounds of fish produced) for all ponds harvested in the date range entered, for all ponds in HarvConv, or for a filtered subset of ponds. After entering the desired date range and doing filtering operations, click the **print button** to print the report of conversion ratios. An example conversion ratios report is shown in Figure 52. Notice that the report shows pounds of fish moved in and out of the pond, as well as fish that were lost due to mortality. Conversion ratios computed in this report are **usually higher** than we would use in feed-to-fish flesh growth, even for the **same ponds**. There is a reason for this difference: Fish that die during the production period are **included** in the conversion ratios in Figure

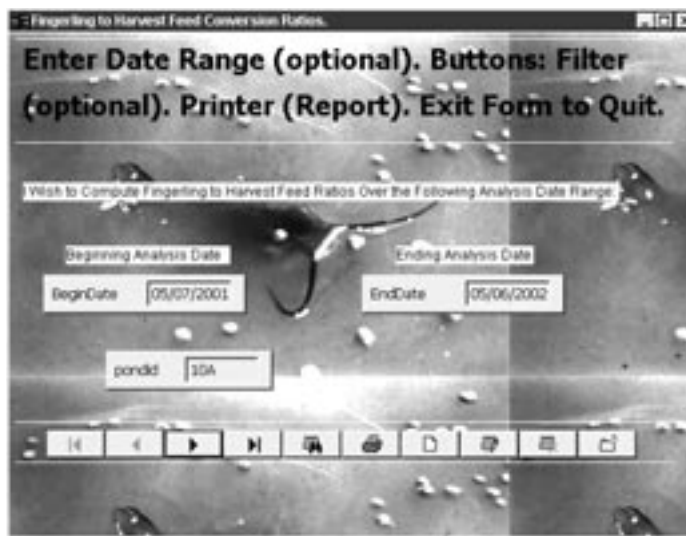


Figure 51. Fingerling-to-harvest feed conversion ratio date and selection screen.

52, but they should **not** be included when predicting how a fish will grow. So, if you have 15% mortality each year, the computed fingerling-to-harvest feed conversion ratios should be roughly 15% higher than ratios used in feed growth forecasting tables.

Complete Batch Fingerling - Harvest Wallace E. Kilcrease									
Feed Ratios. (Harvested, Moved, or Lost)									
05/07/01 MS State MS 39762									
Pond	Batch	Transaction	Lbs Feed	Pounds	Pounds	Pounds	Pounds	Pounds	Feed to Harv
Id	Id	Date	Feed	Stocked	Harvested	Moved Out	Moved In	Lost	est Ratio
E01	2	05/07/01	174755	435	107942	0	0	1915	1.63
E01	3	05/07/01	80725	7488	45804	0	0	1089	2.11
E02	2	05/07/01	215498	848	95310	0	0	2255	2.78
E02	3	05/07/01	2689	170	1392	0	0	2157	2.14
E03	2	05/07/01	351722	3226	161499	0	0	11584	2.72
E04	3	05/07/01	89607	5595	47824	0	0	1552	2.12
E04	7	05/07/01	8541	1950	0	6993	0	111	1.69
E06	3	05/07/01	44871	1015	22490	0	0	672	2.09
Grand Totals			968328	20727	482261	6993	0	22133	2.07

Figure 52. Example feed conversion ratio report.

## Historical Tables

*Historical Tables*, the last submenu item under *Reports*, offers several options: *Feed Fed*, *General Fish Harvest*, *Fish Lost*, *Fish Movements*, and *Pond Chronological History* (Figure 53). When doing historical record keeping, Fishy is an **event-oriented** program. That is, it records events related to fish stocking, feeding, moving, mortality, and harvesting. These events are recorded in files.

There are three types of *General Fish Harvest* reports: *Harvest Summarized by Ponds*, *Harvest Summarized by Processor*, and *General Harvest Reports*. Each of these reports derives information from the **harvest** table, which is updated each time a batch of fish is harvested.

*Fish Lost* offers two types of reports: *Losses by Death Reason and Pondid* and *Losses Sorted via Filter*.

Notice that historical tables report feed fed, fish harvested, fish lost, fish movements, and pond chronological history. There are multiple tables in reporting harvesting and mortality events. Also, filtering

operations in the “general” event-oriented reports each allow several sorting orders. Feed fed table entries are made for each fed pond in your operation, on each date that your fish are fed. Harvest table entries are made for each pond harvested, on each date that fish are harvested. Entries in the mortality table are made for each pond, on each date that mortalities occur. The fish movement table is updated for each relevant pond (source and destination) and date combination as fish are moved. The pond chronological history report is a pond-defined, date-sequenced report of **all** events (stocking, feeding, harvests, and movements), useful for “problem” ponds.

**NOTE:** Data tables that support *Historical Tables* reports now support multiple years of information. Choose appropriate date ranges to report information from as many years as you have included in your records. There is a *Utilities* item to purge records entered before a date that you specify.

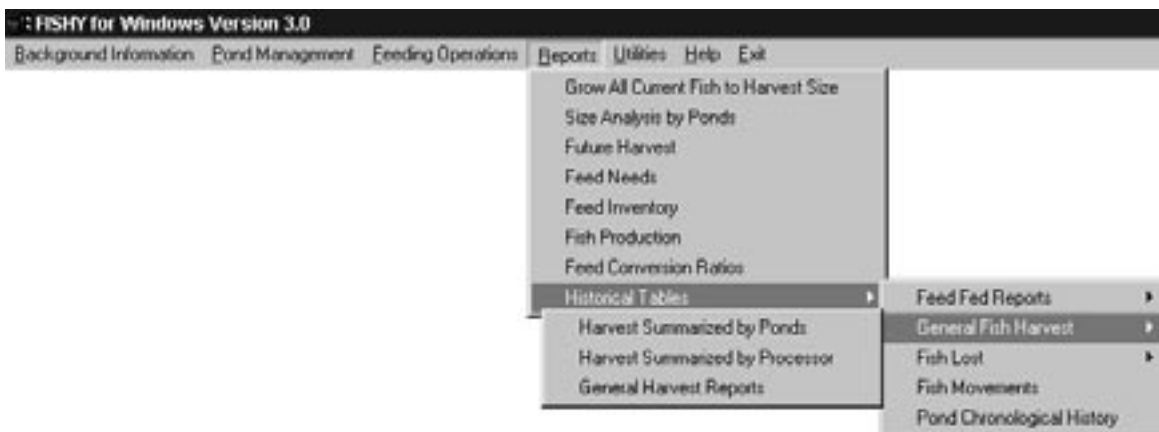


Figure 53. *Historical Tables* submenu.

## Feed Fed

When *Feed Fed*, the first option under *Historical Tables*, is selected, it displays a screen similar to **Figure 54**. After filtering feed fed data to select the information to include in the report, click the **printer button** to print the report. An example feed fed report is shown in **Figure 55**. This report is sorted by pondid, but it may also be sorted by **date fed** (and pondid's within date fed), by **pondid** (then date fed), or by **pounds of feed fed**. The alternative sorting

orders are available via the filtering button. If you want to report all the ponds in an alternative sorting order, just do a dummy filtering operation such as Pondid > "", which checks to see if **anything** is coded in the pondid field. Of course, there is always at least one digit of information there. If you need to filter anyway, just look for the **order** combo box in the filter dialogue box.

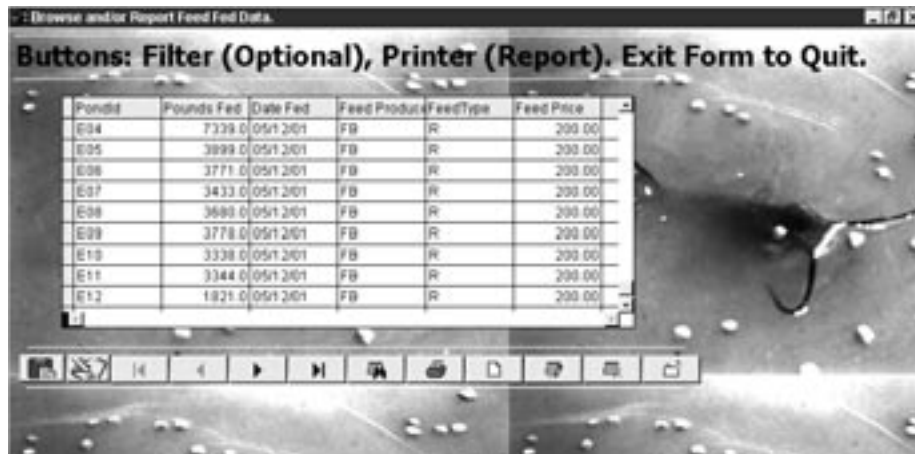


Figure 54. Browse and filtering screen for *Feed Fed* report.

Feed Fed to Ponds by PondId and Date					
05/17/01					
Pondid	Datefed	Lbsfed	Feedprodid	Feedtype	Feedprice
E01	05/12/01	4,388.0	FB	R	200.00
E02	05/12/01	4,081.0	FB	R	200.00
E03	05/12/01	6,016.0	FB	R	200.00
E04	05/12/01	7,339.0	FB	R	200.00
E05	05/12/01	3,899.0	FB	R	200.00
E06	05/12/01	3,771.0	FB	R	200.00
E07	05/12/01	3,433.0	FB	R	200.00
E08	05/12/01	3,680.0	FB	R	200.00
E09	05/12/01	3,778.0	FB	R	200.00
E10	05/12/01	3,338.0	FB	R	200.00
E11	05/12/01	3,344.0	FB	R	200.00
E12	05/12/01	1,821.0	FB	R	200.00
Total:		49,699.0		Average:	200.00

Figure 55. Example *Feed Fed* report.

## General Fish Harvest

*Harvest Summarized by Ponds* — An example report is shown in **Figure 56**. If sales information has been entered for a pond, it will appear in this report.

*Harvest Summarized by Processor* — This report is similar to the one shown in **Figure 56**, but the focus is on fish sold to a particular processor.

Historical Harvest												
05/17/01												
Print Preview												
100%												
PondID	Batch	ReleaseID	PondWeight	HarvestID	PlantWeight	ProcessorID	SalesPrice	ReleaseID	Total	Today	Scaled	ET
<b>E01</b>												
2		05/17/01	30160.3	23213	30083.3	20	0.76	05/17/01	111	111	55	
Subtotal for E01:			30160.3	23213	30083.3		0.76		111.0	111.0	55.0	
<b>E02</b>												
2		05/17/01	30455.6	30454	30546.6	20	0.71	05/17/01	12	55	19	
Subtotal for E02:			30455.6	30454	30546.6		0.71		12.0	55.0	19.0	
<b>E03</b>												
2		05/17/01	51543.4	45190	51325.4	20	0.73	05/17/01	22	55	0	
Subtotal for E03:			51543.4	45190	51325.4		0.73		22.0	55.0	0.0	
<b>E06</b>												
3		05/17/01	21450.3	16900	21009.3	20	0.72	05/17/01	55	111	30	
Subtotal for E06:			21450.3	16900	21009.3		0.72		55.0	111.0	30.0	
Total:			154610.4	115873	152644.6				200.0	382.0	102.0	
Average SalesPrice:							0.729					

Figure 56. Excerpt from a *Harvest Summarized by Ponds* report.

**General Harvest Reports** — These reports have several sorting orders available. **Figure 57** is a selection screen for the general harvest report, with a filtering dialogue box open. Notice the various sorting orders available for this report. They include date sold in descending order (dtsoldds); date sold, then pondid (saledatp); batchid by pondid (btchpond); and pond weight (pondweit). All sorting

orders mentioned are available via the filter dialogue box as shown in **Figure 57**. An example general harvest report is shown in **Figure 58**. The sorting order chosen for this report is date sold in descending order. It should be noted that the historical harvesting reports show only fish that were harvested. No consideration is given to fish movements, losses, or fish still in a pond.



**Figure 57. Harvest report selection screen with filter dialogue and order combo box open.**

Fish Harvested, with Sales Records											
Pondid	Batch	Datesold	Pondweight	Numsold	Planweight	Processid	Saleprice	Datepaid	Toosmall	Toobig	Scalediff
E01	2	05/22/01	30980	23113	30083	PR	0	05/17/01	111	111	55
E02	2	05/24/01	50455	30454	50146	PR	0	05/17/01	12	55	19
E03	2	05/18/01	51543	45190	51325	PR	0	05/17/01	22	55	0
E06	3	05/17/01	21458	16900	21089	PR	0	05/17/01	55	111	38
Total:			154017	115873	152644				200	332	112

**Figure 58. Excerpt from general harvest report, ordered by date sold (descending).**



## Fish Lost

As with *General Fish Harvest*, there are multiple options under *Fish Lost*, which are offered in a sub-menu. The example report shown in **Figure 59** is for *Losses by Death Reason and Pondid*. Notice that this report has prominent headings to group losses by loss reason. The secondary sorting order is pondid. There is a similar losses report that groups the data by pondid, then loss reasons. This report may be useful at the end of the year, when you may want to look at a particular

pond and get a summary by each reason that fish were lost. **Figure 60** is an example *Losses Sorted via Filter* report. As with feed fed and harvest reports, this report offers several different sorting orders. The report shown is sorted in descending order on the **date** the fish were **lost**. Other sorting orders available via this report include stocking date (stokdate, ascending order) and pondid followed by batchid (pondid).

Death Rsn	Pondid	Batch	Stkdate	Stkwt	Datelest	Headlest	Headweight
	E10	2	09/17/99	5,359.90	05/17/01	300	170.54
	E10	3	02/07/00	2,989.40	05/17/01	574	101.23
	E10	4	05/26/00	849.90	05/17/01	129	14.60
Subtotal for A Adjustments:						9,187	3,549.38
<b>F Columaris</b>							
	E01	5	02/07/00	38.08	05/17/01	790	100.00
	E04	7	02/07/00	204.10	05/22/01	3,718	600.00
Subtotal for F Columaris:						4,508	700.00
<b>H Hamburger Gill</b>							
	E01	3	07/09/99	91.46	05/17/01	200	500.00
	E01	3	07/09/99	185.18	05/17/01	355	1,000.00
	E01	2	05/28/98	6.22	05/17/01	344	444.00
	E01	4	09/17/99	1,231.50	05/19/01	6,102	3,500.00
Subtotal for H Hamburger Gill:						7,001	5,444.00
Total:						20,696	9,693.38

Figure 59. Excerpt from a *Losses by Death Reason and Pondid* report.

Pondid	Batch	Stkdate	Death Rsn	Stkwt	Datelest	Headlest
E09	2	09/17/99	A Adjustments	5359	05/17/01	229
E09	3	02/07/00	A Adjustments	2989	05/17/01	444
E09	4	05/26/00	A Adjustments	849	05/17/01	318
E10	2	09/17/99	A Adjustments	5359	05/17/01	300
E10	3	02/07/00	A Adjustments	2989	05/17/01	574
E10	4	05/26/00	A Adjustments	849	05/17/01	129
E01	4	09/17/99	H Hamburger Gill	1231	05/19/01	6102
E04	7	02/07/00	F Columaris	204	05/22/01	3718
Total:				80,922.68		20,696
Average:				2,380.07		608

Figure 60. Excerpt from a *Losses Sorted via Filter* report.

## Fish Movements

Although there is only one report style under *Fish Movements*, there are several sorting orders available through this report. An excerpt from a fish movement report is shown in **Figure 61**. This report is sorted on source pondid (spondid). Other sorting orders that are

available include movement date in descending order (movedtds), destination pondid (epondid), and pounds moved (lbsmoved). Labels shown in parentheses are the sort keys available in the order combo box in the filter window.

Movedate	Spondid	Sbatched	Epondid	Ebatched	Streams	Sblbs	Lbsmoved	Retained
05/17/01	E01	5	E03	6	21,103	1,437	3,393	28,794
05/17/01	E04	6	E02	6	25,833	1,550	6,582	24,319
05/17/01	W1	2	E15	1	28,500	1,599	18,445	25,459
Total:					95,436	4,586	21,000	79,572

Figure 61. Example fish movement report, sorted on starting pondid.

## UTILITIES

The fifth Fishy 2002 Main Menu item is *Utilities* (**Figure 62**). *Utilities* includes 10 submenu items: (1) *Convert Earlier Fishy Files*, (2) *Remove Deleted Records, Rebuild Tag Indices*, (3) *Initialize for New Year*, (4) *Backup Fishy Tables*, (5) *Restore Fishy*

*Tables from a Backup*, (6) *Change the Name of a Pondid*, (7) *Set Calendar Dates to Current Year*, (8) *Delete Historical Records*, (9) *Edit Historical Tables for Error Correction*, and (10) *About Fishy*.



Figure 62. *Utilities* submenu.

## Convert Earlier Fishy Files

When *Convert Earlier Fishy Files* is chosen, Fishy 2002 assumes that you wish to convert a set of DOS Fishy files to Fishy 2002. When the item is chosen, after an explanation window, a box similar to **Figure 63** will appear.

Fishy 2002 expects the folder or diskette entered to have a **full** complement of saved files from a DOS Fishy operation. It should convert the old operation to Fishy 2002 format in a few seconds. You will likely get some prompts regarding the file format used by DOS fishy. That format is **MS-DOS**. When the conversion is complete, it would be a good idea to check *Background Information* submenu items *Operation-Specific Information*, *Feed Groups for Forecasting Fish Growth*, *Fish Feeding Calendar*, and *Background Names*. Make sure that your farm's information is the way you want it to appear on reports, that the growth parameters are set the way you want them set, that the



**Figure 63.** DOS Fishy diskette or folder entry screen.

dates are up-to-date within your calendar (see the last submenu item under *Utilities* for help on this), and that the producers, processors, and loss codes are all correct. You should now be ready to feed and grow some fish.

## Remove Deleted Records, Rebuild Tag Indices

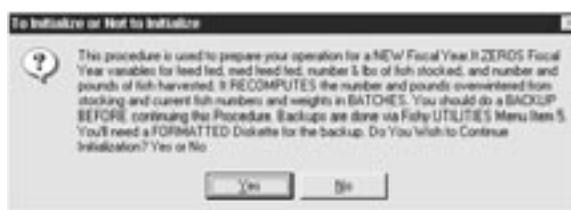
When the *Utilities* submenu item *Remove Deleted Records, Rebuild Tag Indices* is selected, all user-oriented Fishy data files are packed, which means that any records that are flagged for deletion but not physically deleted will be physically removed. Tag indices are used in many of the reports. Rebuilding them is a precautionary measure. **If you are having any problems with index files, it is a good idea to run this menu item.** Also run it **after you delete** ponds or batches. When you run it, you should get an affirmation screen similar to **Figure 64**.



**Figure 64.** Acknowledgement screen for pack and rebuild of CDX index files.

## Initialize for New Year

When the *Utilities* submenu item *Initialize for New Year* is selected, a screen concerning your Fishy calendar date will appear, followed by the screen shown in **Figure 65**. This is an explanation screen telling you exactly what will be done to prepare for a new fiscal year, including zeroing fiscal year variables (feed fed, medicated feed fed, number and pounds of fish stocked, number and pounds harvested) and recomputing overwintered values (stocking and current fish numbers and weights) in the BATCHES table. It also tells you to get a current backup.



**Figure 65.** New year initialization screen.

## Backup Fishy Tables

The *Backup Fishy Tables* submenu item under *Utilities* is designed to back up current Fishy user data files. It **does not** back up the Fishy program and supporting internal files. If you received Fishy 2002 on CD, you have a ready Fishy program backup. If you downloaded Fishy from the Internet, you could download it again in an emergency, or you can save the “zip” file that you download. There are at least two very good reasons to do periodic (weekly during feeding season) backups: (1) in case your hard disk or some other system component fails; and (2) in case Fishy 2002 or the operator does something that is not intended. Each time you exit Fishy 2002, you will get a prompt to do a backup, if you did not do one during the session. The same backup routines are used in both places. When a backup is requested, an explanation screen will appear (if you back up to a folder on your hard drive, the folder **must** exist). This screen is followed by the screen shown in **Figure 66**.



**Figure 66.** Example diskette / folder entry screen for backup and restore activities.

After you enter the diskette or folder address, click the **exit form button** to do the backup, or the **undo button** to cancel the backup. When you do a backup, all Fishy 2002 user data files are **written** to a diskette or to a folder on your hard drive.

## Restore Fishy Tables from a Backup

*Restore Fishy Tables from a Backup*, the fifth submenu item under *Utilities*, is used to read a backup diskette or folder and to **overwrite** information in user-

oriented Fishy tables with the backed up information. The screen shown in **Figure 66** will again appear, but the information will be **read** instead of written.

## Change the Name of a Pondid

The *Utilities* submenu item *Change the Name of a Pondid* will not only change the name of the pondid in the ponds and batches files, but it will also change the name in supporting data files, such as **feedfed**, **movefish**, **harvest**, and **death**, which are the historical tables that support Fishy. When you choose this menu item, the screen shown in **Figure 67** will appear. Notice that the existing pond name to be changed is selected by clicking on a combo box. The new pond name **cannot** be the name of an existing pond. **See the tip on assigning numeric pondid's under “Getting Started.”** Click the **exit form button** to change the pondid selected to the name entered, or click the **undo button** to cancel.



**Figure 67.** Example screen for changing a pond name (pondid).

## Set Calendar Dates to Current Year

When the *Utilities* submenu item *Set Calendar Dates to Current Year* is selected, the information screen and prompt shown in **Figure 68** will appear. Notice that all fiscal year, calendar, and feeding dates for winter can be made current with this menu item. Click “Yes” to make them current and “No” to cancel. The only time that answering “Yes” could be a problem is when you still have some of last year’s data to process.



**Figure 68.** Update calendar information screen and prompt.

## Delete Historical Records

The *Utilities* submenu item *Delete Historical Records* is used to remove records that are considered to be out-of-date in the historical tables that support Fishy events, such as feeding fish (FEEDFED), harvesting fish (HARVEST), losing fish (DEATH), and moving fish (MOVEFISH). When you select this option, a screen similar to **Figure 69** appears. On this screen, click the **exit form** button to continue, or the **undo button** to cancel. If you click exit form, and the date entered in the screen is less than 1 year old, Fishy will give a warning message to give you another chance to back out. If you choose to delete the out-of-date records, Fishy will delete and remove (pack) all the records in the previously mentioned files that are dated earlier than or on the date specified in screen shown in **Figure 69**.



**Figure 69.** Example screen for deleting out-of-date Fishy events data.

## Edit Historical Tables for Error Correction

*Edit Historical Tables for Error Correction* is the ninth submenu item under *Utilities*. This submenu item allows you to update the feed fed, fish

harvested, mortality, and fish movement tables for error correction purposes.

## About Fishy

The *About Fishy* submenu item under *Utilities* is used to define the current version of Fishy. The “System Info” button on this screen will provide technical information about your computer system (Windows version, memory availability, disk space, ect.) An example *About Fishy* screen is shown in **Figure 70**. The bulldog is an added attraction!



**Figure 70.** Example *About Fishy* screen.

# HELP

The sixth Fishy 2002 Main Menu item, *Help*, can be an important tool. When you click *Help*, a topic selection screen similar to **Figure 71** will appear. To select a topic that you need help on, select it, and click the “Help” button at the bottom of the screen. Alternatively, you can double-click the topic that you need help on. When you select a *Help* item, an additional screen similar to **Figure 72** will appear. In some

cases, explanations in *Help* will refer to this bulletin, since it has graphics and the *Help* explanations do not. When you have finished reading a *Help* explanation screen, you can click “Previous” to view the previous screen, “Next” to view the next help explanation screen, or “Topics” to return to the screen shown in **Figure 71**. Click the “X” in the top right corner of either screen to return to the Fishy 2002 menu.



Figure 71. Example help topics screen.

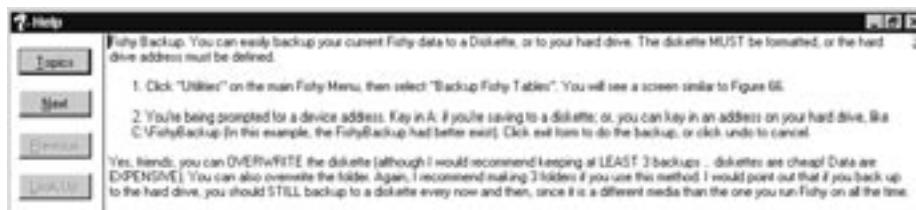


Figure 72. Explanation screen for a help topic.

## EXIT

*Exit* is the final item listed on the Fishy 2002 Main Menu. When *Exit* is clicked, and you have not done a backup in the current session, the prompt screen shown in **Figure 73** will appear. Click “Yes” to do a backup, or “No” to skip the backup. This concludes the Fishy 2002 User’s Guide.



**Figure 73. Exit screen to prompt for a Fishy backup.**

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- (2) **Killcreas, Wallace E.** 1992. Fishy 2.0. A Pond-Oriented Microcomputer Program for Fish Production Management. MSU Department of Agricultural Economics Technical Publication No. 86.
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- (4) **Microsoft Visual FoxPro 7.0.** Copyright @ 1988-2001. Microsoft Corporation.
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