MSU Cattle

A
Windows - Oriented
Computer Program

for **Cattle**
Production Management
and Reports

MSU Cattle:
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PREFACE

The Mississippi State University Cattle Program (MSU Cattle) is designed to provide record keeping and production management data for cattle producers from part-time herdsmen with 30 head of cattle to large commercial operations with thousands of head. It is Windows sensitive and will run on a variety of Windows 95/98 platforms. It was developed in Visual FoxPro version 6.0.

MSU Cattle is the result of hard thinking and hard work by several talented people. I would like to thank all those who contributed to the completion of this project for a job extremely well done. Their important work is much appreciated.

David Laughlin, who is a professor in the MSU Department of Agricultural Economics (Ag Econ) and an economist with the Mississippi Agricultural and Forestry Experiment Station (MAFES), and Sharon Hamlin, who holds a Master's degree in animal science and is a property officer with MSU Receiving and Property Control, prepared a fine cattle computer program and supporting bulletin in 1987 *(1)*. Sharon Hamlin organized most of the meetings for this project and interpreted data from the earlier program and bulletin. Much of MSU Cattle is based on principles developed in that early Basic program. Eddie Cantrell, former MAFES herdsman and former instructor in the MSU Department of Animal and Dairy Science, was of much assistance in the early design of MSU Cattle. Marty Fuller, MAFES assistant director, provided leadership in getting this project under way and help and encouragement during its development. Corey Miller, an Ag Econ graduate assistant, developed the input forms for cows, calves, and stockers, and he assisted in the development of the inventory reports. Corey Miller also provided visual programming expertise in the early phases of the project. Joyce Pace, administrative secretary for the MAFES Prairie Research Unit, provided valuable insights into design features needed in the program. Mike Boyd, professor of animal science and head of MSU's Leveck Animal Research Center, shared his considerable expertise in cattle management and computer program development and had a major impact on the design of MSU Cattle. Amelia Killcreas, student worker and rising junior in the English Department at Millsaps College, is the principal writer of this bulletin. John Johnsey, MSU Ag Econ Network Administrator, took the cattle pictures for MSU Cattle.

Scientists at MAFES branch experiment stations who shared data for this project include Mike Boyd of the MSU Beef Unit; Rick Evans, superintendent of the Prairie Research Unit; David St. Louis, an animal scientist at the South Mississippi Branch Station; and Gregg Smith, superintendent of the Brown Loam Branch Station. Rick Evans helped to educate us on cattle breeds, and he helped us take some great pictures at Prairie. David St. Louis also contributed some great slides.

Mike Boyd, Sharon Hamlin, David St. Louis, Gregg Smith, Rick Evans, Joyce Pace, and Marty Fuller also served as test drivers of MSU Cattle and reviewers of the supporting manuscript. Other test users and reviewers included Charlie Forrest, MSU Extension Service specialist, Ag Econ courtesy professor, and Agribusiness Institute professor; and Tom Jones, Extension and Ag Econ specialist. David St. Louis had some particularly useful suggestions for improving MSU Cattle. Joyce Pace provided some very helpful insights that were implemented during beta testing. Blair McKinley, associate specialist in the MSU Department of Animal and Dairy Science, also contributed some helpful ideas on improving MSU Cattle.

MSU Cattle will be used internally by MAFES as an inventory and management tool. It will be offered to cattle producers in Mississippi and other states as a public domain computer program for use in cattle record keeping and production management. Producers should find it helpful for both purebred and commercial herds. Developers of MSU Cattle hope that it will be an asset to cattle producers for a number of years in the future.

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INTRODUCTION

The MSU Cattle program is helpful in tracking changes and keeping inventory of cattle stock. It can be used to make efficient management decisions to produce healthier and more profitable cattle. In addition, when used consistently, the program can help users keep accurate, up-to-date records for tax and other financial management purposes. MSU Cattle is designed so that its users can enter data for **groups** of cattle whenever practical. It provides comprehensive reports for records as well as for management purposes. All reports can be viewed and/or printed. After an animal's record is entered into MSU Cattle files, it can be automatically moved from event to event (such as calf to stocker, or stocker to breeding herd), or to external media such as spreadsheets seamlessly **without re-entry**.

The program was designed for units of the Mississippi Agricultural and Forestry Experiment Station. However, it can prove useful for any commercial cattleman. The program can be run on any computer that uses Windows95 or higher *(3)*, with minimal disk space required. MSU Cattle was written in a user-friendly computer language called Microsoft Visual FoxPro, version 6.0 *(2)*.

To initially **install** MSU Cattle, you will need a CD-ROM. After the program has been installed, most updates will be distributed on a diskette. Installation and setup are described in the next section of this bulletin.

There are five basic features of the MSU Cattle program: *Records, Events, Reports, Utilities,* and *Help*.

Records are the three current lists of cattle (*Cow & Calf Records*, *Calf Records*, and *Stocker Records*) that are located under *File* (**Figure 1**) in the main menu. They provide a screen for each animal with that animal's basic information (as entered by the user) and are the master files from which all other information is gleaned. MSU Cattle also maintains **historical** files for cattle that have been disposed of. Historical files can be written to external media or reported. Temporary files are user-defined subsets, or **groups***,* of data extracted from master files and used in herd management and reports.

Events are located under *Herd Management* in the main menu and include castrating bull calves, weaning calves, selling calves or stockers, saving bulls or heifers to the breeding herd, transferring held weaned calves to stockers, entering yearling weights and dates, and moving cattle from one pasture to another. Usually used in conjunction with the *Filter* command on *Records* forms, the *Events* feature enables you to update the status of a group of animals all at once, rather than one at a time. **(see "How Do I Filter Records?" in "Performing Common Functions.")**

Reports, located in the main menu, can be viewed onscreen before printing. Four major types of reports are included: inventories, ID number listings, individual animal records, and reports on groups of cattle defined by the user. In addition, the *Reports* menu item offers you a chance to compute average daily gains (ADGs) and to print forms for use in the field.

Utilities, listed by name in the main menu, provide a way for you to add to or alter program operations. For example, in this section, you can change the farm name and address that will appear on all reports, add options to the pull-down menus in most combo boxes, enter a valuation method to be used in inventory reports, or delete old records. *Utilities* offers quick and easy backup and restore menu items to add a measure of security to the record keeping function.

Help lists the four basic features mentioned above (in order), with sub-features as necessary. For a quick "take" on a particular topic, just double-click on it to view the information on-line.

INSTALLATION AND SETUP

The purpose of installation is to get all Visual FoxPro supporting files installed on your computer, along with the latest version of MSU Cattle. Since these files are large, they are installed from CD-ROM. **Note:** If you are installing MSU Cattle from CD-ROM, and an earlier version of the program was previously installed, **delete the old CATTLE2000 directory before installing the new version.**

Subsequent program updates can be done from diskettes. **Diskette (update) Installation Procedure:**

(1) Insert the diskette into the diskette drive; **(2)** Copy all files from the update diskette into the CATTLE2000 folder/directory. It **is** necessary to overwrite some files in this operation.

For best results when using MSU Cattle, **computer screens should be set at 800 x 600** (hit the start button, and go to settings). Use the **taskbar** setting of **"hidden"** when running MSU Cattle. **Nearly all menus have an explanation line that only appears if the taskbar is <u>hidden.</u>**

Here is the CD-ROM installation procedure:

(1) Place the MSU CD in your CD-ROM drive. Allow time for the drive to warm up.

(2) Click your **"Start"** button, highlight **"Run,"** and enter your **CD Device address** (possibly D:\ or E:\). **Click "OK."**

(3) Double click on **"Setup.exe"** (blue screen icon).

(4) Click "OK" on name and organization and confirm name and organization screens. If CATTLE2000 is appropriate for the name of your new cattle folder, click "OK." If not, change it by clicking "CHANGE," and enter a desired folder name. The folder name must be unique on your system. If the folder does not exist, the installation program will create it.

(5) Click the "**LARGE" button** (looks like a computer screen) to begin transferring files. On some systems, it will be necessary to reboot after installing part of MSU Cattle. After the computer restarts, just click on "Setup.exe" (blue screen icon) again. The installation process will begin as before, except this time a **"Reinstall"** option will appear. Select that option, and the installation should complete.

(6) MSU Cattle will display an **"Installation was successful"** message when installation is complete.

RECORDS

MSU Cattle lists animal records by classification: *Calf Records*, including unweaned Steers, Heifers, and Bulls; *Cow & Calf Records*, including Brood Cows and Bulls, plus a listing of and information on all of a cow's offspring; and *Stocker Records,* including Steers, Heifers, and Bulls. Three master files are used for these three listings: *CowMast*, *CalfMast*, and *Stocker*. The *Calf Records* are drawn from the *CalfMast* file, the *Stocker Records* come from *Stocker*, and the *Cow & Calf Records* draw from both *CowMast* and *CalfMast*. In *Calf Records* and *Stocker Records*, every head of cattle is listed in ID number order, with a screen dedicated to the information of each. Bulls in *Cow & Calf Records* are listed similarly; however, cows in *Cow & Calf* records have an additional grid at the bottom of the screen listing all of that cow's offspring along with the full record of each.

Corresponding temporary **group** files (*TempCow* for *CowMast*, *TempCalf* for *CalfMast*, and *TempStocker* for *Stocker*) contain user-selected groups (subsets) of the master files. Group files are used for cattle herd management events and reports.

History files (*CowHist* for *CowMast*, *CalfHist* for *CalfMast*, and *StckHist* for *Stocker*) contain disposed-of cattle. These files are automatically updated by a *Utilities* menu item. Disposed-of cows, calves whose mothers have been disposed-of, and disposed-of stockers make up these files. Records in history files are the **only** records that can be deleted in MSU Cattle, except on a case-by-case basis using the "Delete" icon (button 12, **Figure 2**).

The bottom of each record screen **(Figure 2)** contains 13 icons, called **navigation buttons**. Brief descriptions of a button's function will appear next to the button and in the lower left corner of the screen when the cursor is passed over the navigational icon.

Figure 1. Sample Records Menu (Under *Files* in the Main Menu)

Calf Records

| Dam ID #: | Calf ID #: | Dam Birthdate: | Sex: | Birthdate: | Birth Weight: | Calving Ease: |
| 0511 | 8248 | 10/15/1982 | S | 01/28/1988 | 76 | |

| Sire ID #: | Weaning Date: | Wean Wt: | 205 Wean Wt: | Adj 205 Wean Wt: | Wean Ratio: | Yearling Wt: |
| 208SB | 09/19/1988 | 430 | 545 | 406 | 43 | |

| Yearling Date: | Yearl Adj 365 Wt: | Removal date: | Feeder Grade: | Condition Score: | Breeding Code: |
| / / | | 10/13/1986 | 05Medium 2 | | |

| Disposal Code: | Disposal Date: | Disposal Weight: | Disposal Price: | Dam Weight at Weaning |
| 03Reclassed | 09/19/1988 | 545 | 109.00 | 940 |

1   2   3   4   5   6   7   8   9   10   11   12   13

Figure 2. Sample Calf Records Screen (Button Functions Numbered from Left to Right)

(1) **Transport** – This button, which looks like a clipboard with paper, is used to transfer selected records to a temporary table file within the MSU Cattle program for further manipulation; it is usually used after filtering. This button creates the *tempcalf.dbf* file when used in *Calf Records*, the *tempcow.dbf* file when used in *Cow & Calf Records*, and the *tempstocker.dbf* file when used in *Stocker Records* **(see "Events" and "Reports")**.

(2) **Excel** – This button, which is the Microsoft Excel icon, is used to export selected records to an Excel spreadsheet called *temp.xls*; it is usually used after filtering **(see "How Do I Create a Spreadsheet?")**.

(3) **Browse** – This button, which looks like a table of data, is used to browse records. It produces a more compact listing of information.

(4) **Home** – This button, which looks like a line with a left arrow, is used to return to the first screen of the listing.

(5) **Back** – This button, which looks like a left arrow, is used to go back one screen.

(6) **Forward** – This button, which looks like a right arrow, is used to go forward one screen.

(7) **End** – This button, which looks like a line with a right arrow, is used to advance to the last record

(8) **Filter** – This button, which looks like a table with binoculars, is used to "filter" data. It is helpful in isolating a particular animal or group of animals **(see "How Do I Filter Records?")**.

(9) **Print** – This button, which looks like a printer, is used to print selected data.

(10) New Record – This button, which looks like a blank page, is used to add the record of a newly acquired animal. This icon changes its look and meaning when the program is in *Edit* mode **(see "How Do I Change a Record?")**.

(11) Edit – This button, which looks like a table with pencil, is used to edit the record of the selected animal. It will change look and meaning when the program is in *Edit* mode **(see "How Do I Change a Record?")**.

(12) Delete – This button, which looks like a table with a red "X," is used to delete the record of a selected animal.

(13) OK – This button, which looks like a folder, is used to save changes and exit the record form. It is the **only** way to exit a record form.

Required Record Information. Each set of records requires different information to compile *COWMAST.dbf*, *CALFMAST.dbf*, and *STOCKER.dbf* records. In the following lists of required fields for these records, asterisks (*****) are used to mark fields that use **"combo boxes."** Combo boxes are used in all reports and in some events. They are similar to "multiple choice" in the same way that text fields could be called "fill-in-the-blank." When the animal's record is opened, combo boxes appear as regular fields with a small black arrow to the right of the blank. When you click on the arrow, a pull-down menu with options for filling in that particular field appears – for example, in *Stocker Records*, the field for *Pure Breeds* offers a pull-down menu with 17 options for filling in the blank (**Figure 3**). Once the pull-down menu appears, click on the appropriate option (for example, you can choose *01Angus*) to fill in the blank for that field. Options can be added to most combo boxes by choosing *Edit Code Names* from *Utilities* in the main menu **(see "How Do I Add Options to Combo Boxes?")**.
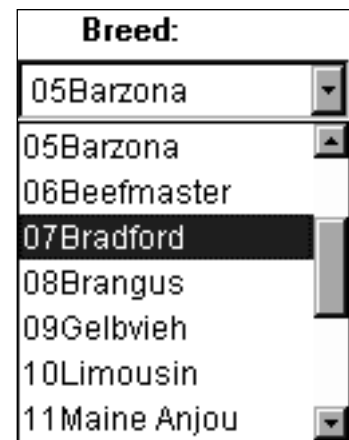
Figure 3. Sample Combo Box

Information Requested for Master Cow Records:
- **ID#** – the animal's unique identification number.
- **Sex** – the animal's sex (Cow or Bull).
- **Pure Breeds *** – the animal's breed type if a purebred; this field is a combo box with 17 options.
- **Crosses** – the animal's breed type if a hybrid; this field is user-defined.
- **Birth Date** – the date the animal was born.
- **Acquisition Date** – if purchased, the date that the animal was bought; if born into the herd, the date that the animal was transferred to the breeding herd.
- **Acquisition Code *** – method by which the cow or bull came to be part of the breeding herd.
- **Herd Entry Date** – same as **"Acquisition Date"** above; change it if animal is internally transferred to another herd.
- **Acquisition Cost** – amount paid, if purchased.
- **Temperament *** – assessment of cow's typical behavior.
- **Sire ID #** – father's ID number.
- **Dam ID #** – mother's ID number.

- **Breeding Status** * – whether cow is pregnant.
- **Breeding Weight** – weight of cow at time of breeding, if pregnant.
- **Breeding Date** – date of breeding, if pregnant.
- **Disposal Code** * – how/why animal exited breeding herd.
- **Disposal Date** – date of animal's disposal.
- **Disposal Value** – if sold, animal's cost.
- **Last Condition Score** – assessment of cow's body condition at last calf's weaning; 1-9 scale (1 = emaciated, 9 = obese).
- **Udder Score** – cow's udder score; 1-5 scale (1 = best, 5 = worst).
- **Under Line Score** – cow's underline score; 1-5 scale (1 = best, 5 = worst).
- **Herd #** – animal's herd number.
- **Pasture** * – name of animal's current pasture.

Information Requested in Master Calf Records:

- **Dam ID #** – calf's mother's ID number.
- **Calf ID #** – calf's unique ID number.
- **Dam Birth Date** – date of birth of calf's mother.
- **Sex** – calf's sex (Steer, Heifer, or Bull).
- **Birth Date** – calf's date of birth.
- **Birth Weight** – calf's weight at birth.
- **Calving Ease** * – ease or difficulty with which calf was delivered.
- **Sire ID #** – ID number of calf's father.
- **Weaning Date** – date calf was weaned.
- **205-Day Weaning Weight** – calf's weight at 205 days old (computed).
- **Adjusted 205-day Weaning Weight** – calf's weight at 205 days, adjusted for sex and dam's age (computed).
- **Weaning Ratio** – the ratio of the calf's weight at weaning to the dam's weight at weaning (calf's weight/dam's weight, computed).
- **Removal Date** – date that the calf was removed from the dam.
- **Weaning Weight** – calf's weight at the time it was weaned.
- **Feeder Grade** * – USDA Feeder Grade at weaning.
- **Condition Score** – calf's body condition score at time of weaning; 1-9 scale (1 = emaciated, 9 = obese).
- **Breeding Code** * – method by which calf was conceived.
- **Disposal Code** * – how calf disposal occurred (re-classed or otherwise).
- **Disposal Date** – when calf's reclassification or other disposal occurred.
- **Disposal Weight** – calf's weight at disposal.
- **Disposal Price** – if sold, calf's price.
- **Dam Weight at Weaning** – weight of mother at time of calf's weaning.
- **Yearling Weight** – weight of a calf at around 1 year.
- **Yearling Date** – date that yearling weight was recorded.
- **Yearling 365-Day Weight** – yearling weight adjusted to 365 days and for age of dam.
- **Pasture** * – pasture where the calf is currently located.

Information Requested for Master Stocker Records:

- **ID #** – stocker's ID number.
- **Sex** – stocker's sex (<u>H</u>eifer, <u>S</u>teer, or <u>B</u>ull).
- **Birth Date** – date of stocker's birth.
- **Herd #** – stocker's herd number.
- **Pasture *** – name of stocker's pasture.
- **Acquisition Date** – date stocker was acquired (or was re-classed as a stocker, if born into user's farm).
- **Acquisition Weight** – stocker's weight at time it was acquired.
- **Acquisition Code *** – how stocker came to be a stocker; re-classed if it was born into the herd.
- **Acquisition Price** – if purchased, price paid for stocker.
- **Pure Breeds *** – the animal's breed type if a purebred; this field is a combo box with 17 options.
- **Crosses** – the animal's breed type if a hybrid; this field is user-defined.
- **Sire ID #** – ID number of stocker's father.
- **Dam ID #** – ID number of stocker's mother.
- **Treatment *** – most recent medical treatment given to the stocker.
- **Treatment Entry Date** – date of most recent medical treatment given.
- **Disposal Code *** – method used to dispose of stocker.
- **Disposal Date** – date that stocker was moved out of stocker herd (usually sold or saved to the breeding herd).
- **Disposal Price** – if sold, stocker's price.
- **Disposal Weight** – weight when stocker is removed from breeding herd.
- **Feeder Grade *** – USDA Feeder Grade when assessed as a stocker (usually at disposal).
- **Condition Score** – score of stocker's body condition; 1-9 scale (1 = emaciated, 9 = obese).

Cow ID	Dam Birth Da	ID #	Birth Date	Se>	Birth Weig	Calving Ea	Sire ID i	Weaning D	205-day We
0511	10/15/82	8248	01/28/88	S	76		208SB	09/19/88	545
0511	10/15/82	9208	01/20/89	H	74		624S	09/06/89	592
0511	10/15/82	0695	02/12/90	S	76		2439W	08/28/90	516
0511	10/15/82	1477	02/07/91	S	72		31/7	09/30/91	546
0511	10/15/82	2360	01/27/92	H	78		41UW	08/31/92	504

Figure 4. Sample Grid with Spinners

Navigating Within a Record. There are two other points of interest in some reports: the use of **"grids"** and the use of **"spinners."** **Grids**, located at the bottom of all *Cow & Calf Records* and in many events, list and give information on all of the cow's calves, past and present. **Figure 4** is an example of one such grid. **Spinners** are the gray boxes at the bottom and on the right side of a grid. They slide from side to side or up and down to reveal sections of the grid that do not fit in the space allotted. They can be moved in three ways: (1) by clicking on one of the arrow buttons to move up, down, left, or right; (2) by holding the left mouse button down on the darker gray box while moving it to the desired location; or (3) by clicking in the lighter gray area between the box and the arrow. Spinners operate this way throughout the program.

Moving Records to History Files. Once added, animal records will remain in the MSU Cattle program even after disposal of the animal. Users will find it useful to select *Move Disposed-of Cattle to History Files* under *History File Management*, which is in the *Utilities* main menu item, which **adds** all disposed-of cows and stockers (as well as calves with disposed-of mothers) to history files. Animals that are added to history files are **removed** from the corresponding master files.

Exiting Records and MSU Cattle. As mentioned, the only way to **exit** a records form is to click on the "OK" icon (button 13, **Figure 2**). Note that in records, the "Close" button (the small "x" in the upper-right corner of the form) is gray rather than black. Any "grayed-out" button in this program indicates that option has been disabled.

There are, on the other hand, three ways to **exit** MSU Cattle itself. You can click on *Exit* from either the main menu or the pull-down *File* menu or click on the small "x" button in the upper right corner, which in this case has not been disabled.

Updating Records. MSU Cattle provides a way for you to update a large group of records all at the same time. This feature is called performing an **event** in *Herd Management*. Events occur when you wish to update records after you have castrated, weaned, or sold calves, saved bulls or heifers to the breeding herd, sold stockers, or moved animals from one pasture to another. To perform an event, you start by choosing the appropriate master list from which to filter:

- *Calf Records* to castrate, wean, or sell calves, and to move held weaned calves to stockers;

- *Stocker Records* to sell or move stockers or to save bulls or heifers to the breeding herd, or to record yearling weights; or

- *Cow & Calf Records* to move members of the breeding herd and their current calves to a different pasture.

Next, filter out the group of animal records that need to be changed **(see "How Do I Filter Records?")**. Note that while performing an event, animal ID numbers can be omitted but not added. Therefore, at the filter stage, it is more important to make sure that all necessary animals are included than it is to make sure that no unnecessary animals are added.

Once you are satisfied with the filter, click on the "Transport" icon (button 1, **Figure 2**) to transfer the records. This action will send the filtered records into a temporary file named *TempCow*, *TempStocker*, or *TempCalf*. Two message boxes will appear, one asking whether you want to continue, the other asking whether to overwrite the current temp file. Answering "No" to either of these questions will stop the transport. However, answering "Yes" to both questions will create a temporary file that has only the records you filtered into it. It will also erase any record list that was in the temporary file already; therefore, it is important to use data from temporary files (i.e., filtered and transported information) immediately to avoid writing over the list before the event has been performed or the report has been generated.

After sending the filtered list into a temporary file, you must close the records file by clicking the "OK" icon (button 13, **Figure 2**). Now, you can begin the process of updating the filtered record.

Under *Herd Management* in the main menu, you will find three options: *Calves*, *Stockers*, and *Move Calves or Stockers* (**Figure 5**). Each of these options has a separate submenu. For example, the *Calves* submenu offers the options *Castrate Bull Calves*, *Wean Calves*, *Sell Calves*, and *Transfer Weaned Calves to Stockers*. The *Stockers* submenu features *Save Bull to Breeding Herd*, *Save Heifer to Breeding Herd*, *Sell Stockers*, and *Enter Yearling Data*. The options under *Move Calves or Stockers* include *Move Cows & Current Calves* and *Move Stockers*. Enter each of these events by simply clicking on the desired option of the 10 offered. The example shown in **Figure 6** comes from choosing the *Wean Calves* menu item.

After an option has been selected, a table featuring the ID numbers of the animals that were sent to the temporary group table will appear. At this point, mark the ID numbers of any animals that need to be omitted from the event by clicking in the small white rectangle directly to the left of the ID number field. If the animal is selected for omission in this way, the rectangle will turn black (see **Figure 6**, Cow ID# 4331, for example). To add the animal back in, click the rectangle again before it scrolls off the screen. This time, it should change from black to white.

Figure 5. Sample Herd Management Menu

Also at this point, you may be asked to enter additional data (such as sale prices when selling calves or stockers). Most additional information is optional, except in the case of weaning weights when weaning calves, pasture names when moving animals, and dates in almost all events. Event dates are set by default at the date that the information is entered, but they can be changed by clicking in the date field and entering the appropriate date.

When the event table is complete, click on the "OK" navigation icon (which looks like a file folder) to finalize the event. To quit, click on the "Cancel" button (which looks like an curved arrow) to exit the event without making any changes. It is important to note that this arrow is **not** an "Undo" button; it does **not** reverse the last change, but rather **cancels** the entire event. If you chooses to complete the event by clicking on the "OK" button, all records involved in the event will automatically be updated in *CowMast*, *CalfMast*, or *Stocker*.

If you are weaning calves, a message box will appear when you click the "OK" button. This message box asks whether you want to reclassify the weaned calves and put their records into stockers or to hold the weaned calves to be disposed of (usually sold) later. To reclassify the records, you should answer "Yes" to this message box; to hold the animals, "No."

Figure 6. Sample Wean Calves Table

REPORTS

There are more than 24 different reports available in MSU Cattle. They all fall, however, into one of four categories: *Complete or Group Inventories*, *Cattle ID Numbers*, *Individual Record Reports*, or *User-Defined Groups*. Explanations of each of these items are in menu order.

Complete or Group Inventories provide a way for you to get a printout of the value of either the entire set of *Cows & Calves*, *Herd Bulls*, or *Stocker Calves* or just a group within any of those three classifications. This menu item also offers you a summary inventory report. These inventory reports can be useful for both reporting / taxation and personal records, and you can establish your own method of animal valuation.

Cattle ID Numbers presents five different ways to print ID numbers – two of the methods list only current cattle by pasture, and the other three list all IDs in the **current master tables**. If you are running out of ID numbers, move disposed-of animals to the history file. This step makes no-longer-current IDs available. You can use these reports to keep track of which animals are in which pastures or to see which ID numbers are already in the database when assigning new identification numbers.

Individual Record Reports provide all current records in printable form. Record reports are, like the records themselves, separated into classifications: *Cow and Bull Records*, *Stocker Records*, and *Calf Records*. In addition, *Individual Record Reports* allows you to print code names for convenient reference purposes.

User-Defined Groups are reports that reference information you put into a temporary file (called *tempcow.dbf*, *tempstocker.dbf*, or *tempcalf.dbf*) to produce reports on *Production Evaluation*, *Predicted Calving*, *Disposals*, and *Field Forms*. This menu item also provides a way for you to compute and report average daily gains. These reports can be used to help you make and record managerial decisions.

All reports are automatically generated in *Print Preview* format, which allows you to see the report
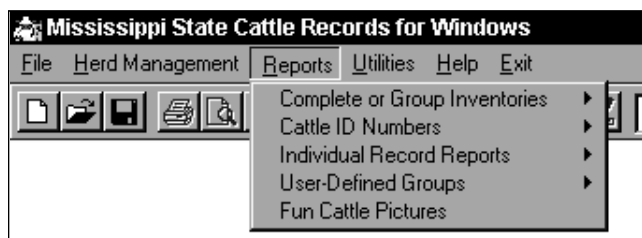
Figure 7. Sample Reports Menu (For Sample Reports, Select Report Wanted and View It.)

before printing it. This feature has an extra toolbar that is used to move around within the report. On this toolbar, left and right arrows are used to move forward or backward by page. The spinners located along the bottom and right sides of the reports also allow you to move around within the same page. Also featured in *Print Preview* is the ability to view the entire page layout simply by clicking on any part of the report itself. To return to the regular view, click again on the report. See **Figure 8** for a production evaluation report in *Print Preview* format.

After viewing the report, you have two options: (1) to look at the report only or (2) to both look at the report and print it. To exit the report form without printing, simply click on the "Close" button (small "x" located in the upper right corner of the report form) to return to the main menu. To print the report, click on the "Print" button (which looks like a printer) in the *Print Preview* toolbar. A screen will appear offering both printer and printing options. At this point, you can choose to print all or part of the report by choosing either the "All" or the "Pages from" option. When this screen is complete, click on "OK" to finalize the decision and send the report to the printer. Clicking "Cancel" will prevent the report from printing.

Note: you may need to click and drag the printing toolbar (see **Figure 8**) to another position before using it, especially if you inadvertently drag it to the upper right-hand corner of the screen.

Sire Id	Cow Id	Cow Cond	Cow Age	Dam Wt.	Bld Scr	Undr Line	Calv Cum.	Inter Last	Number Calves	Calf Id	Calf Sex	Calf Birthday	Calf BW	Wean Date	Wean Wt.	Adj205 Day Wt.	Year ADG
DB642	Average	*	5.1	775			0	0	1				82		390	415	1.363
DB667	5715	4	5.1	825									95	10/17/1997	420	495	1.658
DB667	5143	3	5.1	870			0	0	1	7395	H	05/03/1997	75	10/17/1997	360	479	1.707
DB667	5704	3	5.2	935			0	0	1	7167	H	03/01/1997	90	10/17/1997	410	429	1.391
DB667	5754	3	5.1	800			0	0	1	7366	H	04/02/1997	70	10/17/1997	330	393	1.313
DB667	5410	4	5.1	770			628	628	2	7326	H	03/23/1997	86	10/17/1997	325	376	1.149
DB667	Average	*	5.1	840			628	628	6				83		369	434	1.444
MS	4645	4	5.4	965			0	0	1	7399	S	05/01/1997	72	10/17/1997	325	439	1.497
MS	Average	*	5.4	965			0	0	1				72		325	439	1.497
MSA	3417	5	7.0	994			362	353	5	7390	S	04/17/1997	85	10/14/1997	454	525	2.050
MSA	Average	*	7.0	994			362	353	5				85		454	525	2.050

Print Preview — 100%

Cowcalftab (Main/Cowcalftab)   Record: EOF/495   Record Unlocked

Figure 8. Sample Production Evaluation in Print Preview Format

Complete or Group Inventories

The first type of report is called *Complete or Group Inventories* (**Figure 9**) in the pull-down menu under *Reports*. It provides inventories for *Cows & Calves*, *Herd Bulls*, and *Stocker Calves*, along with a *Summary Inventory Report*.

These reports give you control over two aspects: (1) the valuation method and (2) the animals inventoried. In other words, you have control over how the animals are priced and which animals to include. You make these decisions via message boxes that appear at the beginning of inventory report generation.

In preparing to do an inventory report, choose a valuation method. One way to do this is to choose *Enter*

Average Prices, Weights, and Values from *Utilities* in the main menu. This action will take you to a table with the same name. At the top of the screen, there will be a section labeled *Select Valuation Method*. At this point, you can choose one of two valuation methods, both of which are described at the top of the chart.

Mississippi State Cattle Records for Windows
File   Herd Management   Reports   Utilities   Help   Exit

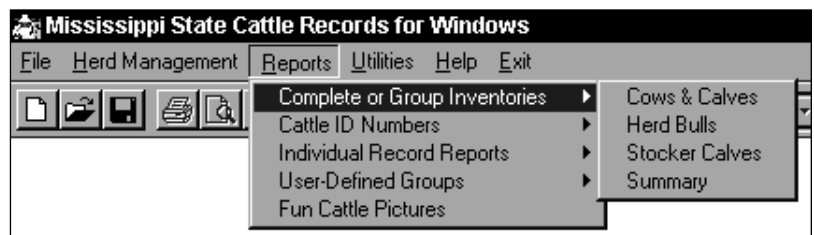| Complete or Group Inventories ▶ | Cows & Calves |
Cattle ID Numbers ▶	Herd Bulls
Individual Record Reports ▶	Stocker Calves
User-Defined Groups ▶	Summary
Fun Cattle Pictures

Figure 9. Sample Complete or Group Inventories Menu

If you select the first of the two options by clicking on the circle to the left of its description, all fields will be enabled **(Figure 10)**. This option allows you the choice of entering either values **or** prices and weights for each type of animal. If the value field is defined, the price and weight fields are ignored. Most users, however, choose to leave the value field blank and enter prices and weights, which are used together (price times weight) to determine animal value. (Note that this calculation is not visible in the value field but is done for the report.) This option allows you to enter prices and weights for some animals but values for others (even within the same report).

The second valuation method allows you to build the report based on **projected**

Figure 10. Sample Valuations Chart (Method 1 Chosen)

jected weights and average prices. There are two major differences between this option and filling in prices and weights in the first option. One difference is that in the second valuation method, values are based on **projected** weights rather than on user-entered weights as in the first option. Also in the second option, all values (with the exception of herd bulls) must be based on the price-times-weight formula – no "filling in" of values is allowed, as it is in the first option. Note that all weight and value fields are disabled (with the exception of herd bulls) in **Figure 11**.

When the second valuation method is used, the prices you entered into the table are combined with a weight projected by the program to obtain each animal's value. The program calculates this weight by first establishing how many days have elapsed since the animal's last weight check. It does this by subtracting the last date the animal was weighed (usually the date of birth or weaning) from the date

of valuation. This is the number of days the animal has grown since it was last weighed. MSU Cattle then multiplies that number of days by the animal's average daily gain to compute the weight gained since the last weigh-in. Weight gained is added to the animal's last known weight (again, usually the weight at birth or weaning) to yield an estimation of the animal's weight at the time of valuation. Because dates are used in this way, **it is imperative** that the *Set Valuation Date* field is set with the appropriate valuation date in order to get the most accurate value for the inventoried animals.

Clearly, to use this method of valuation, you must enter average daily gains (ADGs). ADGs can be obtained from any source. However, MSU Cattle provides an ADG calculation and report for your convenience. To calculate ADGs in MSU Cattle, choose *Compute, Report ADGs* from *User-Defined Groups* under *Reports* in the main menu **(see "How Do I Calculate Average Daily Gains?")**. Once you

have a report of ADGs, enter them via the "Enter ADGs" button (located at the bottom of the valuation table when the second option is on). The small screen that appears **(Figure 12)** provides fields for you to fill in the information obtained in the ADG report.

Once you have filled in these fields, enter them to be used in the valuation table by clicking on the "OK" button (file folder). At this point, you should have entered all necessary information for the chosen valuation method. Enter the valuation table by clicking on the "OK" button. At this point, you have established the values to be used in the inventory report. However, that is only one of the sets of choices that you must make in creating an inventory report.

Now, you must decide

Figure 11. Sample Valuations Chart (Method 2 Chosen)

which animals to include in the report before beginning inventory report generation. You can inventory some or all of the animals in each classification. If you want to inventory all animals in a classification, begin inventory report generation now and skip to the next paragraph. However, to inventory just a group within each classification, filter accordingly **(see "How Do I Filter Records?")** and transfer the filtered records into a temporary table (e.g., *TempCow,*

TempStocker, or TempCalf) by clicking on the "Transport" icon (button 1, **Figure 2**). Note that when you inventory a group within a classification, *Herd Bulls* and *Cows & Calves* inventories use *TempCow* (calves for *TempCow* cows are selected from *CalfMast*), while *Stocker* inventories use *TempStocker*. *Summary Reports* always use all records; in this case, you have no choice. Once the appropriate tables have been established, you are ready to begin inventory report generation.

To begin the process of viewing an inventory report, click on the appropriate report name under *Complete or Group Inventories*. Except in the case of *Herd Bull* inventories, MSU Cattle will first ask whether you have set prices, weights, and values for the inventory at hand. If you answer "Yes," the program assumes that the most recent valuation method chosen is to be used again. In other words, if you followed the instructions for establishing a valuation method, answer "Yes" to this question. If, however, you have not set those values, answer

Figure 12. Sample Set ADGs Chart

"No" and you will be taken to the *Enter Average Prices, Weights, and Values* table. Follow the steps outlined previously to establish these values. If you answer "Yes," another message box will appear (except in the case of summary reports, which will be discussed later).

The second message box concerns the animals to be used in the inventory report. It offers two options: (1) the reports may be based on **all** the records in the database for each classification, **or** (2) they may be based on a **filtered list** of the records within each classification. In essence, MSU Cattle is asking whether to work from a master list (*CowMast* or *Stocker*) or a temporary table (*TempCow* or *TempStocker*). If you answer "Yes" to this message box, the resulting report will include **all of the current records** within that classification (*Cows & Calves*, *Herd Bulls*, or *Stockers*). If you answer "No," the resulting report will include only animals in the temporary table (i.e., the list of animals that you have filtered and placed in *TempCow* or *TempStocker*).

The summary report has a different type of message box. Instead of asking which animals to include in the report, MSU Cattle requests beginning and ending dates for the summary report. By default, the *Ending Analysis Date* is the current date, and the *Beginning Analysis Date* is 90 days before. This default setting assumes that you do inventory on a quarterly system. Once all message boxes have been answered (or dates filled in, in the case of a summary report), the program will automatically show the report in *Print Preview* format.

MAFES users should use pre-established beginning and ending analysis dates.** For MAFES users, beginning and ending dates for tax reports are as follows:

Quarter 1: 01/01/year through 3/31/year.
Quarter 2: 04/01/year through 6/30/year.
Quarter 3: 07/01/year through 09/30/year.
Quarter 4: 10/01/year through 12/31/year.

Cattle ID Numbers

The second type of report listed is called *Cattle ID Numbers* (**Figure 13**). *Cattle ID Numbers* includes four options: *Current Cattle IDs by Pasture*, *Breeding Cattle ID Numbers*, *Calf ID Numbers*, and *Stocker ID Numbers*. Under *Current Cattle IDs by Pasture* is a submenu with *Current Breeding Herd* and *Current Stockers*, which list only those animals without a disposal code or disposal date. In other words, the only animals included in these reports are those that are currently in the herd, according to records. Further, they are sorted by pasture in order to help

you keep track of which animals are in which pastures. The other three reports – *Breeding Cattle ID Numbers*, *Calf ID Numbers*, and *Stocker ID Numbers* – list **all the ID numbers** in the database for each classification. These reports are most useful as a reference to determine which ID numbers are already taken. All of the reports under *Cattle ID Numbers* are automatically generated in print preview format by highlighting and clicking on the desired report name.
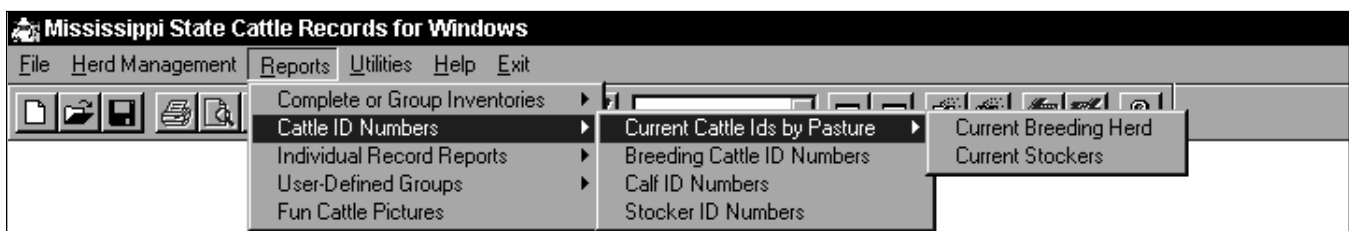

Figure 13. Sample Cattle ID Numbers Menu

Individual Record Reports

The third type of report listed is named *Individual Record Reports* (**Figure 14**). *Individual Record Reports* has a submenu with *Breeding Animal Records*, *Calf Records, Stocker Records*, and other options. These reports list only those animals that are **currently** in the herd (i.e., those animals that do not have a disposal code or date, according to records). Though generally lengthy, these reports present all the information in an animal's record in a printable format.

An option called *Print Code Names* is also included under *Individual Record Reports*. This option allows you to print a list of numeric codes used in the program with their descriptions beside them. Most of these codes and descriptions are used in combo boxes in the records tables. Therefore, this report is probably **most useful as a reference source** when doing **filters** or **entering data.**

Predicted Calving reports depend on two variables: (1) there must be at least one pregnant cow in the *TempCow* file, and (2) there must be a breeding date for the expectant mother. If this information is unavailable, MSU Cattle will display a message box stating the problem, and it will not generate a report. On the other hand, **if both conditions are met**, MSU Cattle will display a report giving the cow's ID number, her predicted calving date (as computed by the program), and other information. This information is sorted in chronological order by expected due dates.
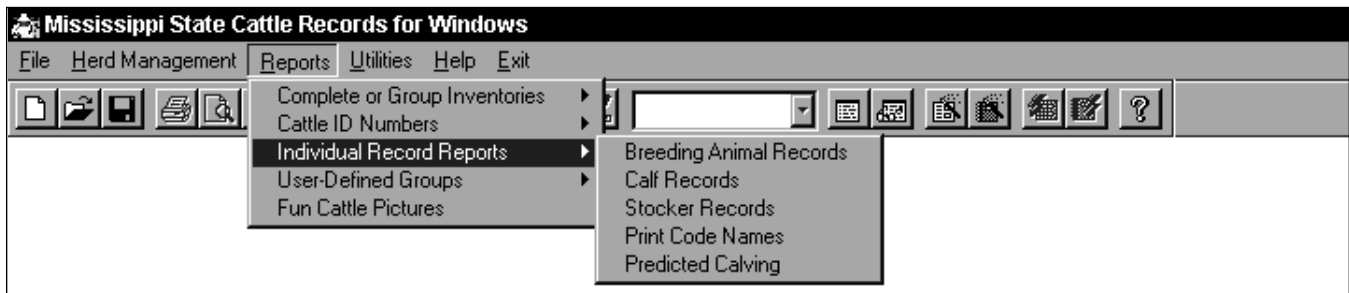
Figure 14. Sample Individual Record Reports Menu

User-Defined Groups

The final listing under *Reports* is called *User-Defined Groups*. These reports show information only for the animals that you have filtered. Reports offered under this section include *Production Evaluation*, *Disposal* (and its submenu), *Field Forms* (and its submenu, shown in **Figure 15**), *Compute, Report ADG*, and *Calf Groups*.
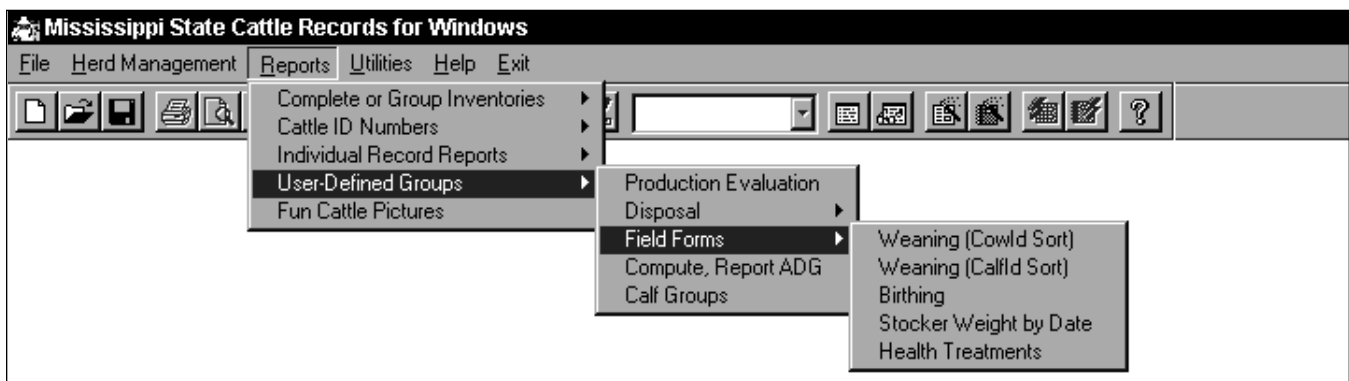
Figure 15. Sample User-Defined Groups Menu

Production Evaluation. This option relies on information you have transported to *TempCow* from *Cow & Calf Records* (see **Figure 8** for an example report). Ordinarily, you would want to limit this list by filtering it first **(see "How Do I Filter Records?")**. However, if you wanted to evaluate the production of all members of the breeding herd, you would simply enter *Cow & Calf Records* and transport the records without filtering at all. This process would produce a *TempCow* file that includes all of the records in *CowMast*. In either case, you **must** fill the *TempCow* table with the animals you want to evaluate from *Cow & Calf Records*.

Regardless of how you fill *TempCow*, the report will produce a listing of current cows with their calves. These records are sorted by sire ID number (i.e., the identification number of the male parent of the current calf). Within this sort, the calves are listed in descending order according to their adjusted 205-day weight *(1, page 53)*. Some information presented in this report (number of calves, historical calving interval, etc.) is based on historical cow and calf data as well as current data. Therefore, this report could be a valuable source in culling both bulls and brood cows. If yearling dates and weights were entered, they will appear in this report, with a computed adjusted 365-day weight.

Disposal. These reports, third in the list of options under *User-Defined Groups* (**Figure 15**), offers disposal reports for *Cows and Bulls*, *Calves*, and *Stockers*. These reports list only those animals from the temporary tables (*TempCow*, *TempCalf*, or *TempStocker*) that have a disposal code **(see "How Do I Filter Records?")**. The disposed-of animals are listed in descending order by disposal date. Other information pertinent to disposals is also included

Field Forms. This is the fourth option in the pull-down menu beneath *User-Defined Groups*. This option allows you to print any one of five forms to be filled out by hand while in the pasture. Three of the forms – *Weaning (CowId Sort)*, *Weaning (CalfId Sort)*, and *Birthing* – draw information from *TempCow*. *Weaning* forms list all cows in *TempCow*. While the *Weaning* forms can be sorted by either the dam's ID or the calf's ID, they are identical in all other aspects. *Birthing* forms list information on all cows

in the *TempCow* file. Unlike weaning and birthing forms, *Stocker Weight by Date* and *Health Treatments* reports do not rely on *TempCow* information – in fact, they rely on no information at all. These reports are completely blank, with spaces for ID numbers and weights (in the case of the stocker reports) or ID numbers, health problems, and health treatments (in the case of health field forms).

Compute, Report ADG. When you select this option under *User-Defined Groups,* MSU Cattle computes ADGs for calves by computing the number of days between birth and weaning, computing the number of pounds gained between birth and weaning, and dividing pounds gained by elapsed days. Stocker ADGs are computed similarly, except that they are computed from weaning to 1 year (yearlings) or to disposal. This report has many uses, the most notable being the fact that ADGs may be required when generating inventory reports (depending on the valuation method used). In addition, this report provides several options along the way. To begin with, you must transport data into *TempCalf* and *TempStocker* to choose which stockers and calves to use when computing ADGs. Ordinarily, you will want to transport the entire set of *Calf* records into *TempCalf* and *Stocker* records into *TempStocker* when establishing ADGs. This is due to the fact that you will later have an opportunity to limit the number of days taken into consideration in the calculation; however, choose to filter first if desired **(see "Events")**.

After you establish the *TempCalf* and *TempStocker* lists, click on the *Compute, Report ADG* item from the menu. At this point, MSU Cattle will display a message box asking you to set a calculation date range. Typing a beginning date and an ending date in the calculation range chart establishes the particular days and weights that the program will use when calculating how much weight the animal has gained per day. For example, you could enter the date that you began keeping animal records on MSU Cattle as the beginning date and the current date as the ending date in order to get an historical ADG. However, you will more often want to choose a more recent set of dates (such as the past year) in order to come up with the most accurate ADGs to enter into inventory.

After selecting the appropriate dates, submit the information by clicking on the "OK" button (file folder). If necessary, you can cancel the dates (and, in fact, the entire report) by clicking on the "Cancel" button (curved blue arrow), which returns you to the main menu. If you click "OK," MSU Cattle will display a message box asking whether the appropriate *TempCalf* and *TempStocker* files have been created. An answer of "No" will return you to the main menu, allowing you to create *TempCalf* and *TempStocker* files and begin the process of generating an ADG report again.

If you answer "Yes," MSU Cattle will display the ADG report in *Print Preview* format. This report can then be printed and/or the ADGs can be typed into the program when generating inventory reports. You have an opportunity to do this when using the second valuation method; access is provided by clicking on the "Enter ADGs" button at the bottom of the valuation methods screen. (See **Figure 11** and refer to **"Complete or Group Inventories"** for details.)

Calf Groups. This report lists each calf in the *Tempcalf* file in order by *CalfId*. Information listed for each calf includes calf ID, dam ID, sire ID, birthday, birth weight, sex, weaning date, weaning weight, and disposal date and weight. This option enables you to filter a group of calves by any desired criteria, save them in the *Tempcalf* file, and obtain a sorted listing of them.

UTILITIES

The *Utilities* section of MSU Cattle provides several ways for you to "custom-fit" the program to suit your needs. For example, this main menu option allows you to enter *Your Operation Data* (name and address), *Enter Average Prices, Weights, and Values*, and *Edit Code Names* (change or add codes). You also can manipulate records under *Utilities* by choosing *History File Management Activities.* You can back up or restore files by choosing *Backup Current Files, Restore Current and/or History Files*, or *Restore Individual Cows/Stockers from History Files.* To remove deleted files from the system, click on *Pack Current Data Tables.* In addition, you can *Apply Auxiliary Weaning Table* data from a user-defined file, which is a useful feature for those with automatic scales. *Fill Missing Dam Birthdays in Calf Recs* is a convenient shortcut that automatically adds dam birth dates to calf records. Explanations of these items are in menu order.
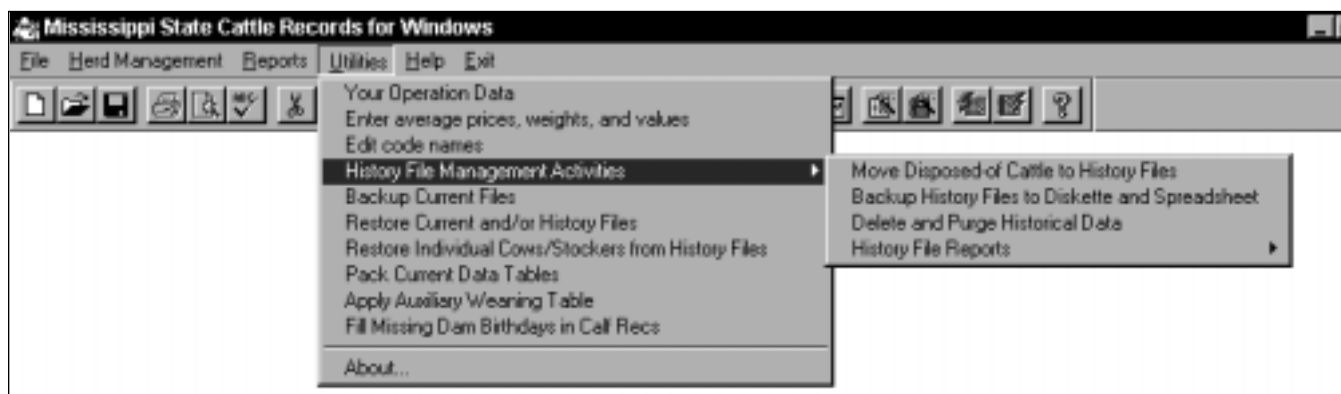

Figure 16. Utilities Pull-Down Menu

Your Operation Data

The first item on the *Utilities* menu is *Your Operation Data* (**Figure 17**). If you click on this option, MSU Cattle displays a screen that allows you to type in the farm name and address. This information will appear on all reports and can be changed at any time. However, it is important to know that any changes made to the operator information will not go into effect until you **exit** and **re-enter** MSU Cattle.
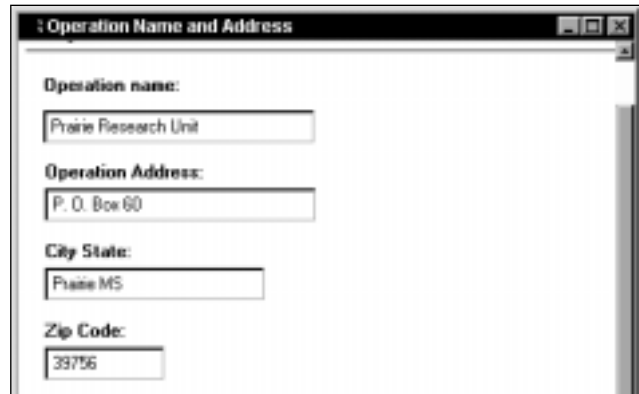

Figure 17. Sample Operation Data Table

Enter Average Prices, Weights, and Values

Under *Utilities*, you also have the opportunity to *Enter Average Prices, Weights, and Values*. Clicking on this option will produce a table with three columns for each class of animal: (1) price, (2) weight, and (3) value. This table allows you to choose between two different methods of valuing cattle and is an essential ingredient in inventory reports (see **Figure 11** and **Figure 12**). This option is fully explained in **"Complete or Group Inventories."**
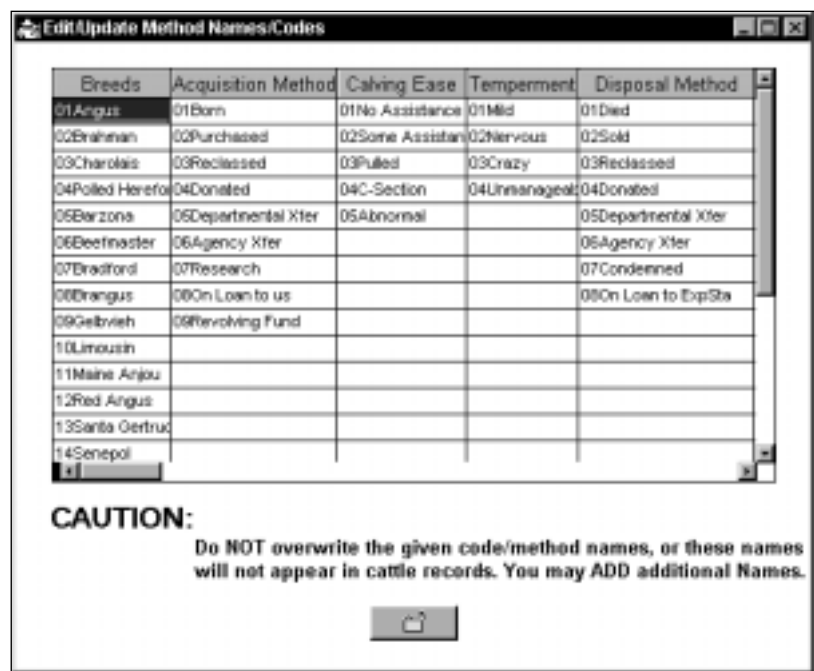
Edit Code Names

Another *Utilities* option is *Edit Code Names* (**Figure 18**). This feature allows you to **add** available codes to the combo boxes located in *Records*. In other words, adding code names will increase the options available for defining a field. For example, if you add "05Loony" to the *Temperament* field, that option will appear beneath the others in the pull-down menu in *Records*.

Also, while it is physically possible to overwrite codes in the *Edit Code Names* section, this should **NOT** be done. Some codes are industry standards, and others are referenced within the program for reports and events. However, *Temperament*, *Health Treatments*, *Health Problems*, and *Pastures* can be overwritten without causing any problems. When overwriting these codes, it is important that you use the **same conventions in editing code names** as MSU Cattle does. For example, be sure to put a number (preceded by a zero if single-digit) immediately before the name. This maintains the order in which the code names will appear.

Figure 18. Sample Edit Code Names Screen

History File Management Activities (**Figure 16**) offers four options: *Move Disposed-of Cattle to History Files*, *Backup History Files to Diskette and Spreadsheet*, *Delete and Purge Historical Data*, and *History File Reports*.

Move Disposed-of Cattle to History Files. Choosing this option moves all cow records that have non-blank disposal codes from *CowMast* to *CowHist*. All calves whose mothers have been moved to *CowHi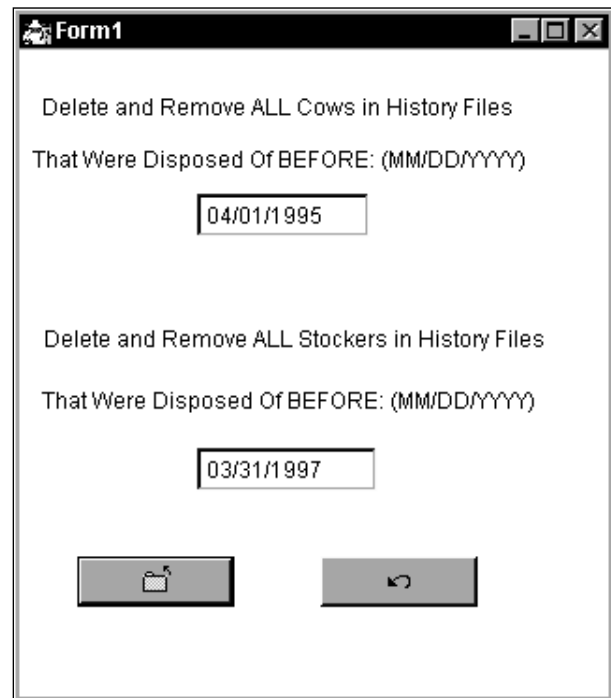st* are then moved to *CalfHist*. Stockers with non-blank disposal codes are moved to *StckHist*. It may be useful to delay moving disposed-of cattle to history files for a few months. For example, stockers are weighed at around 1 year, and yearling weights recorded are transferred to calf records. If a stocker's mother had been disposed of and transferred to *CowHist*, her calves would be transferred to *CalfHist*, and that stocker's weight could not be included in the yearling analysis. Delaying the transfer of the disposed-of cow records until her last calf has been weighed at around 365 days allows the stocker's record to be included.

Backup Historical Files to Diskette and Spreadsheet. This option allows MSU Cattle to copy *CowHist*, *CalfHist*, and *StckHist* onto a **formatted diskette**. Historical backups can be stored on the same backup diskette as **current** files, if there is enough space on the diskette. However, operations with more than 500 dams should keep historical and current backups on separate diskettes. Operations with more than 1,500 dams may need to use external media of more than 1.44 megabytes (perhaps a zip drive), particularly for rich historical records.

Delete and Purge Historical Data. This option can be used to physically remove history file data that are no longer needed. When this item is selected, MSU Cattle will display a screen similar to the one shown in **Figure 19**. Enter a cow removal date and a stocker removal date. Click the "OK"

button (file folder), and MSU Cattle will perform three tasks: **(1) delete and purge all cows** from *CowHist* that were disposed of before the user-specified cow removal date; **(2) remove all calves** from the *CalfHist* file whose mothers were removed from *CowHist*; and **(3) remove all stockers** from *StckHist* that were disposed of before the user-specified removal date. Clicking the curved blue arrow cancels the removal operation.

History File Reports. This option is the last historical file operation under *History File Management Activities* (**Figure 16**). These reports list the essential fields in each historical record. Reports include cows and their associated calves, herd bulls, and stocker calves. History reports are created in preview mode so they can be viewed before printing.

Figure 19. Cattle Removal Screen

Back Up Current Files

While it is easy to remove records in MSU Cattle, it is thankfully just as easy to *Backup Current Files* under *Utilities*. Backing up files ensures easy record retrieval in case of computer problems or serious human error. To back up files, **insert a formatted 3¹/₂-inch floppy disk into the computer's disk drive.** MSU Cattle will ask whether you want to continue. If you answer "No" to this message box, you will be returned to the main screen. However, if you answer "Yes," the program will begin transferring the records to the diskette. An hourglass will appear as the data is saved to the diskette, and a message box will alert you when the transfer is complete. This backup process should be followed **any time a significant amount of data has been changed or updated.** Consistently saving changes will ensure that the backup files remain current and that a minimal amount of work will be lost when problems occur.

Restore Current and/or History Files

Unfortunately, neither computer technology nor computer user performance is infallible. It is sometimes necessary to recreate yesterday's files by selecting *Restore Current and/or History Files* under *Utilities* **(Figure 16)**. If the entire **computer system crashed**, it will be necessary to re-install the latest version of MSU Cattle from CD-ROM before restoring files from a backup diskette. However, when data are inadvertently lost or unwanted changes are made, the problem can be corrected by simply restoring files from a backup diskette. MSU Cattle will first restore the backups of current master files. Then, a message box will appear **(Figure 20)** to prompt you to restore a backup of historical master files. Usually you will answer "No" to this prompt and not restore historical files. However, in the event of a computer crash, historical files may need to be restored. Backups of current and histor-

ical data can be written on the **same diskette** if diskette space is adequate.

To restore files, put the backup diskette into the disk drive and click on *Restore Current and/or History Files*. MSU Cattle will display a message box asking whether you want to continue. Clicking "Yes" will continue the restoration process. Just as in backup, an hourglass will appear briefly before a message alerts you that all files have been restored. Similar prompts for restoring history files will also appear. Any changes made to the database since the backup disk was created **must be re-entered** after the restoration process is complete.
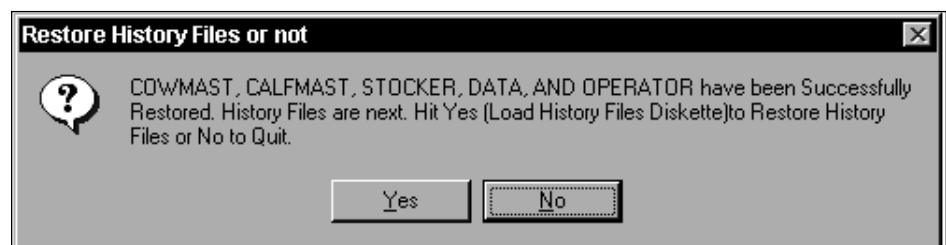
Figure 20. Decision Screen for Restoring History Files

Restore Individual Cows/Stockers from History Files

This option allows you to select individual cows or stockers to be moved from history files to current master files. If a cow is moved from history files to current files, **all its calves** are also moved. Note that in all cases, the animals are **moved**. That is, if they are **moved** to current files, they are **removed** from corresponding history files.

Pack Current Data Table

Pack Current Data Table under *Utilities* (**Figure 16**) is used to physically remove previously deleted individual records from *CowMast*, *CalfMast*, and *Stocker*. When individual records are deleted, they are not physically removed until this menu item is executed. This option should be used at least yearly.

If a cow is inadvertently deleted, and you wish to re-enter its record, you must perform this function **before** re-entering the cow's record.

Apply Auxiliary Weaning Table

Apply Auxiliary Weaning Table under *Utilities* allows you to enter weaning data similar to the *Wean Calves* table (**Figure 6**). This option is an alternative to using the *Wean Calves* event table. When choosing this option, you should **carefully** prepare a *WEANING.DBF* file in the format shown in **Table 1**.

Additional fields may be present in the file if desired, but they will be ignored. Notice that feeder grades were not included in the table. They were omitted because of problems in applying them. If you do feeder grade analyses, use of the auxiliary table is not recommended. Use the *Wean Calves* event shown in **Figure 6** instead. All variables in the user-produced auxiliary weaning table **must agree** in name, type, and length. The user-defined *WEANING.DBF* file will be applied as a "batch" when this menu item is selected.

Table 1. WEANING. DBF Auxiliary Weaning Table Format		
Name	**Type**	**Length**
CowId	Character	5
CalfId	Character	5
Weandt	Date	8
Weanwt	Numeric	5
Condscore	Numeric	1
Damweanwt	Numeric	5
Damcondsc	Numeric	1

Fill Missing Dam Birthdays in Calf Recs

This menu item was created for user convenience. If a cow's birthday is present in the cow's record, this option automatically copies it to the cow's birthday field in *Calf Records* (dam birthday is sometimes needed when completing a calf report). Selecting this option frees you of a little extra data entry. No user input is required to run this item, and it may be run as often as needed.

How Do I Add a New Record?

(1) To add a record**,** follow a process similar to the one used in changing a record. First, open the correct *Records* file (*Calf*, *Cow & Calf*, or *Stocker*).

(2) Next, click on the "New Record" navigation icon (button 10, **Figure 2**) at the bottom of the screen. In *Calf* and *Stocker* records, this action will display a blank form.

(3) In *Cow & Calf Records*, MSU Cattle will display a message box requesting more information. To add only a cow's record, click on *Add record to parent only*. To add both a cow and her calf, click on *Add record to both*. Both of these options require you to enter a **unique** cow ID number before being allowed to fill out the rest of the new form. To add a calf record only, choose *Add record to child (grid) only*. In this case, the program assumes that the calf is to be added to the record of the cow that you are viewing, and that cow's ID number is automatically filled in.

(4) Once you reach a blank form, fill it in similar to the way a file is edited **(see "How Do I Change a Record?")**. When the record is complete, you can save changes by clicking on the "OK" button (diskette) or undo all changes by clicking on the "Revert" button (arrow).

How Do I Add Options to Combo Boxes?

(1) Additions can be made to the options available in any combo box. Choose *Edit code names* under *Utilities* in the main menu, and MSU Cattle will display a chart with all of the combo boxes offered in all of the reports.

(2) Add new options by typing new code names into the appropriate fields under the appropriate columns. **Some** fields can be overwritten (such as temperaments, health problems, treatments, pastures) without causing problems. However, industry standards and/or the nature of MSU Cattle make it inadvisable to overwrite other fields. It is better to add new options than to alter these fields.

(3) When new code names are added, the naming conventions used in MSU Cattle must be followed. For example, if you want to add a new pasture named "Jefferson" and the last pasture listed in program was named "05Jones," the new pasture must be entered as "06Jefferson."

How Do I Back Up My Current Data Files?

(1) Put a **blank, formatted** $3^1/_2$-inch diskette into your disk drive.

(2) From *Utilities* in the main menu, choose *Backup Current Files*. Answer "Yes" to the message box that appears to save the files to the diskette.

(3) Wait while the data are saved to the diskette. MSU Cattle will display a message box letting you know when the backup is complete.

(4) Remove the diskette from the computer. Remember to label, date, and store your backup diskette. Also, make backup diskettes frequently to ensure little loss of data in case of catastrophe.

How Do I Back Up My Historical Data Files?

(1) Put a **blank, formatted** 3$\frac{1}{2}$-inch diskette into your disk drive.

(2) From *Utilities* in the main menu, choose *History File Management Activities*, then *Backup History Files.* Answer "Yes" to the message box that appears to save the files to the diskette.

(3) Wait while the data is saved to the diskette. MSU Cattle will display a message box letting you know when the backup is complete.

(4) Remove the diskette from the computer. Remember to label, date, and store your backup diskette. Also, make backup diskettes frequently to ensure little loss of data in case of catastrophe.

How Do I Calculate Average Daily Gains?

(1) Open *Calf Records*. Filter from *CalfMast* the list of *Calf Records* to be included in the calculations and transport this list into *TempCalf* via the "Transport" icon (button 1, **Figure 2**) **or** transport all of *CalfMast* into *TempCalf* without filtering. Close *Calf Records* and open *Stocker Records*.

(2) Filter from *Stocker Records* the list of *Calf Records* to be included in the calculations and transport this list into *TempStocker* via the "Transport" button **or** transport all of *Stocker* into *TempStocker* without filtering.

(3) Close *Stocker Records*. At this point, you should have created two tables: *TempCalf* and *TempStocker*.

(4) Under *Reports* in the main menu, highlight *User-Defined Groups*. The heading *Compute, Report ADG* will appear as an option. Click on this item.

(5) MSU Cattle will display a table labeled *Set Average Daily Gain Calculation Range*. In this table, fill in the dates to be considered when making ADG calculations. Filling a beginning date and an ending date in the calculation range chart establishes the particular days and weights that the program will use when calculating how much weight the animal has gained per day. You will most often want to choose a relatively recent and compact set of dates (such as the beginning and ending dates of the past year) in order to come up with the most accurate ADGs to enter into inventory.

(6) Enter these dates by clicking on the "OK" button at the bottom of the table. Answer "Yes" to the message box that appears (assuming you have followed steps 1-6). MSU Cattle will display a report with the computed ADG for calves and stockers in print preview format. These can be entered as ADGs if using the second valuation method.

How Do I Change a Record?

(1) The information in each animal's file can be changed at any time. To edit a record, you must choose the appropriate table – *Cow & Calf Records* to change a cow or bull record, *Stocker Records* to change a stocker record, and *Cow & Calf* or *Calf* records to change a calf record.

(2) Click the "Forward" icon (button 6, **Figure 2**) to find the identification number of the record to be edited. Alternatively, you can use the filter feature to find the record, which is much faster **(see "How Do I Filter Records?")**.

(3) Once you locate the correct cow's data table, you can edit any field except ID number by clicking on the "Edit" icon (button 11, **Figure 2**). In general, it is preferable for you to do all changes in the editing mode. However, it is possible to change combo boxes any time the record is visible. Unfortunately, unwanted changes are more difficult to correct outside of *Edit*. Since the

"Revert" button **[see (4) in this section]** is only available in *Edit*, you would have to delete mistakes via the backspace key. Alternatively, you could return to the original data by clicking on "OK" button to close the record and choosing not to save the changes when working outside of *Edit*.

(4) Record information can be changed in one of two ways, depending on the field. In regular fields, simply click in the desired field and type in the updated information. In combo box fields, choose the correct information from the pull-down menu. You can also move from field to field by clicking the tab key.

(5) Note that in *Edit* mode, most navigation buttons are grayed out (disabled), while two of the buttons change look and meaning. In this mode, the "New Record" icon (button 10, **Figure 2**) changes from a blank page to a **diskette** ("OK" button) and is used to **save changes** made to the record. The "Edit" icon (button 11, **Figure 2**) changes from a table with pencil to an **arrow** ("Revert" button) and is used to **revert back to the original information** contained in the form.

(6) If changes to the record are complete and correct, save the updated file by clicking on the "OK" button. To undo all changes made (in the case of wrong information, for example), click on the "Revert" button.

How Do I Create a Spreadsheet?

(1) Open the desired *Records* (*Cow & Calf*, *Stocker*, or *Calf*). Filter the records to include only those to be included in the spreadsheet **(see "How do I Filter Records?")**. If all records are to be included, filtering is not necessary.

(2) Click on the "Excel" icon (button 2, **Figure 2**). Answer "Yes" to the message box that asks whether you want to create the file *temp.xls*. This action will transport the filtered records into an Excel file.

(3) Close the report forms by clicking on the "OK" icon (button 13, **Figure 2**).

(4) Exit MSU Cattle and open Microsoft Excel. Locate and open the document named *temp.xls* in Excel. This file will be located on the local hard drive (usually C:) in the folder labeled with the current cattle directory name (most likely Cattle 2000, unless you have changed this default setting).

(5) Manipulate, print, or save the Excel document. **Important:** Remember to click on *Save As* if you wish to save the document. This will give you the opportunity to change the file's name. It is essential that you **change the name** if you intend to keep this Excel file. Otherwise, this file will be overwritten the next time you transport records into Excel.

How Do I Enter Average Daily Gains?

(1) Calculate ADGs, either through MSU Cattle or some other resource (If calculating using MSU Cattle, **see "How Do I Calculate ADGs?"**).

(2) Under *Utilities* in the main menu, choose the option *Enter Average Prices, Weights, and Values*. When the table of the same name appears, click on the second of two valuation methods, which requires ADGs. Click on the "Enter ADGs" button that appears at the bottom of the screen when the second valuation method is chosen.

(3) MSU Cattle will display a table with fields for entering *Calf* and *Stocker* ADGs. Enter the appropriate average daily gains, as calculated by MSU Cattle or another source. Enter these gains by clicking on the "OK" button (file folder) at the bottom of the screen. These ADGs will be used in conjunction with prices entered into the *Enter Average Prices, Weights, and Values* chart to determine cattle values when using the second valuation method in inventory report generation.

How Do I Enter My Operation's Name and Address?

(1) From *Utilities* in the main menu, click on *Your Operation Data.* Change the information in the fields as desired, filling in the name and address you wish to appear on all reports generated by MSU Cattle.

(2) Click on the "Close" button (small "x" in upper-right hand corner) to exit the operation data form.

(3) To apply the information you just entered, you must now exit MSU Cattle completely. When you re-enter the program, the operation data will be visible in the upper right side of the first page of all reports generated.

How Do I Filter Records?

Why Do I Need to Filter? There are four main reasons to filter records: (1) To locate a particular animal's record for updating; (2) To send a listing of a certain group of animals to an Excel spreadsheet; (3) To begin the process of updating the records of a large group of animals through *Herd Management* events (for example, to isolate a group of calves to be weaned or stockers to be sold); and (4) To isolate certain groups for reports. Filtering can easily be broken down into a series of steps:

(1) Under *File* in the main menu, click on the group of records from which you want to filter (*Stocker*, *Cow & Calf*, or *Calf*). Once in the appropriate set of records, click on the "Filter" navigation icon (button 8, **Figure 2**). Note the decision table labeled *Filter Conditions* **(Figure 21)** that appears.
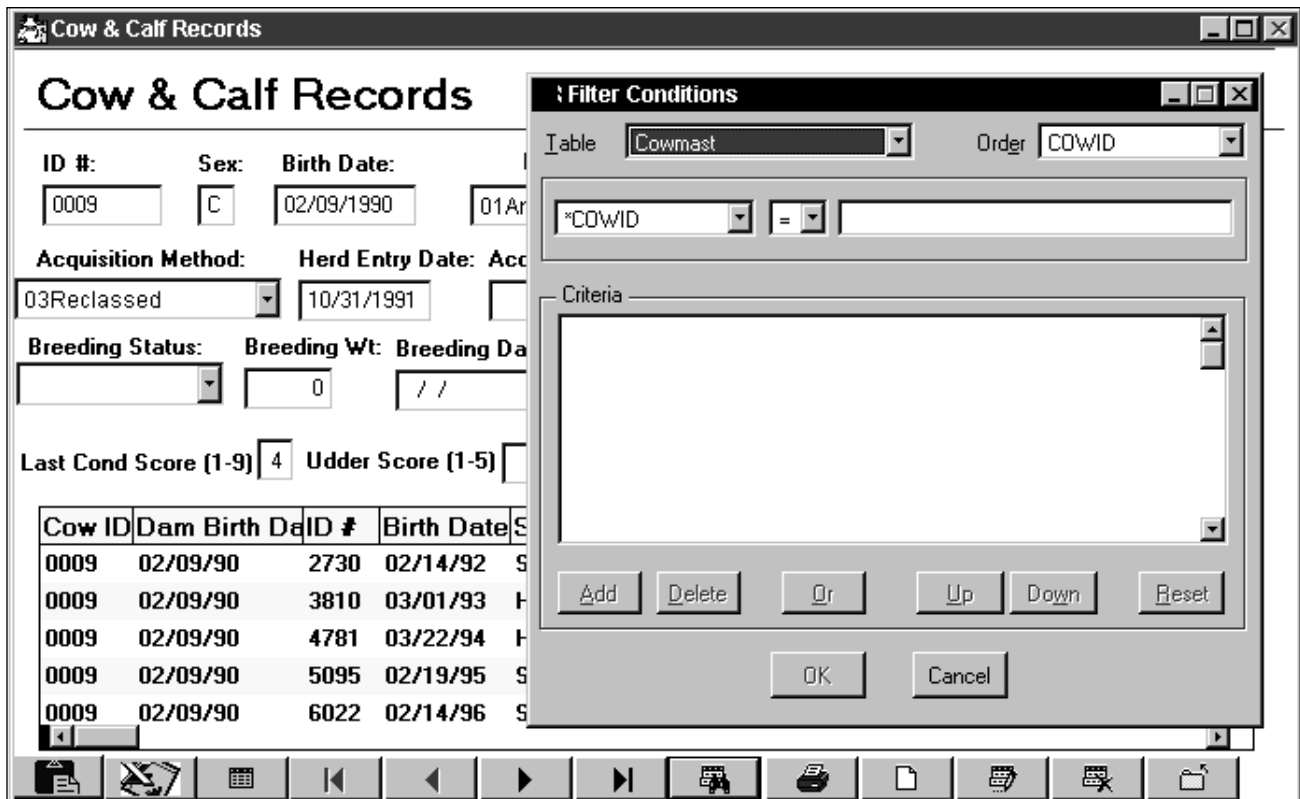

Figure 21. Sample Filter Conditions Table

(2) When in *Cow & Calf Records* (and **only** in *Cow & Calf Records*), you can choose which master list to filter from by clicking on the combo box labeled *Table* (on the first row of fields). From the pull-down menu that appears, you can choose to access records from both *CowMast* or *CalfMast.* Once you have chosen your master list in *Cow & Calf Records*, move to the next step.

(3) In most cases, you should go immediately to the second row and click on the first of the three combo boxes. It should be labeled **STOCKERID*, **COWID*, or **CALFID* by default, depending upon which master file you are in. A pull-down menu will appear.

(4) **To select a group of animals**, choose a variable by which to filter records. For example, to deal only with those calves born on or after January 1, 1999, you would choose *CBIRTHDAY* from the list. (*CBIRTHDAY* stands for calf birthday, whereas simply *BIRTHDAY* indicates the date of birth for a stocker or a member of the breeding herd.) Other variables are fairly self-explanatory and correspond to variables in the records.

(5) Next, click on the second combo box in the row. It should contain an equal-to symbol (=) by default. A pull-down menu with several alternative symbols, called relational operators, will appear:

      <   **less than**
      <=   **less than or equal to**
      <>   **not equal to**
      =   **equal to**
      >   **greater than**
      >=   **greater than or equal to**

(6) Choose the appropriate operator for your filter. For example, in order to get all the calves born **on or after** January 1, 1999, as in the above example, you would choose the **greater-than-or-equal-to** operator (>=). This operator allows the filter to search for calves born on January 1 and after that date.

(7) Click on the final field in the row. This field is not a combo box, so you must type in the appropriate information. To continue the above example, you would type in "01/01/99" for January 1, 1999. **Please note:** this field is case-sensitive and requires information to appear **exactly** as it does in the records; for example, all filters must include any numeric code that is used in the records.

(8) If all the fields in your filter so far are correct, click on the "Add" button to enter them into the table. So far, the example should look like the example shown in **Figure 22**. At this point, you have at least two options: (1) You can choose to further your search with other variables; **or** (2) You can choose to quit filtering and view the animals that the filter has already selected.

(9) **To filter further,** repeat the above steps. Each time you add a filter method, you must click "Add" to add it to the table. If you choose to select on more than one variable, you can also use the "Or" button. The "Or" feature is used by clicking on the "Or" button **after** designating one filter or set of filters but **before** designating the next filter or set of filters. Filters that follow the "Or" command are still entered by clicking the "Add" button. While the "Add" button used alone requires that **both** filter conditions be met for an animal to be selected, the "Or" button requires that only one condition or the other be fulfilled. For example, if you wanted to select all heifers **and** all animals of a certain herd number, you would choose "Or" between the filters. However, if you wanted only the heifers **from** a certain herd, you would use the "Add" button between the sex and pasture filter. In **Figure 23**, first only current (empty disposal date) animals are included. Since no "Or" was used between entries one and two, the current stockers must all be heifers (sex = "H"). The "OR" in line three means that this filter will choose all current female stockers **OR** all current stockers (empty disposal date, line four) in herd 2 (line five).
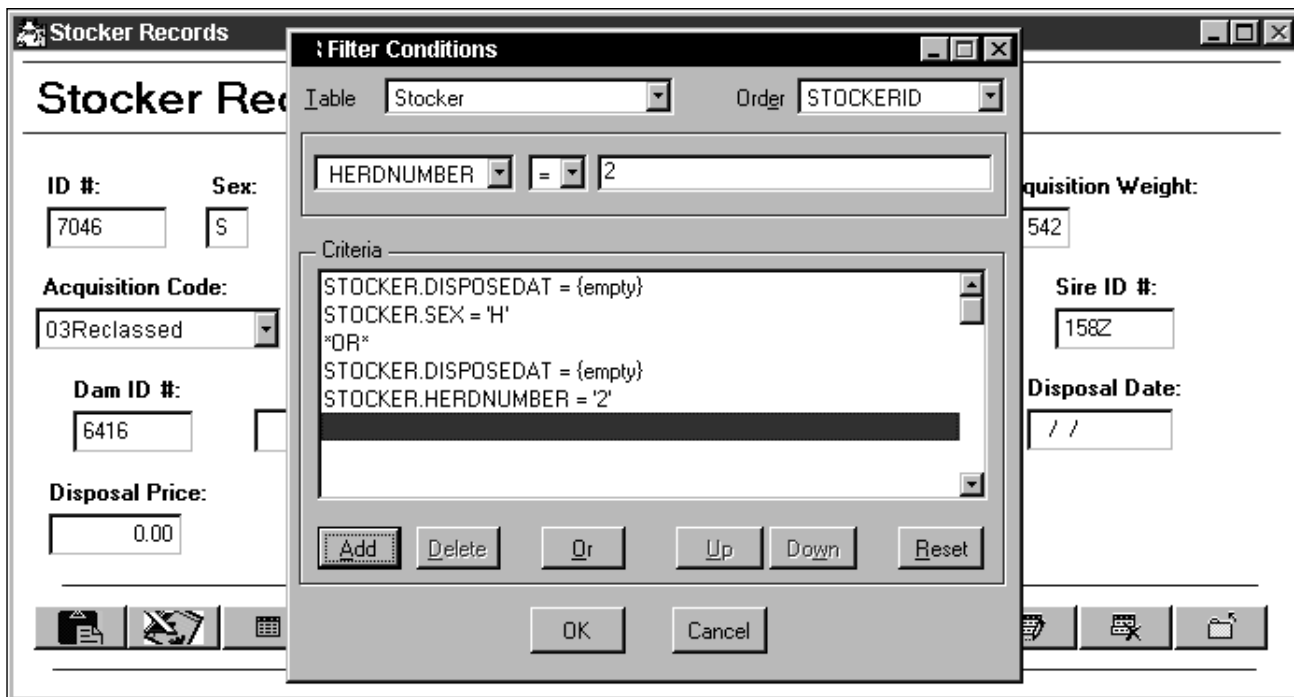
Figure 22. Simple Filter Example

Figure 23. Sample "Or" Situation Filter

(10) To select just one or two animals, keep *CalfId*, *CowId*, or *StockerId* in the first combo box and the equal-to (=) symbol in the second. Then, fill in the ID numbers of the animals you wish to isolate. Use the "Add" button after every animal ID and be sure to click the "Or" between each animal ID. Otherwise, the filter will try to find one animal with **all** the ID numbers you entered.

(11) When you are satisfied with your filter, click on the "OK" button at the bottom of the table. A flag listing how many animals your filter picked up will appear briefly near the top of your screen. Then, the filter table itself will disappear. At this point, you will view only the records of the animals your filter selected. You can move around within this group just as you would within the full set of records. You can go back to the filter button at any time to extend your filter.

(12) When you are done filtering, you have several options. If you only wanted to look at the filtered animals' records, you can exit and re-enter the records (*File* then *Cattle and Calf Records*, for example) to return to the entire set of records. To update the records of the group you've selected or to get a printable report on those animals, click on the "Transport" icon (button 1, **Figure 2**). This will result in the creation of a temporary file called *TempCow*, *TempCalf*, or *TempStocker*. Temporary files are used in events and some reports and are changed every time you send a filtered list to them. Therefore, it is important to view the report or perform the event **immediately** after creating the tempfile. Otherwise, you could inadvertently write over the filtered list you have created before you make the necessary changes or get the necessary information.

Helpful Filtering Hints:

• In filtering, the word "empty" can be used for any **date** (and for dates only). This is especially helpful when filtering only for current animals. A filter of "DISPOSEDAT = empty" would eliminate any old records.

• Similarly, a date unequal to (<>) "empty" would yield only those animals with a date filled in.

• Also, using the designation "codename" > " " for any code will yield animals **with** a code. In other words, if you select the appropriate code name in the first field, the greater-than operator in the second field, and a quote mark followed by a space followed by another quote mark in the third field, your filter will pick up those animals that do have that code in their records. You can also use "codename" < " " to pick up animals **without** a code.

How Do I List *All* Animal Identification Numbers?

(1) Under *Reports* in the main menu, highlight *Cattle ID Numbers*. Click on the appropriate listing of those offered: *Breeding Cattle ID Numbers*, *Stocker ID Numbers*, or *Calf ID Numbers*.

(2) A report listing the ID numbers of the type of animals chosen will appear in print preview format. You can view the report using the arrows in the print preview toolbar and/or you can print the report by clicking on the "Print" button from the toolbar. Because this report lists current stock ID numbers, plus IDs of cattle in master files since disposed-of cattle were moved to history files, it should help establish new cattle ID numbers by eliminating those ID numbers already being used in the database.

How Do I List Master File Information for *Current* Animals?

(1) Highlight *Individual Record Reports* from *Reports* in the main menu. Click on the records you want to see – *Breeding Animals*, *Calves*, or *Stockers*. A report listing all the **current** animals in that classification will appear. All the information in each animal's record is listed in ID number order.

(2) You can view and/or print the report. This report will be in print preview format. To move from page to page, use the blue arrow buttons in the print preview toolbar. To print, click on the "Print" button on the print preview toolbar. Designate how many pages to print by choosing the "Pages from" choice in the message box that appears.

How Do I List *Current* Animal Identification Numbers by Pasture?

(1) Under *Reports* in the main menu, highlight *Cattle ID Numbers*. From the sub-menu that appears, highlight *Current Cattle IDS by Pasture*. Click on the appropriate listing of the two offered: *Current Breeding Herd* or *Current Stockers*.

(2) A report listing the ID numbers of the type of animals chosen will appear in print preview format. These numbers will be sorted by pasture, and current calves will appear in parenthesis next to the dam's ID number. You can view the report using the arrows in the print preview toolbar and/or you can print the report by clicking on the "Print" button from the toolbar.

How Do I Print Paper Forms to Use in the Field?

(1) If you want a *Weaning* or *Birthing* form, open *Cow & Calf Records*. If you want a *Stocker Weight by Date* or a *Health Treatment* form, skip on to step 2. Filter for the animals you want in the report. Transfer this filtered list into *TempCow* by clicking on the "Transport" icon (button 1, **Figure 2**). Close the records by clicking on the "OK" icon (button 13, **Figure 2**).

(2) Under *User-Defined Reports* (in *Reports* from the main menu), highlight *Field Forms*. Select the field forms you wish to print – *Weaning* (on your choice of a cow or a calf ID sort), *Birthing*, *Stocker Weight by Date*, or *Stocker Health Treatments*.

(3) Click on the "Print" button on the print preview toolbar. On the next screen that opens, adjust the number of copies to be printed and click on "OK."

How Do I Print a Complete Inventory Report (All Cattle)?

(1) Highlight *Complete or Group Inventories* from *Reports* in the main menu. Click on *Cows & Calves*, *Herd Bulls*, or *Stocker Calves* from the sub-menu under *Complete or Group Inventories*.

(2) If you chose *Cows & Calves* or *Stocker Calves*, MSU Cattle will display a message box asking whether you have chosen the appropriate valuation method for the report. (Skip this step in *Herd Bulls Inventory Reports*.)

(3) If you have set the appropriate valuations method, answer "Yes" to this message box. If not, answer "No" and you will be taken to the set valuations methods table and required to enter the necessary information **(see "How Do I Set Valuation Methods?")**. After setting the valuations methods, you must re-enter the inventory report generation by again choosing the appropriate report.

(4) Once you have answered "Yes" to the valuation methods box, another message box will appear. (This will be the **first and only** message box in *Herd Bulls* inventories.) This box asks whether to inventory all of the animals within the category or just a group. Answer "Yes" to inventory them all.

(5) MSU Cattle will automatically generate the report in print preview format. You can view the report using the arrows in the print preview toolbar and/or you can print the report by clicking on the "Print" button from the toolbar.

How Do I Print a Group Inventory Report?

(1) Open the appropriate set of records – *Cow & Calf Records* to inventory *Cows & Calves* or *Herd Bulls* or *Stocker Records* to inventory *Stocker Calves*. Filter for the appropriate set of animals to be inventoried. Transfer this filtered list to a temporary table (*TempCow* in *Cow & Calf Records* or *TempStocker* in *Stocker Records*) by clicking on the "Transport" icon (button 1, **Figure 2**). Close the records by clicking on the "OK" icon (button 13, **Figure 2**).

(2) Highlight *Complete or Group Inventories* from *Reports* in the main menu. Click on *Cows & Calves*, *Herd Bulls*, or *Stocker Calves* from the sub-menu under *Complete or Group Inventories*.

(3) If you chose *Cows & Calves* or *Stocker Calves*, MSU Cattle will display a message box asking whether you have chosen the appropriate valuation method for the report. (Skip this step in *Herd Bulls Inventory Reports*.)

(4) If you have set the appropriate valuations method, answer "Yes" to this message box. If not, answer "No" and you will be taken to the set valuations methods table and required to enter the necessary information **(see "How Do I Set Valuation Methods?")**. Once you have set the valuations methods, you must re-enter the inventory report generation by again choosing the appropriate report.

(5) Once you have answered "Yes" to the valuation methods box, another message box will appear. (This will be the **first and only** message box in *Herd Bulls* inventories.) This box asks whether to inventory all of the animals within the category or just a group. Answer "No" to inventory just the group you have filtered and placed into the temporary tables.

(6) MSU Cattle will automatically generate the report in print preview format. You can view the report using the arrows in the print preview toolbar and/or you can print the report by clicking on the "Print" button from the toolbar.

How Do I Print a Summary Inventory Report of All Cattle?

(1) From *Reports* in the main menu, highlight *Complete or Group Inventories* and select *Summary* from the sub-menu of options that appears.

(2) MSU Cattle will display a message box asking whether you have set the valuations method to be used in the report. If you have set the appropriate valuations method, answer "Yes" to this message box. If not, answer "No" and you will be taken to the set valuations methods table and required to enter the necessary information **(see "How Do I Set Valuation Methods?")**. **Note:** the valuation date used in the valuation table **must be within the analysis dates** that will be requested later. Once you have set the valuations methods, you must re-enter the inventory report generation by again choosing the appropriate report.

(3) Once you have answered "Yes" to the valuation methods box, MSU Cattle will display a table requesting beginning and ending dates for the summary report. Remember that these dates **must include the date** used as the date of valuation in the *Enter Average Prices, Weights, and Values* table. By default, the setting for the *Ending Analysis Date* is the current date and the setting for the *Beginning Analysis Date* is 90 days before. This default setting assumes that you do inventory on a quarterly system. **MAFES users**, please see the **"Reports"** section for specific instructions. After you enter the appropriate dates, click on the "OK" button (file folder) to enter them.

(4) At this point, MSU Cattle will display the summary inventory report in print preview format. View it by using the blue arrows in the print preview toolbar or print it by clicking on the "Print" button in the toolbar.

How Do I Print a Cattle Disposal Report?

(1) Open the desired set of records – *Cow & Calf Records*, *Stocker Records*, or *Calf Records*. Filter for the animals you wish to include in the report. Transport this filtered list into the temporary table *(TempCow*, *TempStocker*, or *TempCalf*) by clicking on the "Transport" icon (button 1, **Figure 2**). Close the records by clicking on the "OK" icon (button 13, **Figure 2**).

(2) Under *User-Defined Reports* (in *Reports* from the main menu), highlight *Disposals*. Select the appropriate group – *Cows and Bulls*, *Calves*, or *Stockers*.

(3) MSU Cattle will display a disposal report including only those animals with disposal codes and dates (of the animals you put into the temp file) in print preview format. You can view the report using the arrows in the print preview toolbar and/or you can print the report by clicking on the "Print" button from the toolbar.

How Do I Print a Predicted Calving Report?

(1) Open *Cow & Calf Records*. Filter for the animals you wish to include in the report. Transfer this filtered list into *tempcow.dbf* by clicking on the "Transport" icon (button 1, **Figure 2**). Close the records by clicking on the "OK" icon (button 13, **Figure 2**)

(2) Under *Individual Record Reports* (in *Reports* from the main menu), click on *Predicted Calving*.

(3) MSU Cattle will display a report including all pregnant cows' ID numbers, breeding dates, and predicted date of calving in print preview format. This report is listed in order from earliest expected calving date to latest. You can view the report using the arrows in the print preview toolbar and/or you can print the report by clicking on the "Print" button from the toolbar.

How Do I Print a Production Evaluation Report for Culling Decisions?

(1) Open *Cow & Calf Records*. Filter for the animals you wish to include in the report. Transfer this filtered list into *tempcow.dbf* by clicking on the "Transport" icon (button 1, **Figure 2**). Close the records by clicking on the "OK" icon (button 13, **Figure 2**).

(2) Under *User-Defined Reports* (in *Reports* from the main menu), click on *Production Evaluation*.

(3) The resulting report lists information on current calves. Overall, the report is sorted by bull ID. Within this sorting, calves are arranged in descending order by adjusted 205-day weight. This report also provides historical information (computed by the program) such as the cow's calving intervals. Therefore, this report is a good resource for culling bulls (if sire IDs are recorded), culling cows (based on production), or culling calves (based on weight).

How Do I Restore Backup Files after a Calamity?

(1) In case of a hard drive crash, first install the most recent version of MSU Cattle from a CD-ROM. See **"Installation and Setup"** for more information.

(2) Insert the most recent *Backup* diskette available and select *Restore Current Files* from *Utilities* in the main menu. Answer "Yes" to the message box that appears to continue the restoration, or answer "No" to cancel it. If you answer "Yes," an hourglass will appear on your screen as the computer downloads the data from the diskette.

(3) MSU Cattle will display a prompt similar to the one shown in **Figure 20** to ask whether you want to also restore history files. Answer "Yes" to restore them, or "No" to quit. At the end of the restoration, a message box will appear to let you know that the transfer is complete.

(4) Be sure to re-enter all data that has been updated or added since the backup diskette was made.

How Do I Set Valuation Methods for Inventories?

(1) Under *Utilities* in the main menu, select *Enter Average Prices, Weights, and Values* to open a table of the same name. This table offers two valuation methods**.**

(2) The first method allows you to switch from using **prices and weights** to using **values** for each type of animal (even within the same report). This method relies on weights that you enter, instead of those projected by MSU Cattle. If you choose the first method, you must enter prices and weights **or** values for each type of animal. If the values field is defined, the price and weight fields will be ignored.

(3) Except in the case of herd bulls, the second method uses only **projected** prices and weights based on ADGs to determine value. For herd bulls, this method allows you to use values, as well as projected prices and weights. If you choose the second method, you must enter ADGs and prices.

(4) Once all the required information is entered, click on the "OK" button to enter the valuations table for use in inventory reports.

How Do I Update Records after Castrating Calves?

(1) Open *Calf Records*. Filter to include the group of bull calves that were castrated. At this point, it is best to focus more on including all necessary animals than on excluding unnecessary ones. You will have an opportunity to exclude animals later in the event. **(See "Events" for further details.)**

(2) Send this filtered list into *tempcalf.dbf* by clicking on the "Transport" icon (button 1, **Figure 2**). Answer "Yes" to the two message boxes that appear. Close *Calf Records* by clicking on the "OK" icon (button 13, **Figure 2**).

(3) Under *Herd Management*, click on *Calves*. Click on *Castrate Bull Calves* in the submenu that appears. To omit a calf from this event, click on the small white rectangle directly to the left of *CowId* to unselect its ID number. This rectangle will turn from white to black. Click on the black rectangle to add that calf back into the event.

(4) When the table is satisfactory, click on the "OK" button (file folder) to update the record, or click on the "Cancel" button (curved arrow) to cancel the event. All calf records included in the event will automatically be updated: the sex classification of all bull (B) calves will be changed to steer (S).

How Do I Update Records after Moving Cows and Calves to a New Pasture?

(1) Open *Cow & Calf Records*. Filter for the set of cows that are to be moved; MSU Cattle will automatically include the cow's current calves, if any. At this point, it is more important to focus on including all necessary animals than on excluding unnecessary ones. You can exclude animals later in the event.

(2) Transfer the filtered list to *tempcow.dbf* by clicking on the "Transport" icon (button 1, **Figure 2**). Answer "Yes" to both message boxes that appear. Exit the records by clicking on the "OK" icon (button 13, **Figure 2**).

(3) Select *Move Cows and Current Calves* (in the submenu of *Move Cows or Stockers*) under *Herd Management* in the main menu. Choose the pasture **from** which the cows are to be moved from the pull-down menu in the table that appears. Only pastures included in the *tempcow.dbf* table are available in this menu. Cows can be moved from only one pasture at a time. Therefore, if the *TempCow* table contains cows from more than one pasture, you must repeat this process for each pasture.

(4) From the second pull-down menu, choose which pasture the cows are moved **to**. All the pastures used in the database will be available in this menu. Eliminate any cows from the event by clicking on the small rectangle directly to the left of the ID number. The rectangle will turn black. Click the black section again to add the calf back into the event.

(5) Click on the "OK" button (file folder) to finalize the event. Click on the "Cancel" button to ignore the list and return to the main menu. If the event is submitted, the pasture of the cows and calves involved in the event will change from the "move from" pasture to the "move to" pasture.

How Do I Update Records after Moving Stockers to a New Pasture?

(1) Open *Stocker Records*. Filter for the set of stockers that are to be moved. At this point, it is more important to focus on including all necessary animals than on excluding unnecessary ones. You can exclude animals later in the event.

(2) Transfer the filtered list to *tempstocker.dbf* by clicking on the "Transport" icon (button 1, **Figure 2**). Answer "Yes" to both message boxes that appear. Exit the records by clicking on the "OK" icon (button 13, **Figure 2**).

(3) Select *Move Stockers* (in the submenu of *Move Cows or Stockers*) under *Herd Management* in the main menu. Choose the pasture **from** which the stockers are to be moved from the pull-down menu in the table that appears. Only pastures included in the *tempstocker.dbf* table will be available in this menu. Stockers can be moved from only one pasture at a time. Therefore, if the *TempStocker* table contains stockers from more than one pasture, you must repeat this process for each pasture.

(4) From the second pull-down menu, choose which pasture the cows are moved **to**. All pastures used in the database are available in this menu. Eliminate any stockers from the event by clicking on the small rectangle directly to the left of the ID number. The rectangle will turn black. Click the black section again to add the calf back into the event.

(5) Click on the "OK" button (file folder) to finalize the event. Click on the "Cancel" button to ignore the list and return to the main menu. If the event is submitted, the pasture of the selected stockers will change from the "move from" pasture to the "move to" pasture.

How Do I Update Records after Placing a Bull in the Breeding Herd?

(1) Open *Stocker Records*. Filter for the bulls to be saved to the breeding herd. At this point, it is more important to focus on including all necessary animals than excluding unnecessary ones. You can exclude animals later in the event.

(2) Transfer the filtered list into *tempstocker.dbf* by clicking on the "Transport" icon (button 1, **Figure 2**). Answer "Yes" to both message boxes that appear. Close the records by clicking on the "OK" (button 13, **Figure 2**).

(3) Click on *Save Bull to Breeding Herd* under *Herd Management* in the main menu. Fill in the date the bulls joined or will join the breeding herd. Eliminate any stockers from the event by clicking on the small rectangle directly to the left of the ID number. The rectangle will turn black. Click the block again to add the stocker back into the event.

(4) Click on the "OK" button (file folder) to submit the event. Click on the "Cancel" button to ignore the list and return to the main menu. If the event is submitted, *Cow* records will be created for each saved bull, including cow ID, cow sex, birthday, breed type, acquisition date, acquisition code, herd entry date, and dam ID. *Stocker* records will add a disposal code and date.

How Do I Update Records after Placing a Heifer in the Breeding Herd?

(1) Open *Stocker Records.* Filter for the heifers to be saved to the breeding herd. At this point, it is more important to focus on including all necessary animals than excluding unnecessary ones. You can exclude animals later in the event.

(2) Transfer the filtered list into *tempstocker.dbf* by clicking on the "Transport" icon (button 1, **Figure 2**). Answer "Yes" to both message boxes that appear. Close the records by clicking on the "OK" (button 13, **Figure 2**).

(3) Click on *Save Heifer to Breeding Herd* under *Herd Management* in the main menu. Fill in the date the heifers joined or will join the breeding herd. Eliminate any heifers from the event by clicking on the small rectangle directly to the left of the ID number. The rectangle will turn black. Click the block again to add the heifer back into the event.

(4) Click on the "OK" button (file folder) to submit the event. Click on the "Cancel" button to ignore the list and return to the main menu. If the event is submitted, *Cow Records* will be created for each saved heifer, including cow ID, cow sex, birthday, breed type, acquisition date, acquisition code, herd entry date, and dam ID. *Stocker Records* will add a disposal code and date.

How Do I Update Records after Selling a Group of Calves?

(1) Open *Calf Records.* Filter for the set of calves that were sold. At this point, it is more important to focus on including all necessary animals than excluding unnecessary ones.

(2) Transfer the filtered list into *tempcalf.dbf* by clicking on the "Transport" icon (button 1, **Figure 2**). Answer "Yes" to both message boxes that appear. Exit the records by clicking on the "OK" icon (button 13, **Figure 2**).

(3) Click on *Sell Calves* under *Herd Management* in the main menu. In the table that appears, fill in calf sale date, sale weight, and sale price. If no sale weight or sale price is entered for a particular calf, the average sale weight and average sale price (which you enter) will be used. In other words, MSU Cattle "looks" for an individual sale weight and sale price first. If none are listed, the program uses the average sale prices and weights. This process is done on a case-by-case basis, so that some animals can be priced individually while others are priced by the averages.

(4) Eliminate any calves from the event by clicking on the small rectangle directly to the left of the ID number. The rectangle will turn black. Click the black section again to add the calf back into the event.

(5) Click on the "OK" button (file folder) to submit the event. Click on the "Cancel" button to ignore the list and return to the main menu. If the event is submitted, disposal codes, dates, weights, and prices will be added to the calves' records automatically.

How Do I Update Records after Selling a Group of Stockers?

(1) Open *Stocker Records.* Filter for the set of stockers that were sold. At this point, it is more important to focus on including all necessary animals than excluding unnecessary ones.

(2) Transfer the filtered list into *tempstocker.dbf* by clicking on the "Transport" icon (button 1, **Figure 2**). Answer "Yes" to both message boxes that appear. Exit the records by clicking on the "OK" icon (button 13, **Figure 2**).

(3) Click on *Sell Stockers* under *Herd Management* in the main menu. In the table that appears, fill in stocker sale date, sale weight, and sale price. If no sale weight or sale price is entered for a particular stocker, the average sale weight and average sale price (which you enter) will be used. In other words, MSU Cattle "looks" for an individual sale weight and sale price first. If none are listed, the program uses the average sale prices and weights. This process is done on a case-by-case basis, so that some animals can be priced individually while others are priced by the averages.

(4) Eliminate any stockers from the event by clicking on the small rectangle directly to the left of the ID number. The rectangle will turn black. Click the black section again to add the stocker back into the event.

(5) Click on the "OK" button (file folder) to submit the event. Click on the "Cancel" button to ignore the list and return to the main menu. If the event is submitted, disposal codes, dates, weights, and prices will be added to the stockers' records automatically.

How Do I Update Records after Weaning a Group of Calves?

(1) Open the *Calf Records*. Filter for the group of calves that were weaned. At this point, it is more important to focus on including all necessary animals than on excluding unnecessary ones. You can exclude animals later in the event. **(See "Events" for further details.)**

(2) Transfer this filtered list to *tempcalf.dbf* by clicking on the "Transport" icon (button 1, **Figure 2**). Answer "Yes" to both message boxes that appear. Close the records by clicking on the "OK" icon (button 13, **Figure 2**).

(3) Click on *Wean Calves* in the *Calves* submenu (under *Herd Management* in the main menu). In the table that appears, omit any animals from the event by clicking on the small rectangle directly to the left of the ID number. The rectangle will turn black. Click the black section again to add the animals back into the event. Fill in as much additional information to the table as possible. The more information filled in, the more accurate the records will be.

(4) Click on the "OK" button (file folder) to submit the event. Click on the "Cancel" button to ignore the list and return to the main menu. At this point, MSU Cattle will display a message box asking whether to reclassify the weaned calves as stockers or to hold them for sale.

(5) An answer of **"Yes"** will automatically re-class the animals and update records. In *Calf Records*, weaning dates, weaning weights, 205-day weights, adjusted 205-day weights, disposal codes, disposal dates, disposal weights, dam weight at weaning, and dam condition score at weaning are added. This disposes of the calf in *CalfMast*. In *Stocker Records*, stocker ID, sex, birthday, acquisition date, acquisition code, sire ID, dam ID, feeder grade, and condition score are created. This process creates a stocker record for the weaned calf. In *Cow Records*, the dam's last condition score is also updated.

(6) An answer of **"No"** will hold the record in *Calf Records*. All of the above information will be added to the *Calf Record* **except** the disposal date and code. No *Stocker Record* will be created for the weaned calf. (See the section on **"Auxiliary Weaning Tables"** to see if they would "fit" your operation.)

REFERENCES

(1) **Laughlin, David H., and Sharon L. Hamlin.** 1987. MAFES Cattle Records System User's Guide. MSU Department of Agricultural Economics Technical Bulletin 68, Mississippi Agricultural and Forestry Experiment Station.

(2) **Microsoft Visual FoxPro 6.0.** Copyright© 1988-1996, Microsoft Corporation.

(3) **Microsoft Windows 98.** Copyright© 1981-1998, Microsoft Corporation.

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