Cow Sense

Life Beyond Fortran

There's a natural resentment
When we don't understand,
For technical advances
Attributed to Man.

Now I'm learning evolution
And positions of the stars
And why it is that wives, most times,
Don't like you in the bars.

But the greatest of inventions
That I have ever seen
Is the flashing phosphorescence
Of a C.R.T.V. screen.

For those of you, unknowing,
It's part of a computer
That makes us all seem wise somehow
Smarter and astuter.

But I guess the thing that chaps me
Is it never makes mistakes!
It's always human error,
Power surges, earthquakes!

It's what you put into it
That determines your reward
Like dealin' square with strangers
And givin' part back to the Lord.

Commandment number seventeen
Is what it's all about;
Computin' just like livin',
Garbage in and garbage out!

by Baxter Black

Cow Sense

User's Guide

Version 4 for Windows

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Good job, and thanks to you all

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Chapter 1: Introduction to Cow Sense

Welcome to the Cow Sense Version 4 Series! We have worked hard to make this release of Cow Sense the most powerful and productive ever. We have extended the features that we have long envisioned for the Cow Sense family of products. All the while, we strive to maintain the ease of use for which Cow Sense is noted. We hope you will like the result and will experience the benefit that powerful, flexible, and *friendly* herd management software can bring to your operation.

If you have any ideas for improving the software call Midwest MicroSystems at 800-584-0040 or send a note to Midwest MicroSystems at 4701 Innovation Drive, Lincoln, Nebraska, 68521-5330. Also look for the Midwest MicroSystems web page at http://www.midwestmicro.com or send an e-mail message to support@midwestmicro.com

This chapter describes new features available in Cow Sense Version 4, how Cow Sense works, and the fundamental techniques you'll need to successfully run the program. In order to fully operate Cow Sense, you should know how to:

- Use a mouse to navigate in a Windows icon-oriented and drop-down menu environment.
- Operate Windows Explorer™ in Windows 95™ or higher.

INTRODUCING THE COW SENSE VERSION 4 SERIES

Version 4 has major feature enhancements at three levels: processing, user interface, and industry partnerships as illustrated in Figure 1-1. Processing and interface changes all are contained within the Cow Sense program.

Most obvious to you will be the enhancements to the user interface, and the functionality you find there in user-defined fields, global edits, breeding, semen inventory, embryo tracking and others. Equally important are the underlying changes to processing

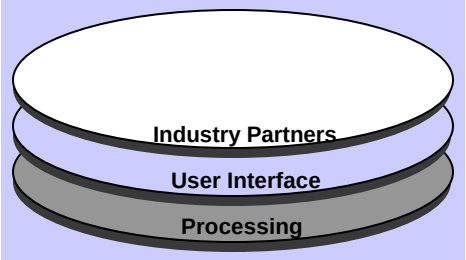


FIGURE 1-1. COW SENSE DESIGN LAYERS.

TIP: COW SENSE IS ALSO A PRACTICAL HERD RECORD KEEPING SYSTEM FOR BISON, ELK AND HORSE HERDS, AND SHEEP FLOCKS.

and data structure. You will not interact with these enhancements directly, but they make Cow Sense even more flexible and powerful, and enable all of the other improvements. Other enhancements allow you to exchange data easily and reliably with others in the industry, which eliminates the need for re-keying information you may receive from another source or that you may want to send to another link in the production chain. Such electronic data exchange is becoming a very important element of both emerging and traditional industry partnerships: in production systems, with breed associations, or simply a means of anonymously comparing performance within your herd to others who are in the business of producing beef.

We have worked hard to preserve the basic features and simplicity of Cow Sense while extending its reach, power, and flexibility. If you are a user of Cow Sense EZ-75 or Cow Sense Lite, you will find that some of these enhancements do not apply. We understand and appreciate your desire for a basic program, and we have provided you with additional flexibility and capability without forcing you to move to a level of record keeping that doesn't fit your operation or your needs.

Although Cow Sense provides comprehensive performance analysis for your cattle, it is also designed to make data entry as easy, fast, and error-free as possible. You will find extensive use of defaults and drop-down lists that save time and help you keep from making data entry errors.

Please look in Chapter 2 for instructions on installing, opening, and setting up your herd data.

AN OVERVIEW OF THE COW SENSE SUITE

Different modes of Cow Sense are tailored to different types of herd management. Features available in some modes are not available in others. To view key features by mode, refer to Appendix 1.

Cow Sense EZ-75 is designed for the cow-calf producer who keeps 75 or fewer cows. As its name implies, EZ-75 is easy to use. It contains several of the features of Cow Sense Commercial, but it restricts entry to 75 cow, and 15 bull records. Refer to Appendix 1 for more information on Cow Sense EZ-75.

Cow Sense Lite keeps herd and semen inventory, and calving records, analyzes reproductive performance, tracks individual and herd treatments, and records sales. It does not contain fields for recording individual weights or values for feedlot and carcass performance, EPDs, and pedigrees. It provides for only two user-defined fields per calf, cow or bull

table. This mode does not restrict the number of animals you can entering into the system.

Cow Sense Commercial provides all the features of Cow Sense Lite, but it is designed for producers who want to use weights, and feedlot and carcass data as a measure of cow and bull performance. It also allows much more flexibility in customizing user-defined data fields. Like Cow Sense EZ-75 and Lite, it does not allow producers to track pedigrees and cow EPDs.

Cow Sense Purebred, for seed stock producers, builds on Cow Sense Commercial, adding pedigrees, embryo transfer features, and cow EPDs on animal records. It also links to the optional Sale Manager.

The ***Cow Sense Sale Manager***—a stand-alone companion to Cow Sense—prepares sale sheets with the most current performance data you have entered, tracks customers and their lifetime purchases, prints mailing labels, and clerks sales. It further will produce galley proofs of sale catalogs, without you having to type a single pedigree or performance record.

The ***Premium Interface Component*** is an optional program that is designed for electronic data exchange with breed associations or within value added production systems. The software handles all of the technical aspects of data structure and file layouts and gives you the simple convenience of menu driven commands. You can apply a predefined data structure for a specific application to your Cow Sense herd, then simply select import and export routines that are written for specific data exchange functions. Validations operate in the background to ensure that data requirements are met on both import and export.

MULTIPLE HERD MANAGEMENT

The Cow Sense Lite, Commercial and Purebred modes let you keep multiple herds, and they do not limit herd size. Cow Sense EZ-75 limits you to one herd file in which you can keep up to 75 cow and 15 bull records.

Cow Sense lets you track up to two groups (plus breed groups) within each herd for cows, bulls, calves and yearlings. Within-herd groupings are important for detailed analysis and to calculate ratios for contemporary groups (cattle subjected to the same environmental and management conditions). Cow Sense keeps track of the lifetime production of each cow and each bull (if you identify individual sires) in your herd. It compiles each animal's performance and provides you with measures that you can use to rank and cull your herd. Cow Sense will rank individuals, compare groups, examine production history, calculate a break-even price and more.

CONCURRENT PRODUCTION CYCLES

Cow Sense Version 4 permits *concurrent* production cycles. You do not have to complete one production cycle before beginning another, and when you begin a new production cycle, you can select a specific group of cows. Concurrent production cycles is illustrated on the flow chart in Figure 1-2 by the *stacked boxes* for Run New Cycle.

Notice the production cycle selector box on the main tool bar, illustrated as Item M in Figure 1-3. Use this selector to make any production cycle the current cycle for reporting or entering data. The selector tells you the date and status of the production cycle, along with the descriptive notation. You can select a different production cycle by clicking on the Hot button.

Run New Cycle now begins with a prompt for selecting the cows to put into the cycle, as well as the date the cycle is to begin. Cow Sense makes standard selection tools available, along with the option to simply select "All Active Cows". Furthermore, Cow Sense includes a timesaving feature that automatically builds calf IDs from dam IDs, *including a prefix or suffix to distinguish the calf from the dam.*

Version 4 gives you the ability to lock production cycles so that they do not update. This new feature significantly enhances performance and preserves computations that are specific to a particular production cycle. You even have the option of selecting individual breed specifications on each production cycle you create. You continue to have the freedom to edit calf records on any production cycles that are not locked and the confidence that those changes will be reflected in subsequent updates.

CUSTOMIZED DATA FIELDS

Version 4 permits virtually unlimited flexibility in customizing the data structure by allowing you to create data fields or change labels for selected standard fields. Cow Sense Lite does not allow customized data fields, however.

REPORTING TOOLS

In addition to storing user defined data elements, Cow Sense Version 4 gives you all the power of the query and reporting tools for those data elements during analysis. The query is a means for you to *select* a subset of records by using simple drop down boxes to generate comprehensive selection formulas. Custom reports allow you to place any combination of data elements on a report for cows, bulls, or calves. Working together, these tools

bring the real power of computing to your herd management and decision-making process.

Cow Sense provides a comprehensive set of standard, ready-to-run reports with powerful query and sorting tools. For the more demanding user, the Cow Sense report designer in Lite, Commercial and Purebred, links directly into your herd database and gives complete flexibility to design, name, and save any report. You can also build summary calculations of your own into a report or you can create custom sorts and queries, name them, and save them.

Cow Sense also comes with a library of sample queries and sample reports to illustrate their use. Load these samples into your own herd and use them, or modify them to suit your needs. Refer to Chapter 5 for more information on using the Open Library function.

Additionally, Cow Sense now has a new custom print report engine that is far superior to the custom print report engine in previous releases. The new custom print report feature allows you to add grid lines (useful for custom field forms) and double spaces, or change fonts.

EXPORTING FEATURES

Cow Sense permits you to export data for comparative analysis, graphs, and charting. This is a valuable feature if you're visually-minded or if you want to present data graphically to potential customers or partners. You can load Cow Sense data into other commercially available software tools to conduct any type of analysis you wish.

IMPORTING FEATURES

Cow Sense Lite, Commercial and Purebred also let you import data. For example, if you use an electronic scale with memory capability, you can load tab-delimited weight data off the scale and into Cow Sense.

BREEDING EVENT TRACKING

Because reproductive performance is critical, you can enter virtually unlimited breeding events for a cow. You can track a complete breeding history for every cow. You also have a comprehensive set of estimated progeny difference (EPD) fields for trial matings in the Purebred mode, which makes this aspect of the breeding tools even more useful.

Pregnancy Checking

Pregnancy checking has much more functionality in Version 4. The

cow record now carries a pregnancy status, complete with days bred (or pregnancy stage) and projected calving date calculation.

Semen Inventory

The semen inventory feature in Lite, Commercial and Purebred, is a transaction system that tracks inventory additions and usage during breeding.

CARCASS AND FEEDLOT PERFORMANCE TRACKING

The Closeout Update in the Commercial and Purebred modes takes carcass and feeding data analysis to a new level of sophistication. Cow Sense computes sire and dam lifetime historical averages of carcass and feeding values for progeny, just the same as it does for weight performance.

COMPLETE HERD DATA FILE CONTAINMENT

The herd data file is self-contained, carrying with it breed specifications, saved report layouts, and saved queries. When you create a new herd, Cow Sense will ask whether you want to clone an existing herd with all its customized fields, saved report layouts, queries, and breed specifications.

ELECTRONIC DATA EXCHANGE

More and more, Cow Sense customers are cooperating with other entities in the industry. Cow Sense is specifically designed to engage with all facets of the industry, as illustrated by the design layers in Figure 1-1. Cow Sense does this through electronic data exchange.

Import/Export

Included in Version 4 is a new import tool that allows you to easily import a broad range of data. You can import such data as weights and update EPDs as well as feedlot and carcass information. You can set up an import specification just once and store it for easy recall in future use.

Exporting is easier now, as well, because with the click of one button on any list report you can send data to a text file that is readable by anyone.

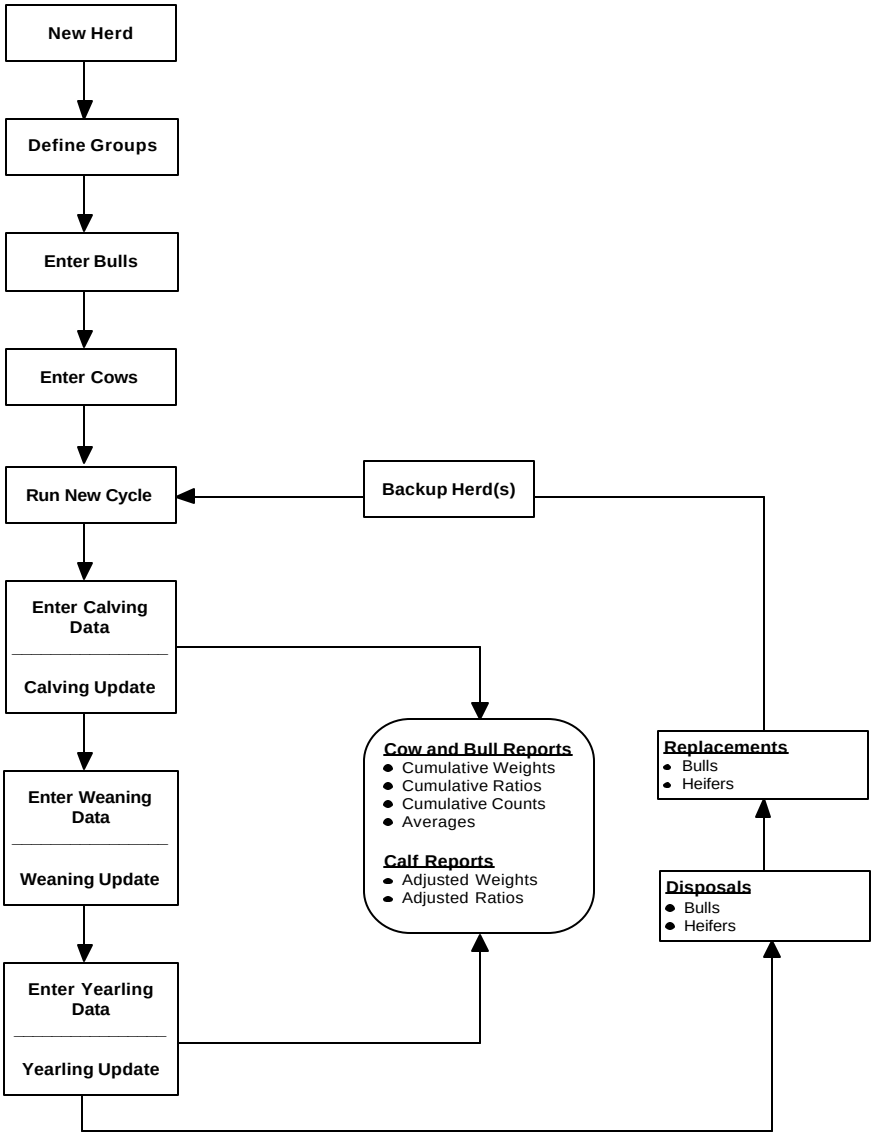
ORGANIZATION OF THIS DOCUMENT

This document is organized to follow the natural progression through the Cow Sense **Main Menu**. It guides you through each menu item, associated tasks and related features. This style provides a direct reference to specific functions and necessary approaches to accomplishing the task at hand. We are pleased to provide you with this useful tool and stand at your service to ensure your optimum benefit of its use.

INFORMATION FLOW

Figure 1-2 shows the Cow Sense flow chart, which provides a graphical representation of information flow in Cow Sense. You will do well to spend time with the flow chart to grasp the overall process. Mark the flow chart page so you can conveniently refer to it as you read through chapters in the *Cow Sense User's Guide*.

FIGURE 1-2. COW SENSE INFORMATION FLOW.



BASIC FUNCTIONS AND NAVIGATION

To navigate in Cow Sense you rely on your mouse and keyboard. The selections you access by opening items in the drop-down main menu bar provide a means for you to perform common menu commands with a single mouse click. Cow Sense also uses several icons that direct a given action when you single click on them. Documentation for buttons and other navigation tools specific to the Enter Data and Reports windows are documented within their respective chapters.

NAVIGATION

Once you are entering data, it will be more convenient to keep both hands on the keyboard. The standard key for navigating to new fields while entering data is the TAB key. Otherwise, you may use your mouse to navigate among fields in Cow Sense.

THE HOT BUTTON

FIGURE 1-3. THE HOT BUTTON.

Certain data entry boxes have a downward arrow called a Hot button. The Hot button drops down a list of options concerning the field on which it's located. Click an item on the list to make your data entry selection.

A Hot button also appears on listing reports, usually in the ID column. Click on the ID of an animal to make the Hot button appear. Then, when you click the Hot button, a linked form will appear, giving you more detailed information about the animal.

THE CHECK MARK

FIGURE 1-4. THE CHECK MARK.

You can use the checkmark in the mark individual data records. For example, if you want to select a group of calves to treat with a 7-way clostridial vaccine, select **Enter Data > Treatment > Treat Cattle** from the main menu bar; then enter a treatment and select the Calves form. To access the checkmark, position the standard Windows pointer on the left side of the Calf ID field and it will change from an arrow to a checkmark. Then when you click the mouse, Cow Sense will highlight the selected row (record).

THE MENU BAR

Figure 1-5 supplies details on the items and icons associated with the Cow Sense main menu and main tool bar.

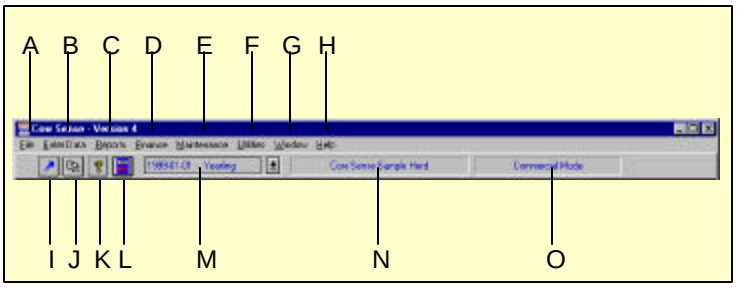


FIGURE 1-5.
THE MAIN MENU AND MAIN TOOL BAR

Using the main menu and the main tool bar

A. The **File** menu contains selections for creating new herd databases, opening existing herd databases, deleting herd databases, closing or redisplaying (or cascading) windows, setting up the printer commands and quitting Cow Sense. *See Chapter 3*.

B. The **Enter Data** menu contains the *Define Group* selection where you customize fields and analysis criteria for your data entry screens. It also contains selections for entering bull, cow, and calf data for setting up and recording treatments (mass and individual) and for printing forms on which to record information in the field (for example, at the working chute during pregnancy evaluation). *See Chapter 4*.

C. The **Reports** menu contains selections for various cow, bull, calf, breeding and herd health treatment reports. In each case, you have the ability to create custom reports. See Chapter 5.

D. The **Finance** menu contains selections for individual and group sale and cost analysis. The Sales option not only allows you to record various cattle sales, but it provides a Sales Record Report. You can create Custom Sale Reports as well. The Cost option provides a template in which to enter various production costs (for example: labor, interest, and grazing) and compute the break-even price of your calves. *See Chapter 6*.

E. The **Maintenance** menu contains selections for calculating and compiling production cycle information regarding calving, weaning and yearling records, replacement stock selection, and disposal information. This menu also contains the Setup option for defining your herd and analytical functions, and establishing data entry criteria, and customizing data fields. Further, you can retrieve information on cow, bull, and calf inventory, and a log of calving, weaning, and yearling updates from this menu. *See Chapter 7*.

F. The **Utilities** menu contains selections for maintaining the integrity of your data and program operations. Under this menu you can back up your herd (very important to do often), restore backups, repair common database problems, and export and/or import data to or from other program files. *See Chapter 8*.

G. The **Window** menu lists all open windows on your Cow Sense desktop, allows you to cascade windows, and provides the toggle for turning on and off the Data Entry Mode. *See Chapter 9*.

H. The **Help** menu contains the Cow Sense on-line help document. *See Chapter 9*.

I. The **Arrow** icon lets you put away all the open windows on your Cow Sense desktop.

J. The **Cascade** icon layers your windows in a cascading stack so that you can see the title bar and left margin of each open window.

K. The **Question Mark** icon launches the Cow Sense on-line help document.

L. The **Calculator** icon opens up the Microsoft Windows calculator.

M. When you click the Hot button in the **Production Cycle Selector** box, Cow Sense will display a drop-down list form which you can call up a production cycle cohort for all production cycles you have created for the open herd—past, present and future. This gives you access to all records you have stored in Cow Sense.

N. This box tells you which herd you currently have open.

O. This box tells you what mode you're using (EZ-75, Lite, Commercial or Purebred).

SUPPORT

At Midwest MicroSystems, we strive to make Cow Sense products easy to use, yet capable of providing advanced analysis and superior management information. While the documentation we provide gives detailed explanations of program features and capabilities, we realize that there are times when you need extra technical assistance by support personnel.

When you purchase Cow Sense, you also purchase a set amount of support. Review the current Midwest MicroSystems customer support policy to determine the support options available to you. Beyond the initial support provided by Midwest MicroSystems, you may purchase additional support as you need it. Contact the Midwest MicroSystems support center for technical support options and pricing.

To receive support:

1. Check the *Quick Start Guide, User's Guide,* or Help first.
2. Send e-mail to support@midwestmicro.com.
3. Call Midwest MicroSystems support center at (877) 500-8834.
4. Point your Internet browser to http://www.midwestmicro.com to download maintenance releases or read the Cow Sense support forum.

Please have your Cow Sense registration number handy when you call for support. Your registration number is displayed at **Maintenance > Administration > Setup**.

You can also use the Midwest MicroSystems **MicroFTP** feature to send a herd file electronically to Midwest MicroSystems to have technicians evaluate your herd in light of certain problems. Refer to Chapter 9 for more information on sending herd files electronically to Midwest MicroSystems for support.

UPGRADES

The Cow Sense Trial Edition does not expire, and you may activate it at any time to Cow Sense EZ-75, Lite, Commercial or Purebred modes. You may also upgrade any Cow Sense mode to a higher level simply by requesting a new activation key. As a registered Cow Sense user, Midwest MicroSystems will notify you regarding future upgrades as they become available. For further upgrade information, call your licensed Midwest

MicroSystems reseller or call Midwest MicroSystems at 800-584-0040. You may also send e-mail inquiries to sales@midwestmicro.com.

Also, Midwest MicroSystems posts periodic maintenance updates and intermediate version releases at its web site at http://ww.midwestmicro.com. Some releases are free and some are available for a fee. Visit the site often to make sure you keep the most up-to-date version of Cow Sense running on your operation.

ABOUT THE SOFTWARE AUTHORS

Jim Lowe ranched in the Nebraska Sandhills from 1980 to 1995, and began designing computer programs for ranch applications in 1984. Cow Sense grew out of his work with record keeping systems in his own herd and as a consultant for other ranchers. In 1995, Jim dedicated his professional career to building the software business, which is now located in Lincoln, Nebraska. Jim holds a Bachelor's degree from M.I.T., and he was a Bush Fellow in graduate school at the University of Minnesota. Prior to moving to the ranch in 1980, Jim worked in applied research on the Minnesota Work Equity Project. Jim grew up on a crop and cattle feeding operation in southwest Minnesota.

Dave Borchert owns a computer consulting firm in Golden Valley, Minnesota. He has been providing software support to clients throughout Minnesota since 1981. His clients range from medical services to meat processors. Dave holds a Bachelor's degree from Carlton College in Northfield, Minnesota, and he attended graduate school at the University of Minnesota. When Dave isn't at the keyboard, he is usually either hiking the Big Horns or canoeing the Boundary Waters.

Chapter 2: Getting Started

INSTALLING COW SENSE

FILE STRUCTURE

Cow Sense stores most files in the c:\cowsense directory or folder (or the directory you specified in step 5 of the installation procedure). Cow Sense makes four subdirectories or subfolders inside your main c:\cowsense directory. The HERDS subdirectory is where Cow Sense stores your current herd databases. The HERDSBAK subdirectory holds backup herd files that are quick and easy to restore. (*You should also back up to removable media, such as to floppies or Zip disks, and store these media off-site.*) The ACROREAD subdirectory contains Adobe Acrobat files. The SALEMGR subdirectory contains Sale Manager execution files and, if you have Midwest MicroSystems' Sale Manager, it contains Sale Manager data files as well. The remainder of the files in the c:\cowsense directory or folder are execution and report files. They are necessary files for running Cow Sense efficiently and effectively. You should not attempt to alter or remove these files or you will corrupt your Cow Sense program. Cow Sense creates a log file during installation (SETUP.LOG) that documents all the installed or updated files. You will find SETUP.LOG in c:\cowsense, and you can open it with Notepad, WordPad, or any other text editor.

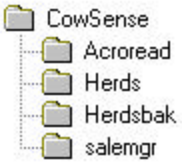


FIGURE 2-1.
THE COW SENSE DIRECTORY TREE.

Because of the nature of the Windows operating system, Cow Sense must also store or update some files in your Windows folder. These files are resources that allow Cow Sense to run and may also be shared with other programs installed on your computer. Cow Sense will back up any system files that it updates during installation and will identify the backup files in SETUP.LOG.

FIGURE 2-2.
THE COW SENSE SETUP WINDOW.

INSTALLATION PROCEDURE

Installing from CD

1. Insert the installation CD into your computer's CD or DVD

drive. Your computer should automatically launch the Cow Sense installation utility (see Figure 2-2). If the Cow Sense Setup window does not load directly, click the Windows **Start** button. Click **Run...** . In the Run window, click the Browse button. Select your CD/DVD drive (for this example, drive E) with the Cow Sense CD loaded. Click the Open button. Select setup.exe, and click the Open button. The Open command window should show e:\setup.exe. Click the OK button, and your computer should launch the Cow Sense installation utility.

2. In the Cow Sense Setup window, choose **Install Cow Sense!** An Install Cow Sense window will appear. Click the OK button.
3. In the Cow Sense Setup window, read the License Agreement. Click the I Agree button if you wish to proceed.
4. In the Cow Sense Version 4 window, click the Next button.

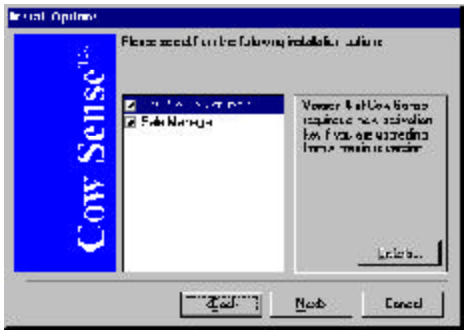


FIGURE 2-3.
THE COW SENSE INSTALL OPTIONS WINDOW.

5. When you reach the Install Options window (see Figure 2-3), you have the opportunity to chose which components you want to install: Cow Sense and/or Sale Manager. You can arrow through the selections for a brief description of each. By default all components are checked to install. If you wish not to install Sale Manager, click on it with your mouse to uncheck it. Be sure you have Cow Sense Version 4 selected. Click the Next button.
6. A Cow Sense Version 4 window will appear telling you in which directory it will install the software. If you are an advanced user or have a unique install requirement (such as partitioned hard drives) you can change the default path (c:\cowsense) by typing a new drive letter and / or folder name in the dialog box; you can also look for a directory by clicking the browse (...) button. Click the Next button to continue.
7. The next window to appear will be the Install Adobe Acrobat Reader? window. You must have Adobe Acrobat Reader in order to read and print downloaded user's guides and supplemental docu-

ments. If you have Acrobat Reader installed already, or if you do not wish to use the on-line documents, click the No button. You can install Acrobat Reader later. You can find Acrobat Reader installation instructions in the Quick Start Guide (select the “View User’s Guide” option in the Cow Sense Set Up window). If you want to install Acrobat Reader, click the Yes button.

8. If you did not install Acrobat Reader, or after you have finished the Acrobat Reader installation process, Cow Sense will begin installing on your computer. After all components are installed, a Cow Sense Registration window will appear listing your serial number. If you are updating, this box will also display your name and ranch name from the previous version. If not, you can add this information later. Click the Save button to complete the installation.
9. You must restart your computer for the installation process to finish

When Cow Sense is finished installing, it will create a program window that contains your Cow Sense icons. It will place the folder for access on the Start menu under the Programs directory. Refer to Windows documentation to place a shortcut on your desktop or in a toolbar.

Installing from floppy disks

1. Insert the installation disk #1 into your floppy disk drive (usually drive A).
2. Click the Windows **Start** button.
3. Click **Run...** .
4. Type a:\setup in the Open box and click the OK button or press the ENTER key.
5. When you reach the Install Options window, you have the opportunity to chose which components you want to install: Cow Sense and/or Sale Manager. You can arrow through the selections for a brief description of each. By default all components are checked to install. If you wish not to install Sale Manager, click on it with your mouse to uncheck it. Be sure you have Cow Sense Version 4 selected. Click the Next button.
6. A Cow Sense Version 4 window will appear telling you in which directory it will install the software. If you are an advanced user or have a unique install requirement (such as partitioned hard drives) you can change the default path (c:\cowsense) by typing a new drive

letter and / or folder name in the dialog box; you can also look for a directory by clicking the browse (...) button. Click the Next button to continue.

7. The next window to appear will be the Install Adobe Acrobat Reader? window. You must have Adobe Acrobat Reader in order to read and print the downloaded user's guides and supplemental documents. If you have Acrobat Reader installed already, or if you do not wish to use the on-line documents, click the No button. You can install Acrobat Reader later. You can find Acrobat Reader installation instructions in the Quick Start Guide (select the "View User's Guide" option in the Cow Sense Set Up window). If you want to install Acrobat Reader, click the Yes button.
8. If you did not install Acrobat Reader, or after you have finished the Acrobat Reader installation process, Cow Sense will begin installing on your computer, prompting you for subsequent installation disks. After all components are installed, a Cow Sense Registration window will appear listing your serial number. If you are updating, this box will also display your name and ranch name from the previous version. If not, you can add this information later. Click the Save button to complete the installation.
9. You must restart your computer for the installation process to finish

When Cow Sense is finished installing, it will create a program window that contains your Cow Sense icons. It will place the folder for access on the Start menu under the Programs directory. Refer to Windows documentation to place a shortcut on your on your desktop or in a toolbar.

Other Installation Options

Your Cow Sense CD comes with several other selections besides the Install Cow Sense option.

Slide Show Presentations

Cow Sense comes with two slide show presentations, "Cowboys and Computers" and "The Beef Business by Dr. Harlan Richie". You can view both by clicking on them in the menu; They will show via an included Microsoft PowerPoint reader.

Viewing CD-Enabled Documents

You can view and print the Cow Sense User's Guide, Quick Start Guide and Sample Reports directly from the installation CD without installing

Acrobat Reader. You can access these documents by clicking on their titles in the Cow Sense Setup window that activates when you launch the CD.

Uninstalling

You can use the Windows Uninstall utility to uninstall most Cow Sense files. To find the utility, click the Windows **Start** button. Click **Settings > Control Panel**. Double click **Add/Remove Programs**. Under the Install/Uninstall tab, scroll and select Cow Sense from the software list. Click the Add/Remove button Click the Yes button to proceed. You may also uninstall Cow Sense manually, but before deleting any files, copy SETUP.LOG to a temporary directory for reference. To uninstall Cow Sense, simply use Windows Explorer to send the Cow Sense program folder (or directory) and all the subdirectories and files inside of it to the Recycle bin; Cow Sense may share the resource files installed in c:\windows\system with other programs, so use caution if you remove them. Restore the backed up versions listed in SETUP.LOG.

TIP: FOR HANDY REFERENCE, CLICK ON THE "VIEW QUICK START GUIDE" FROM THE INSTALLATION CD, AND PRINT THIS DOCUMENT TO HAVE AT YOUR FINGERTIPS DURING INSTALLATION AND START UP.

LICENSING

When you receive your Trial Edition of Cow Sense, you are limited in the number of cows you can enter, but you can fully examine the different operation modes available (EZ-75, Lite, Commercial and Purebred). If you purchase Cow Sense, and once you decide which mode suits you best, you must obtain an activation "key" number from the licensed Midwest Micro-Systems reseller who sold you the program or from Midwest MicroSystems in order to unlock the full capabilities of your software. You'll enter the key number in the **Maintenance > Administration > Setup** menu in Cow Sense. See the *Setting Up Herds* section of this chapter for more information about entering your key.

STARTING COW SENSE

1. Click the **Start** button.
2. Click Programs.
3. Click the program folder called Cow Sense.
4. Click the Cow Sense icon (see Figure 2-4).
5. Cow Sense will display a copyright notice and then the Cow Sense title screen. Click Continue and the Cow Sense shell will appear on your display.

FIGURE 2-4.
THE COW SENSE START ICON.

TIP: You can put the Midwest MicroSystems icon on your desktop or in a tool bar. Refer to your Microsoft Windows documentation to learn how.

SETTING UP HERDS

Setting up your herd or herds is the first step to successfully operating Cow Sense. Once you're inside Cow Sense, you'll use the main menu and tool bars to operate the program.

Notice that the first time you run Cow Sense the herd name in the tool bar will say "Cow Sense Sample Herd". Once you set up your own herd (or herds), the name of the current herd with which you're working will appear there instead (see Figure 2-5).

Figure 2-5. The Cow Sense Main Menu Bar. The current herd name is in the middle window box, called "Cow Sense Sample Herd".

ENABLE COW SENSE

The copy of Cow Sense you received is a full, working system, but it has a "lock" on it that identifies it as a Trial Edition and limits the amount of information you can enter. Once you decide to purchase Cow Sense, you can obtain an activation "key" from the licensed Midwest MicroSystems reseller who sold you the program, or from Midwest MicroSystems. You may obtain a key in one of two ways:

- If you purchase Cow Sense from a reseller, that reseller can supply you with a activation key, which he receives from Midwest MicroSystems. Contact your reseller after you purchase the program in order to receive the key. Your reseller will ask you for your Cow Sense serial number and registration number.
- If you purchase Cow Sense directly from Midwest MicroSystems, you may receive a key after your payment is processed (credit card orders assure a faster alternative to receiving your key than check orders). Either write to Midwest MicroSystems at 4701 Innovation Drive, Lincoln NE 68521 or at sales@midwestmicro.com, or call Midwest MicroSystems at 800-584-0040. Provide the service representative the serial number and registration number in your program in order to receive the key.

The serial and registration numbers are located on the Setup window under **Maintenance** > **Administration** > **Setup** (see Figure 2-6).

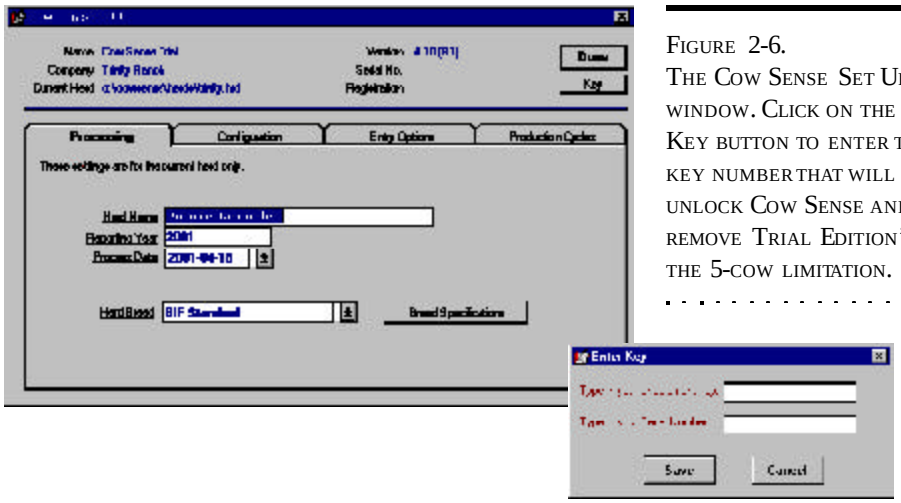


FIGURE 2-6.
THE COW SENSE SET UP WINDOW. CLICK ON THE KEY BUTTON TO ENTER THE KEY NUMBER THAT WILL UNLOCK COW SENSE AND REMOVE TRIAL EDITION'S THE 5-COW LIMITATION.

FIGURE 2-7.
THE ENTER KEY WINDOW.

To unlock the Trial Edition and enable your selected operating mode, click **Maintenance > Administration > Setup** from the main menu bar. In the Cow Sense Setup window, click the Key button. Type the activation key provided by Midwest MicroSystems in the data entry box (see Figure 2-7). Click the Save button. Cow Sense will tell you to restart the program for the activation key to take effect. From this point on you'll have complete access to the operating mode of Cow Sense you purchased.

CREATE A HERD

To begin setting up a herd file, click **File > New Herd** from the main menu bar. The Create A New Herd window will appear (see Figure 2-8). It will list the name and company you typed in when you installed Cow Sense.

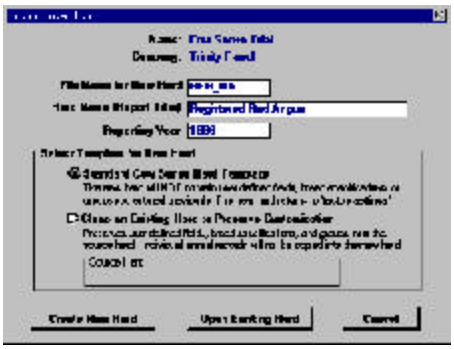


FIGURE 2-8.
THE CREATE NEW HERD WINDOW.

NOTE: IF YOU ARE SETTING UP A PUREBRED HERD YOU MAY WANT TO CONSIDER USING THE PREMIUM INTERFACE COMPONENT (PIC) TO EXCHANGE INFORMATION ELECTRONICALLY WITH A BREED ASSOCIATION. IF YOU USE THE PIC, FIRST CHECK TO BE SURE YOUR BREED IS LISTED. THEN SETUP BREED SPECIFICATIONS ACCORDING TO THE PIC DOCUMENTATION.

In order to set up a new herd, you need to type the file name for the herd, a herd title for reports, and the reporting year in which you want to start recording information.

You have two template options when you select **File > New Herd** from the main menu bar. You can use the Standard Cow Sense Herd Template, which will not contain personally-defined fields, breed specifications, or groups you set up previously (if you're upgrading), or you can Clone an Existing Herd to Preserve Customization. *If you are setting up a herd for the first time, you will use the Standard Cow Sense Herd Template option.*

If you select the latter option to clone a customized existing herd, Cow Sense will display a Select Herd to Clone window (see Figure 2-9), and will default to the c:\cowsense\herds directory. To change directories—if you've stored your herds in a different directory, which is inadvisable—use standard Windows directory tree protocol by double clicking the c:\ icon (c:\ ) in the Folders listing; continue to click on the appropriate sub folders until you find the herd you wish to open.

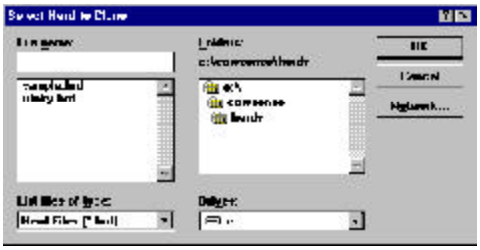


FIGURE 2-9.
THE SELECT HERD TO CLONE WINDOW.

Select the herd you wish to clone and click the OK button. Cow Sense will verify your selection, and after you click the OK button Cow Sense will return to the Create New Herd window and list the herd you selected in the Source Herd box.

TIP: IF YOU SELECT THE CLONE AN EXISTING HERD… OPTION IN THE CREATE NEW HERD WINDOW, YOU WILL FIND THAT ALL THE SETTINGS UNDER **ENTER DATA > DEFINE GROUPS** REFLECT THE SETTINGS YOU SET UP IN THE HERD YOU CLONED.

Click the Create New Herd button to continue. Cow Sense will display a Create New Herd confirmation window. Click the OK button to continue. Then Cow Sense will display the Beginning New Herd window. Click the OK button. Afterward, Cow Sense will display the Select Herd Operation Mode window if you have either the Commercial or Purebred modes (see Figure 2-10).

Any operating mode can create herds in a lower mode. If you have Purebred, you will have a choice of Lite, Commercial or Purebred. If you have Commercial, you will have a choice of Commercial or Lite. And if you have the Lite or EZ-75 mode, the window will not appear.

FIGURE 2-10.
THE SELECT HERD OPERATION MODE WINDOW.

SETUP OPTION

To set up your herd, click **Maintenance > Administration > Setup** on the main menu bar. The Cow Sense Set Up window will list the current version, the administrator and company names, the current herd and data path, your serial number, and your unique registration number—all information you entered when you installed Cow Sense. You cannot alter this information in Setup.

NOTE: THE OPTIONS UNDER THE MAINTENANCE DROP-DOWN MENU ARE HERD-SPECIFIC. IN OTHER WORDS, IF YOU SETUP AND MAINTAIN MORE THAN ONE HERD IN COW SENSE, YOU CAN SET THE MAINTENANCE OPTIONS DIFFERENTLY FOR EACH HERD.

Processing Options

In the Processing form (under the *Processing* tab), Cow Sense carries over the information for Herd Name, Reporting Year, and Process Date from the information you entered to start a new herd. You can override that information in this form (see Figure 2-11).

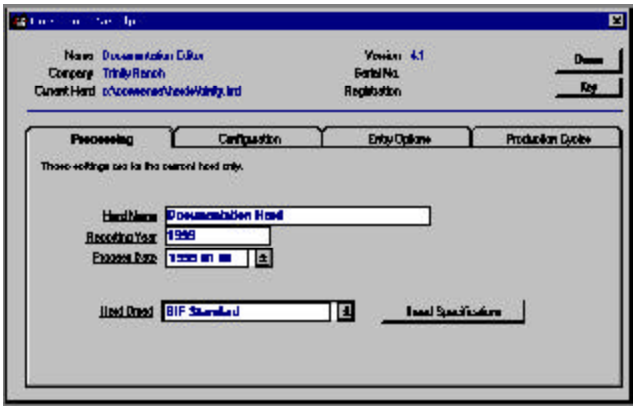


FIGURE 2-11.
THE COW SENSE SET UP PROCESSING FORM.

The Herd Name is the title that you want to appear on all printed reports. Cow Sense also provides this name to you for confirmation when you select **File > Open Herd** from the main menu bar. Each herd you create retains its own title.

TIP: YOU SHOULD LEAVE THE PROCESS DATE BLANK WHEN YOU'RE ESTABLISHING A HERD DATABASE BECAUSE COW SENSE WILL PROMPT YOU FOR A DATE WHEN YOU ESTABLISH A NEW PRODUCTION CYCLE USING THE **MAINTENANCE > NEW CYCLE > RUN NEW CYCLE** OPTION.

The Reporting Year is the current reporting year. The year will appear along with the report title on your current reports and when you open an existing herd. Cow Sense automatically increments the reporting year each time you create a new cycle with the **Maintenance > New Cycle > Run New Cycle** option. You can override that date in the New Cycle Reference Date window (see Chapter 7), but you should leave the Process Date blank when you're establishing a herd database because Cow Sense will prompt you for a date when you establish a new production cycle using the **Maintenance > New Cycle > Run New Cycle** option. *You have a 270-day window from this date in which you can enter calf data (60 days prior to and 210 after)*.

Finally, the Breed Standard box allows you to select criteria for computing performance measures. You may choose Beef Improvement Federation (BIF) standards or specific breed standards as defined by breed associations. If you are using Lite or Commercial Cow Sense, you will only have a BIF standard and the ability to create custom standards from a BIF template. You cannot change the BIF or breed standards, but you can add custom standards based on modifications of those values. You can then use your custom standards to calculate performance measures in your herd.

Refer to the section entitled Processing in Chapter 7 to learn how to set up custom breed standards.

When you're finished in the Processing form, click the Done button or click the *Configuration* or *Entry Options* tabs to make or confirm changes in those windows.

Configuration Options

In the Configuration form (see Figure 2-12) you can adjust the way you sort and enter data, and set the operation mode (Lite, Commercial, or Purebred).

Sorting Box

You can sort your herd three different ways in Cow Sense, depending on your identification system.

- *Numeric*. This option gives you a *true numeric sort*—you don't have to use leading zeros (for example, 0001). That means you can enter

identification numbers as 1, 2, 3…10, 12, 13…100, 120, 130…and it will sort them that way, instead of sorting them as 1, 10, 100, 12, 120, 13, 130, 2, 3. If your identification system includes both numeric and alpha character identification, then Cow Sense will separate them and sort numeric IDs numerically and alpha character IDs alphanumerically.

TIP: NEVER PUT SPACES IN IDS. FOR EXAMPLE: A 123 IS *NOT* ALL RIGHT, BUT A123 IS). IF YOU WANT A "SPACE" IN IDS, USE AN *UNDERSCORE* FOR THE SPACE (FOR EXAMPLE, A_123).

- *Leading Year.* This option lets you put a single year digit ahead of the ID that denotes the year of birth. Using Leading Year, Cow Sense sorts first by that digit, then numerically by ID.
- *Alphabetic.* This option lets you put alpha characters in your identification numbers (for example, 03487RA). You don't have to use alpha characters in your identification numbers if you use this sort. You *do* have to use leading zeros, however, if you want any numeric sort capabilities included. Otherwise a number such as 3458 will come after 13458 (but 03458 will come before 13458).

To change the Sorting option, click on the option that best fits your operation. When you're finished in the Configuration form, click the Done button or click the *Processing* or *Entry Options* tabs to make or confirm changes in those windows.

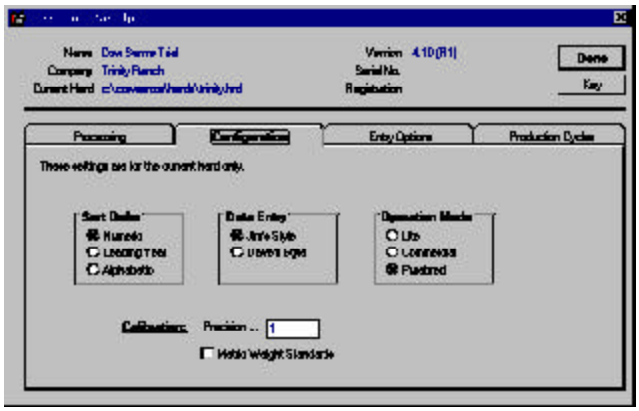


FIGURE 2-12.
THE COW SENSE SET UP CONFIGURATION FORM.

Operation Mode box

If you have Cow Sense EZ-75 or Lite, you won't have an Operation Mode Box. If you have Cow Sense Commercial, you'll have two choices in this box:

- Lite
- Commercial

If you have Cow Sense Purebred, you'll have three choices in this box:

- Lite
- Commercial
- Purebred

These options allow you to set the appropriate operation mode for a given herd. This is particularly useful if you are using Cow Sense to keep records on more than one herd. To change the kind of herd you're setting up in either Cow Sense Commercial or Cow Sense Purebred, click the option that best describes the herd.

Calibration Box

This box lets you define to what decimal place you want to record numeric data. You type the number as an example. Therefore, if you want to carry numerals to two decimal places, you should type *1.00* as an example; if you don't want to carry decimals at all, you should type *1* as your example. This is most useful if you use metric weights and measures.

Metric Weights

Finally, in the Configuration form, you have an option of using Imperial or metric weights and measures. The default selection is Imperial. If you wish to use the metric system, click on the Metric Weight Standard box and confirm your choice by typing *metric* in the proceeding confirmation window.

When you're finished in the Configuration form, click the Done button or click the *Processing* or *Entry Options* tabs to make or confirm changes in those forms.

Entry Options

The Entry Options form (see Figure 2-13) provides choices to establish certain data entry triggers and validations. The options available to you depend on the mode of Cow Sense you have. Cow Sense Commercial and EZ-75 provides all the choices available in Purebred, except the Registration option under Require Unique ID Throughout Herd. Cow Sense Lite provides all the choices available in Commercial except Commercial Tattoo under Display on Data Entry Forms and Tattoo under Require Unique ID

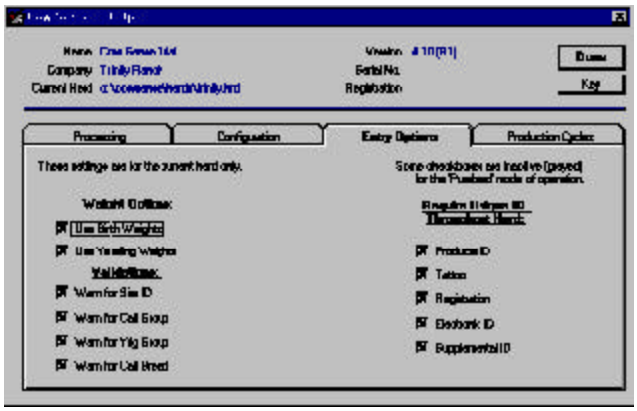


FIGURE 2-13.
THE COW SENSE SET UP ENTRY OPTIONS TAB WINDOW.

Throughout Herd. Cow Sense Lite does not provide options for using birth or yearling weights. Cow Sense Purebred gives you the following choices:

Weight Options. If you have one or both of boxes checked, Cow Sense will prompt you to enter values for birth and yearling weights. You must check the Use Birth Weights box in order to active the Calf: Birth Weights Report (see Chapter 5). You must check the Use Weaning Weights box in order to access the Enter Calves [Yearling] window (see Chapter 4), and in order to activate the Calf: Yearling Weights Report (see Chapter 5).

- Use Birth Weights
- Use Yearling Weights

Validations. If you check any validations, Cow Sense will warn you when you haven't entered data in a field checked for validation.

- Warn for Sire ID
- Warn for Calf Group
- Warn for Yearling Group
- Warn for Calf Breed

Display on Data Entry Forms. The fields you select will appear in the appropriate Enter Data window(s).

- Commercial Tattoo
- Electronic ID
- Supplemental ID
- Castration Date

Require Unique ID. If you check any of these options you must enter a unique ID or tattoo for each animal (for example, you can't use the same ID or tattoo for a calf that you use for its dam). If you don't check these boxes, animals in different contemporary groups can share the same ID or tattoo. In other words, a calf can share a dam's ID. Regardless of whether or not a box is checked, however, animals in contemporary groups can never share the same ID. In other words, two cows in the same herd or two bulls in the same herd or two calves in the same production cycle cannot share the same ID.

- Producer ID
- Tattoo
- Registration
- Electronic ID
- Supplemental ID

When you're finished in the Entry Option form, click the Done button or click the Processing, Configuration or Production Cycles tabs to make or confirm changes in those forms.

Production Cycles

The Production Cycles form displays a list of production cycles that exist for the open herd. When you set up a herd initially, Cow Sense will not contain production cycle data. Refer to the Production Cycle section of Chapter 7 for more information about this form.

PREPARING TO ENTER DATA

When you finish running the Setup option from the **Maintenance > Administration** main menu, you're ready to define groups. *Groups are optional*. Although Cow Sense does not require groups, they are a powerful tool in managing your herd. Groups give you selection criteria that enhance the capability of Cow Sense for reporting and analysis.

For Define Group instructions, see Chapter 4. Chapter 4 also covers data entry in Cow Sense. It works best to define groups before changing breed standards, and before entering cow or bull data. Group names appear on drop-down lists in the Enter Data windows. Nevertheless, you may define groups and assign animals at any time.

NOTE: IF YOU USE THE PREMIUM INTERFACE COMPONENT (PIC), YOU WILL NEED TO DEFINE SOME GROUP FIELDS TO INTERFACE WITH CERTAIN BREEDS. REFER TO THE PIC DOCUMENTATION FOR SPECIFIC INSTRUCTIONS ON USING GROUP FIELDS IN CONJUNCTION WITH THE PIC.

You will probably also want to add at least some custom data fields to your system *before* you begin data entry. The best way to determine what fields you want is to experiment with Cow Sense by adding a few cow and calf records, and a bull record or two. Then after you get the feel for the Enter Data windows, you can see what EPD, Supplemental, Breed, Carcass and Feedlot data fields you want to engage or add to your Cow Sense program. You can use the Cow Sense Trial mode to accomplish this exercise. See **Maintenance > Administration > Customize Data Fields** in Chapter 7 for complete instructions.

You must enter all cow and bull data before you enter calf data. Cow Sense uses the cow and bull information to prepare files for calf records, so that information must be in place first. This method will save you time later.

Chapter 3: The File Menu

Cow Sense Lite, Commercial and Purebred easily maintains records for multiple herds. For example, you may want to maintain separate herds for spring and fall cows or for commercial and purebred cows. You do not have to pay additional license fees for keeping multiple herds when you are using a single installation of Cow Sense.

NOTE: YOU CAN KEEP MULTIPLE HERDS IN COW SENSE, BUT IF YOU MOVE COWS FROM HERD TO HERD, YOU WILL FIND IT EASIER TO KEEP ALL COWS IN ONE HERD AND DIFFERENTIATE AMONG THOSE COWS USING THE COW GROUP FIELDS (SEE CHAPTER 4, ENTER DATA > DEFINE GROUPS). IF YOU NEED TO KEEP COWS IN SEPARATE HERDS, BUT YOU ALSO NEED THE FLEXIBILITY TO MOVE COWS BETWEEN HERDS, THEN YOU SHOULD CONSIDER COW MOOVER, WHICH IS AVAILABLE FOR PURCHASE SEPARATELY FROM COW SENSE. SEE DOCUMENTATION ON COW MOOVER IN CHAPTER 8.

OPEN HERD

When Cow Sense starts, it automatically opens the herd you had open when you were last in the program. (In Trial mode, Cow Sense automatically opens the Sample Herd.) The current herd title is reported in the menu bar. Use the Open Herd command to open a different herd.

To select a different herd, click **File > Open Herd** from the main menu bar. Cow Sense will display the Open Herd window (see Figure 3-1). To select a different herd in the default directory (c:\cowsense \herds), double click on the herd you want listed in the File Name box (or click the herd and then click the OK button on the right side of the window). To change directories—if you've stored your herds in a different directory, which is inadvisable—use standard Windows directory tree protocol by double clicking the c:\ icon (c:\ ) in the Folders listing; continue to click on the appropriate sub folders until you find the herd you wish to open.

Once you select the herd by double clicking or by clicking the OK button, Cow Sense will display a verification window asking you if the herd it lists is the one you want to open. If you click the No button, Cow Sense will return to the Open Herd window. If you click the Yes button, Cow Sense will display the newly opened herd in the icon bar at the center-top of your Cow Sense screen and close the Open Herd window.

FIGURE 3-1.
THE OPEN HERD WINDOW.

NEW HERD

Use the New Herd command to create new herd files. If you are a Cow Sense Lite, Commercial or Purebred user, you may want to do this if you run both a fall and a spring herd, or if you have a purebred herd and a commercial herd, for example. Keep in mind, however, when you create different herds, the databases become unique to themselves, which limits your ability to compare information in the different herds (you can make cross-herd comparisons by exporting data to other analysis tools such as Excel or Lotus). If you want to compare cattle within Cow Sense, use the group designations within a herd (See the Define Groups section of Chapter 4 for more information).

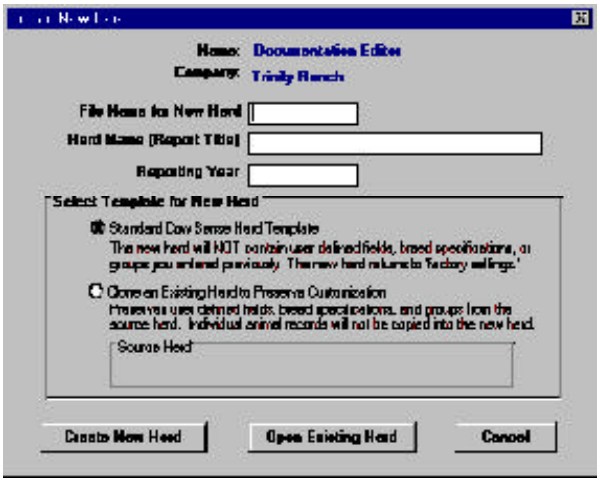


FIGURE 3-2. THE CREATE NEW HERD WINDOW.

To create a new herd, click **File > New Herd** from the main menu bar. The Create A New Herd window will appear (see Figure 3-2). It will list the name and company you typed in when you installed Cow Sense. In order to set up a new herd, you need to type an eight character (or less) file name for the herd, a herd title for reports, and the reporting year in which you want to start recording information.

TIP: IF YOU SELECT THE CLONE AN EXISTING HERD… OPTION IN THE CREATE NEW HERD WINDOW, YOU WILL FIND THAT ALL THE SETTINGS UNDER **ENTER DATA > DEFINE GROUPS** REFLECT THE SETTINGS YOU SET UP IN THE HERD YOU CLONED.

You have two template options. You can use the Standard Cow Sense Herd Template, which will not contain personally-defined fields, breed specifications, or groups you set up previously (if you're upgrading), or you can Clone an Existing Herd to Preserve Customization. *If you are setting up a herd for the first time, you will use the Standard Cow Sense Herd Template option.*

If you select the latter option, to clone a customized existing herd, Cow Sense will display a Select Herd to Clone window (see Figure 3-3), and will default to the c:\cowsense\herds directory. To change directories—if you've stored your herds in a different directory, which is inadvisable—use

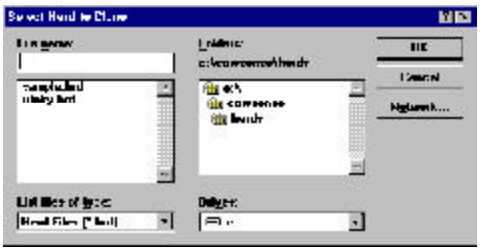


FIGURE 3-3.
THE SELECT HERD TO CLONE WINDOW.

standard Windows directory tree protocol by double clicking the c:\ icon (c:\ ) in the Folders listing; continue to click on the appropriate sub folders until you find the herd you wish to open.

Select the herd you wish to clone and click the OK button. Cow Sense will verify your selection, and after you click the OK button Cow Sense will return to the Create New Herd window and list the herd you selected in the Source Herd box.

Click the Create New Herd button to continue. Cow Sense will display a Create New Herd confirmation window. Click the OK button to continue. Then Cow Sense will display the Beginning New Herd window. Click the OK button.

Afterward Cow Sense will display the Select Herd Operation Mode window if you have either the Commercial or Purebred modes (see Figure 3-4). If you have the Purebred mode, you will have a choice of Lite, Commercial, or Purebred. If you have the Commercial mode, you will have a choice of Commercial or Lite. And if you have the EZ-75 or Lite mode, the window will not appear.

FIGURE 3-4.
THE SELECT HERD OPERATION MODE WINDOW.

Before you begin entering data in your new herd, you should establish some analysis criteria and perform a few administrative duties. Refer to Chapter 2 for more detailed information in establishing a new herd database.

DELETE HERD

Rarely will you want to delete a current herd, but you may, especially if you want to create some test herds to explore different features of Cow Sense.

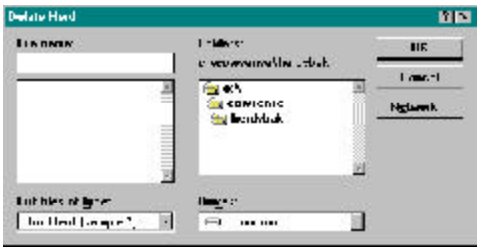


FIGURE 3-5.
THE DELETE HERD WINDOW.

To delete a herd, click **File > Delete Herd** from the main menu bar. A Delete Herd dialog will appear, which is a standard Windows directory dialog box (see Figure 3-5).

The default directory when you bring up the window is c:\cowsense\herdsbak, which is the directory on your hard drive where herd backups reside. This path is listed under Folders. To change directories use standard Windows directory tree protocol by double clicking the c:\ icon (c:\ ) in the Folders listing; continue to click on the appropriate sub folders until you find the herd you wish to delete.

Also inside the Delete Herd window, you will see a File Name box, where you select the name of the herd you want to delete. Cow Sense will default to the current herd, listed as This Herd (name of herd.*) in the List files of type box. *You cannot delete the current herd*. To see all files in the current directory, click the Hot button in the List files of type: box and then click All Files (*.*). Double click on the herd you wish to delete, or click the file to select the herd and then click the OK button. Cow Sense will display a Confirm Delete box.

FIGURE 3-6.
THE CONFIRM DELETE WINDOW.

Click the No button to return to the Delete Herd window. Click the Cancel button to abort the Delete Herd option. Click the Yes button to proceed deleting all the files associated with that herd. Cow Sense will display another warning box for you to confirm the operation. Click the Yes button to continue. Click the OK button in the File Deleted window to finish.

PRINTER SETUP

You may find it necessary to adjust printer settings or change printers. For example, if you have a fax modem, you can fax reports directly out of Cow Sense by choosing your fax modem as the default printer. To select a different printer or to modify the settings on a current printer, click **File >**

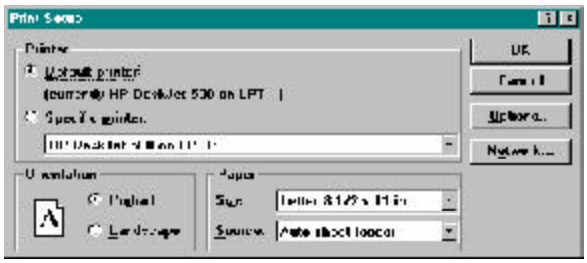


FIGURE 3-7.
THE PRINT SETTINGS WINDOW.

Printer Setup from the main menu bar, and Cow Sense will display a standard Windows Print Setup window (see Figure 3-7).

Under Printer, Cow Sense will have the current Default printer button activated and it will list the default printer you specified for Windows (first time) or the printer you selected the last time you used Cow Sense. To select another printer, click the Hot button under the Specific printer: radio button. Cow Sense will list all currently available printers. Click the printer you wish to use.

Define whether you want your printout to be portrait (vertical page) or landscape (horizontal page) in the Orientation box. For instance, you may want to select Landscape if you have a custom report with several columns or if you want to print several columns of the Treatment Items list. See Chapters 4 and 5.

In the Paper box you can select paper size and paper source; these options will vary, depending on your printer. You can define other settings, which will vary based on your printer, by clicking the Options button. If your printer is on a network, consult your network administrator for help regarding the Network button.

Cow Sense will maintain the printer settings you chose until you change them under this option, even if you change herds or restart the program. The printer settings will be most useful for custom reports. The standard reports in Cow Sense take care of themselves. Most of the standard reports in Cow Sense are set up for printing to letter-sized paper in portrait orientation, but field forms are landscaped. You do not have to change the orientation of field forms manually.

LAUNCH SALE MANAGER

If you have Sale Manager loaded in your Cow Sense directory, Cow Sense will automatically open Sale Manager when you click **File > Launch Sale Manager** from the main menu bar. Sale Manager will launch whether you have a trial version or a full working version. Contact Midwest Micro-Systems to learn more about this sale management program.

QUIT COW SENSE

The **Quit Cow Sense** command shuts down the current session of Cow Sense. To quit using Cow Sense, click **File > Quit Cow Sense** from the main menu bar. You can also quit Cow Sense by clicking the **X** icon in the upper right-hand corner of your Cow Sense shell.

Chapter 4: The Enter Data Menu

After you establish your new herd or herds, this is the first step to capturing the power of Cow Sense. *The more complete your data files, the more power you'll have to make objective decisions to manage your operation*.

You must enter all your cow and bull data before you can begin entering calf data. Cow Sense uses the cow and bull information to prepare files for your calves.

SPECIAL ENTER DATA FEATURES

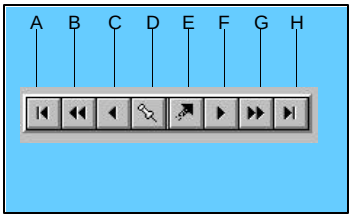
Cow Sense comes with data entry features that help you quickly and reliably enter and edit data. Some of these features are readily visible in the Enter Data windows, but others work behind the scenes to help ensure that the data you enter is accurate and reliable.

NAVIGATION TOOL BAR AND COMMAND BUTTONS

All of the Enter Data windows have a navigation tool bar to easily access different records (see Figure 4-1).

Further, all Enter Data windows have command buttons that allow you to manipulate records in the data file (see Figure 4-2). You may save a record, clear unsaved entries, create a new record, find an existing record, or

Using the navigation tool bar



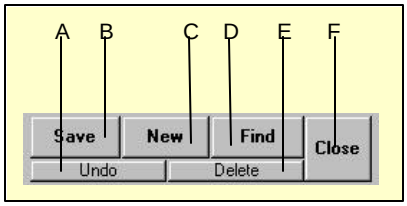
A. This button takes you to the first record in the herd file.
B. This button takes you back 20 records.
C. This button takes you back one record.
D. This button marks a record so you can return to it with button E.
E. This button takes you to the record you marked with button D.
F. This button takes you forward one record
G. This button takes you forward 20 records.
H. This button takes you to the last record in the herd file.

FIGURE 4-1.
THE NAVIGATION TOOL BAR.

delete a record. Cow Sense does not permit you to leave a record without saving changes, even if you do not click the Save button. Also, each time Cow Sense saves a record, it writes it to the hard disk. This way you do not have to worry about losing data through forgetfulness or due to a power failure. At most, you will only lose information on the current unsaved record.

FIGURE 4-2.
THE COMMAND BUTTONS.

Using the command buttons



A. This button clears an unsaved entry.
B. This button saves the current record.
C. This button creates a new record.
D. This button opens a dialog box to find an animal ID.
E. This button deletes the current record.
F. This button closes the current window.

WINDOW TABS: RECORD FORMS

Enter Data windows are also broken down into different sections, identified by tabs. Cow Sense documentation refers to the tabbed sections as “forms”. Therefore, in most Enter Data windows, you will have several “forms” with tabbed identifiers.

THE DATA ENTRY PROCESS

FIGURE 4-3.
THE HOT BUTTON.

When you begin a new herd file, Cow Sense presents you with a blank window ready for the first animal record. Otherwise, the Enter Data window will open to the last animal record you entered or edited. Cow Sense uses shortcuts such as Hot button drop-down lists, lookups, or defaults as much as possible to speed data entry and reduce data entry errors.

When you have data fields with sub-selections, a Hot button (see Figure 4-3) will appear on the right hand side of the data field that triggers a drop-down list of data options. If you can’t remember which option you want, you can scroll through the list to pick the appropriate information.

Also, typing the first character of the word you want to enter when you advance to a new data entry field will often change the information in the box. For example, if you want to change status from Active to Gone, just type a “G” in the highlighted field and Cow Sense will fill in the rest of the word.

When you’ve entered all the data on an animal and you want to save the record, click the Save button and Cow Sense will present you with a new window to enter a new animal record. If you are working in a saved record and you want to add a new record, click the New button to bring up a blank Enter Data window.

If you make a mistake during data entry, click the Undo button in the upper right hand corner of the window before you click the Save button and Cow Sense will clear all the data fields for you to start over.

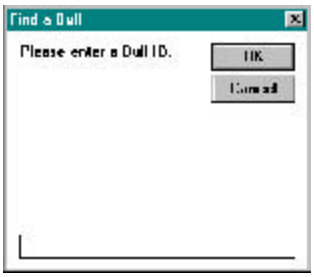


FIGURE 4-4.
THE FIND WINDOW.

If you want to find a record you’ve entered previously, click the Find button. Cow Sense will display the Find a Bull/Cow/Calf window (see Figure 4-4), with the cursor blinking in the data box. Enter an animal ID and click the OK button. Cow Sense will take you to the record matching that ID and will automatically put you in an Edit mode so that you can edit the record if you wish. If you enter an ID that is not in the database, Cow Sense will warn you that the animal “is not on file”; click the OK button and click the Find button again.

If you want to delete a record from the database, click the Delete button in the right hand corner of the window. For example, you might want to delete a bull if he did not sire any calves in the current production cycle. Cow Sense will not let you delete a bull or cow record if any calf records in the current production cycle have him/her listed as a sire/dam.

Cow Sense sorts records in the order in which you entered them. If, for example, you have bulls called Arlen, Bobby, Chubby, Dixon, and Elmo, but you enter them as Bobby, Dixon, Arlen, Elmo, and Chubby, Cow Sense will sort them according to the chronology in which you entered their records. If, however, you want Cow Sense to sort the bulls alphabetically (or numerically), click on the Sort by ID box in the upper middle section of the window.

DEFAULTS SPEED DATA ENTRY

Each Enter Data window has quick data entry fields or defaults. Defaults appear where the values are repetitive or commonly occurring and they are designed to save you time when you are entering data. These fields show up with red text in them and they pull the same information from the last record you entered. Thus, if you called an animal in the previous record "Active" in the Status field, the Enter Data window will automatically show "Active" in the Status field. You can override these choices and they will turn blue after you click the Save button. Cow Sense establishes defaults when you save the current record.

=, + AND - KEYS ASSIST IN DATE FIELD ENTRIES

You can use the = (equal) key in a date field to insert the current date on you computers clock/calendar. In most date fields, you can use the + (plus) and -(minus) keys to incrementally increase or decrease the date values that carry over from the previous animal record.

VALIDATION HELPS SECURE DATA INTEGRITY

Validation is a method of comparing an entry with set standards. It requires either that the field must have certain information in it or that the information in the field is unique (no other record in the database carries the same information) before Cow Sense will allow you to save the record. Cow Sense uses validation extensively to help ensure that your records maintain a degree of accuracy. When you trigger a validation, Cow Sense presents a window explaining the problem and suggesting a remedy. Some validations are optional and you can turn them on or off in the Entry Options form when you select **Maintenance > Administration > Setup** from the main menu bar (see Chapter 2).

TIP: OFTEN THE COPY AND PASTE CAPABILITY OF WINDOWS IS VERY USEFUL FOR REMARKS. COPY A TEXT STRING TO THE WINDOWS CLIPBOARD BY FIRST SELECTING (HIGHLIGHTING) THE TEXT AND THEN PRESSING THE CTRL + C KEY COMBINATION. PASTE THE TEXT STRING REPEATEDLY USING THE CTRL + V KEY COMBINATION.

ENTERING DATES IN COW SENSE

Cow Sense favorably records dates with the following formats:

- 5/15/2008 or 2008/5/15 (with slashes)
- 5 15 2008 or 2008 5 15 (with spaces)
- 5-15-2008 or 2008-5-15 (with dashes)

When you Save a file, Cow Sense saves all dates with slashes (that is, 5/15/2008 or 2008/5/15).

USING THE REMARKS FIELD

All Remarks fields are open-ended and unlimited text fields. With

some forethought and consistency in the text you use in Remarks fields, you can create a powerful and flexible analysis tool because you can run word queries on the text using the "Contains" relational operator (see Chapter 5 for instructions on running queries). For example, you can keep cow disposition "tags" in the Remarks field (such as "unruly" and "overprotective").

CUSTOMIZING DATA ENTRY FIELDS

Cow Sense provides a means to customize many data fields so that you can tailor the program to your operation.

REQUIRED VS. OPTIONAL DATA FIELDS

In Cow Sense, some data fields are written in the program, and you cannot remove them. Many of these also require for you to enter a value in order to save an animal record (for example, Bull, Cow or Calf ID). Other fields are standard in Cow Sense, but they do not require data in order to save a record (for example, Weight Date).

ADDING AND EDITING DATA FIELDS

Cow Sense also comes with several predefined data fields that you can choose whether to keep or not; and Cow Sense lets you add your own data fields. The addition of these data fields affects the look of your Enter Data windows. To learn more about adding and editing data fields, refer to the section on customizing data fields under the Maintenance menu in Chapter 7.

VALIDATIONS ON IDS

Cow Sense will not let you enter a duplicate number (it will prompt you for a unique ID) if you select to REQUIRE A UNIQUE ID THROUGHOUT HERD in the **Maintenance > Administration > Setup > Entry Options** form for any of these predefined IDs: Producer ID, Tattoo (RE and LE), Registration, Electronic ID, or Supplemental ID. All of these IDs are optional. See Chapter 7.

DEFINE GROUPS

Define Groups allows you to establish criteria for each *class of cattle for herd analysis*. This feature is optional, but if you are going to Define Groups, you should do so *before* entering any cow, bull, or calf data. This can be a powerful tool to help you make management and breeding decisions, so you should give it a lot of thought. For example you may want to

define cow groups by ownership, location, management practice, or grade (whether the cows are purebred or commercial, if you want to compare the two groups, rather than keep them as separate herds). You may want to define bull groups by breeding status (heifer, maternal or terminal), or ownership. And you may want to define calf and yearling groups by management (whether or not you backgrounded them or moved them directly to a feeder), location (to which feedlot they went or to which pen within a feedlot), treatment group (if you want to compare different treatment or processing regimes), or by target markets (if you want to identify calves that are targeted for specialty markets by the way they're treated or fed).

CUSTOMIZING GROUP FIELDS

You can customize two group fields in Cow Sense. You can change the group names, but that will weaken your analysis over time, so it's best to establish what you want to analyze up front and stick with it. If you think you will be changing group names often, use the calf or yearling groups, rather than cow or bull groups.

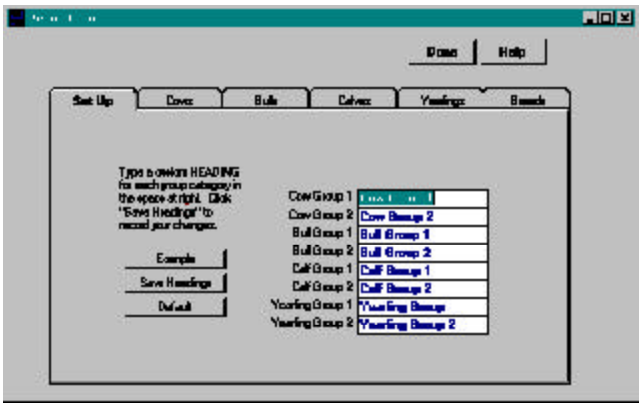


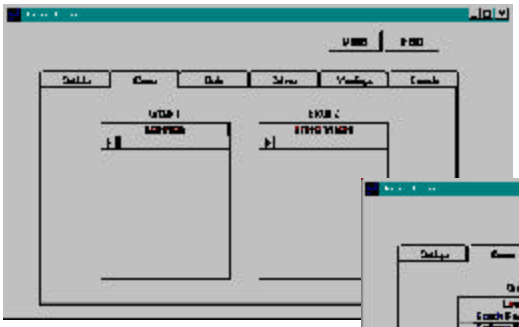
FIGURE 4-5. THE DEFINE GROUPS SET UP TAB.

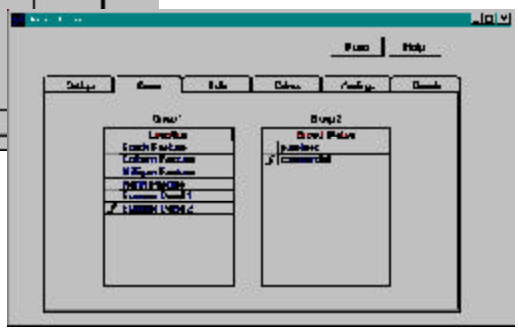
You do have an option of developing ratios within each group. Cow Sense relies on the calf group or yearling group for ratios.

To customize the group fields, click **Enter Data > Define Groups** from the main menu bar. The Define Groups window will appear, defaulting to the Set Up form (see Figure 4-5). Cow Sense will present you with two data entry rows each for cows, bulls, calves and yearlings. Each group designation is a mutually exclusive way to characterize groups of cattle on the ranch. The names in the data rows will determine what shows up in the Enter Data window(s). If, for example, you leave the first field (Cow Group 1) as the default (also Cow Group 1), that will be the field name in the Enter Cows window. If you type in "location", that will be the field name in the Enter Cows window. Advance to the next row (Cow Group 2) using your

NOTE: IF YOU CHANGE THE NAME OF A COW, BULL, CALF, YEARLING OR BREED GROUP AFTER YOU HAVE ESTABLISHED IT, COW SENSE UPDATES THE CURRENT RECORDS FOR ALL AFFILIATED ANIMALS. COW SENSE WILL ASK YOU TO CONFIRM THIS ACTION BEFORE PROCEEDING.

TIP: USE THE CALF OR YEARLING GROUP FIELDS TO DESIGNATE UNIQUE CALF GROUPS ON WHICH TO RUN RATIOS.





mouse or the TAB key. Continue until you have customized all the group names for cows, bulls, calves and yearlings.

FIGURES 4-6 AND 4-7. IF YOU DEFINED COW GROUPS 1 AND 2 AS "LOCATION" AND "BREED STATUS" RESPECTIVELY UNDER THE SET UP TAB, YOU WOULD ENTER LOCATION NAMES AND NUMBERS IN THE GROUP 1 TABLE AND BREEDING STATUS CRITERIA IN THE GROUP 2 TABLE.

Next, establish your analysis criteria within each group by defining subgroups. The subgroups become a list of choices in the identified group field that you will access with a Hot button in the Enter Data window(s). You can enter an unlimited number of subgroups, but you may find it complicated if you have too many. To establish criteria for the groups, click on the Cows, Bulls, Calves, or Yearlings tab to open the respective forms. Enter criteria. For example, if you defined Bull Group 1 as "Breeding Status", you would probably label the subgroups within that record as "heifer", "maternal", and "terminal".

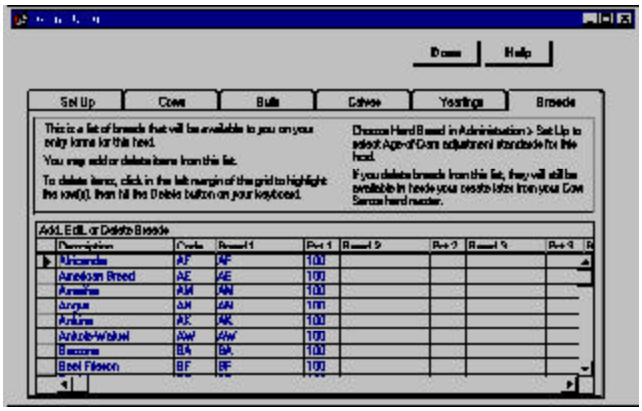
CUSTOMIZING BREED GROUPS

Cow Sense provides valuable tools to allow you to track not only purebred breed types, but also breed composition and percent hybridization of crossbred animals. Within the Breeds Form you have fields for recording a breed description, code, and percent composition for each purebred or composite breed you wish to track.

To establish your herd's breed composition(s), select **Enter Data > Define Groups** from the main menu bar, and click on the Breeds tab to open the Breeds form. You will find a virtually exhaustive listing of currently recognized breeds in the United States as provided by the Beef Industry Federation (see Figure 4-8).

Deleting Breed Designations

You do not have to keep the breed listings you won't use. To delete the breeds you don't want, click on the arrow (in the far left column) and press the DELETE key on your keyboard. You can delete a range of breeds



FIGURES 4-8.
THE BREEDS TAB IN THE DEFINE GROUPS WINDOW.

by dragging your pointer down the arrow column with the left mouse button depressed; after you have selected a range of breed designations to delete, press the DELETE key on your keyboard. Whether you are deleting one listing or several, Cow Sense will display a warning asking you if you're sure you want to delete the row(s) you selected. Click the OK button or press the ENTER key to continue.

Adding Breed Designations

To add breeds, find the end of the Breed designation list. You can use the scroll bar on the far right side of the window list to find the bottom of the list. The last row on the list will have an asterisk (*) in the first column. Click inside the Description field on this row (the asterisk will change to an arrow). Type in the a breed description and then TAB to the "code" field and enter a code up to four characters (alpha or numeric) long. For example, if your breed description was Red Baldy, you might put RB in the Code field. The next fields (Breed 1, 2, 3, etc. and Percent 1, 2, 3, etc.) refer to the breeds that make up the new type you're adding. List all breed designations and percentages in these fields. For example, if you want to enter a breed type for Red Baldy, you would enter "Hereford" in the Breed 1 field and "50" (percent) in the Pct 1 field, followed by "Red Angus" in the Breed 2 field and "50" (percent) in the Pct 2 field.

Once you have customized breeds for a herd, they will be available in a drop-down list on the Bull, Cow and Calf Enter Data windows. The Breed fields in these windows contains a Hot button with which to select a breed for an animal from the Breed list you have customized.

BULLS

Use the Enter Bulls windows to establish and edit data on all sires in your herd, and to keep track of semen inventory.

You should establish records for all bulls when you establish a new herd database, and then add any additional bulls or AI sires as they enter your herd or breeding program. When you want to add replacement bulls from your own herd, use the **Maintenance > New Cycle > Replacements > Bulls** option (see Chapter 7).

Cow Sense can track the lifetime performance of each bull in your herd. If you run more than one bull in a breeding group of cows, you can define that pair (or team) of bulls as a single bull. Defining a bull team does not let you accurately track individual bull performance, because Cow Sense links performance measures to the *Bull ID*. However, it does have some value for tracking bull team performance, especially if the bulls are half brothers. If you have bull teams, keep individual Bull IDs in the Remarks field.

ENTER BULLS

The Enter Bulls window contains fields in which to enter unique information on each bull. The Purebred mode of Cow Sense has tabbed forms on which to record general information (Main), Pedigree, EPD and Supplemental information. The Commercial mode does not have a tabbed Pedigree form, and the Lite mode does not have tabbed Pedigree or Supplemental forms.

Main Form

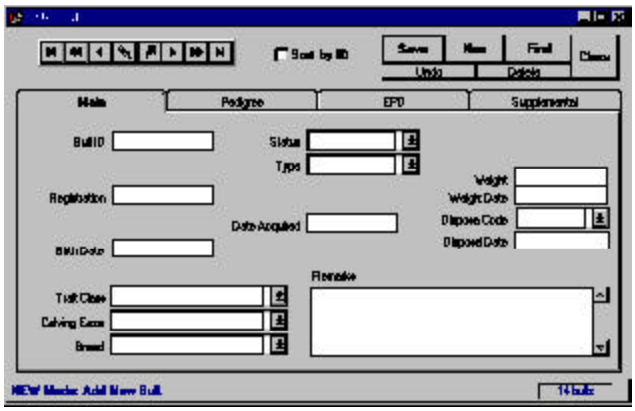


FIGURE 4-9.
THE ENTER BULLS WINDOW, MAIN FORM.

Some of the fields on the Main form appear when you select them using the **Maintenance > Administration > Setup > Entry Options** or **Maintenance > Administration > Customize Data Fields**. Others are standard in every Enter Bulls Main form regardless of mode (Lite, Commercial, or Purebred). They include:

- *Bull ID*. Information in this field is required and it is unique, meaning that only one bull can have that ID in that herd. If you fail to enter a Bull ID, Cow Sense will display a validation message prompting you to do so.
- *Birth Date*. This is the bull's date of birth. It is not required.
- *Bull Group 1* (user defined). This field contains data files you established in the Set Up and Bulls forms of the **Enter Data > Define Groups** window. It is not required. You are limited to the selections you defined. For example, if you called Bull Group 1 "Breeding Status", and you defined your group selections as "Heifer", "Maternal" and "Terminal", the only information you could put in this field is "Heifer", "Maternal" or "Terminal". Click the Hot button at the right side of the field box to see the selections you have available. This is a default field; the text will appear in red until you save it.
- *Bull Group 2* (user defined). See as Bull Group 1 above.
- *Breed*. This includes the breeds you left in or added in the Breeds form of the **Enter Data > Define Groups** window. You are limited to the selections you have included in the database. You can click the Hot button at the right side of the field box to see the selections you have available or you can type the first few characters of a breed and Cow Sense will fill in the rest of the name. This is a default field; the text will appear in red until you save the record.
- *Status*. Information in this field defines whether a bull is active or gone from the herd. See the Disposals section of Chapter 7 for more information on Status. This is a default field; the text will appear in red until you save the record. Information in this field is required—if you fail to enter a Status, Cow Sense will display a validation message prompting you to do so.
- *Type*. Information in this field defines whether a bull is a herd bull, an AI sire, or both. This is a default field; the text will appear in red until you save the record. Information in this field is required—if

NOTE: YOU CAN ADD SEVERAL OTHER FIELDS TO YOUR DATA ENTRY FORMS—DEPENDING ON THE MODE OF COW SENSE YOU ARE USING—USING THE **MAINTENANCE > ADMINISTRATION > SETUP > ENTRY OPTIONS** OR **MAINTENANCE > ADMINISTRATION > CUSTOMIZE DATA FIELDS** FUNCTIONS. SEE CHAPTER 7 FOR MORE INFORMATION.

you fail to enter a Type, Cow Sense will display a validation message prompting you to do so.

- *Weight*. This field is for recording the bull's weight during breeding soundness examination.
- *Weight Date*. This field is for recording the date of weigh-in—generally the same date of the bull's breeding soundness examination.
- *Disposal Code*. This field contains a Hot button with which to select from a list of reasons for culling or disposing of a bull. This list is consistent with Beef Improvement Federation standards. Click the Hot button and select an option from the drop-down list.
- *Disposal Date*. This field is for recording the date on which you disposed of the bull.
- *Remarks*. Use the remarks field to make notes regarding such information as the bull's disposition. You have unlimited room in which to record information in this field.

To enter new bull records, click **Enter Data > Bulls > Enter Bulls** from the main menu bar. The Bulls window will appear and default to the Main form (see Figure 4-9). When you are entering bull records for a new herd the indicator in the lower right hand corner of the window will initially register "0 bulls". As you Save records, that number will reflect the total number of bulls in that herd. Each time you select **Enter Data > Bulls > Enter Bulls** from the main menu, Cow Sense will provide you with a blank Enter Bulls window. Cow Sense will place the cursor in the Bull ID field on the Main form. Type in a bull ID. Advance to the next data entry field by pressing the TAB key or by clicking on the field. The next field you'll come to depends on which entry options you've chosen using the **Maintenance > Administration > Setup** Entry Options form, and the Add/Select fields for Bulls window from the **Maintenance > Administration > Customize Data Fields > Bulls** option. For example, if you have no special entry options selected, the next field will be Birth Date; if you chose Electronic ID as an entry option, E.I.D. will be the next field on the Enter Bulls window.

Continue through the Enter Bulls Main form until you've entered all the information available on a bull. Then click the Save button in the upper right hand corner of the window or continue to the Pedigree, EPD, or Supplemental tabs, depending on the mode you have activated. When you save a record, Cow Sense will display a new Enter Bulls Main form to begin recording another bull record.

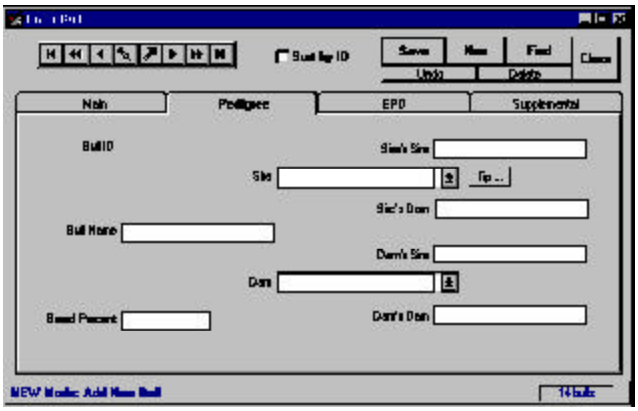


FIGURE 4-10.
THE ENTER BULLS WINDOW, PEDIGREE FORM.

Pedigree Form (Purebred mode only)

You can keep three generations of a pedigree record for each bull. You can access the Pedigree form two ways. If you press the TAB key after the Remarks field in the Main form, Cow Sense will advance to the Pedigree form (see Figure 4-10) and list the Bull ID you started with in the Main form. Otherwise, you can find a bull record using the Find button or you can enter a new Bull ID in the Main form and then click on the Pedigree tab to build a bull pedigree. Cow Sense will display the Bull ID and take you to the Bull Name field (you do not have to enter a bull name). Enter a Bull Name or proceed to the Sire field. To choose a sire, you can either type in a sire, or you can choose a sire from your herd by clicking on the Hot button, which will look up all the sires in your herd database. The sire doesn't have to be in your herd database. If the sire is in the database and you've built his Pedigree, Cow Sense will automatically enter information in the Sire's Sire and Sire's Dam fields.

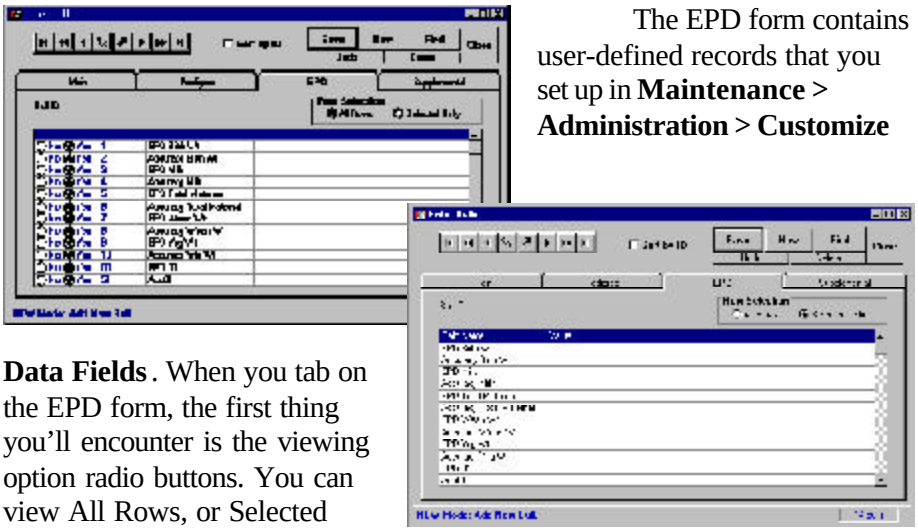
TIP: WHEN YOU BUILD PEDIGREES, BEGIN WITH THE OLDEST SIRE AND DAM IN THE HERD FIRST TO GET THE MOST BENEFIT FROM THE LOOKUP FEATURE.

Use the same procedure to fill in the bull's Dam, Dam's Sire and Dam's Dam. Finally, proceed to the Breed Percent field. This is a numeric field in which to enter the percent purity of the breed. For example, you would enter a value of 100 for a purebred and 50 for a half-blood animal.

TIP. THE BEST PLACE TO VIEW PEDIGREES IS IN THE INDIVIDUAL SUMMARY REPORTS (SEE CHAPTER 5) BECAUSE YOU CAN ACCESS AN UNLIMITED NUMBER OF GENERATIONS FROM THESE REPORTS.

EPD Form (Purebred and Commercial modes)

To enter or edit expected progeny differences information on a specific animal, enter a bull ID in the Bull ID field of the Main form. Click on the EPD tab to access the EPD form. Enter or edit information on that animal. You can also find a bull record using the Find button on the Main form.



FIGURES 4-11 AND 4-12. THE ENTER BULLS WINDOW, EPD FORM IN THE "ALL ROWS" (TOP) AND "SELECTED ONLY" (BOTTOM) VIEWS.

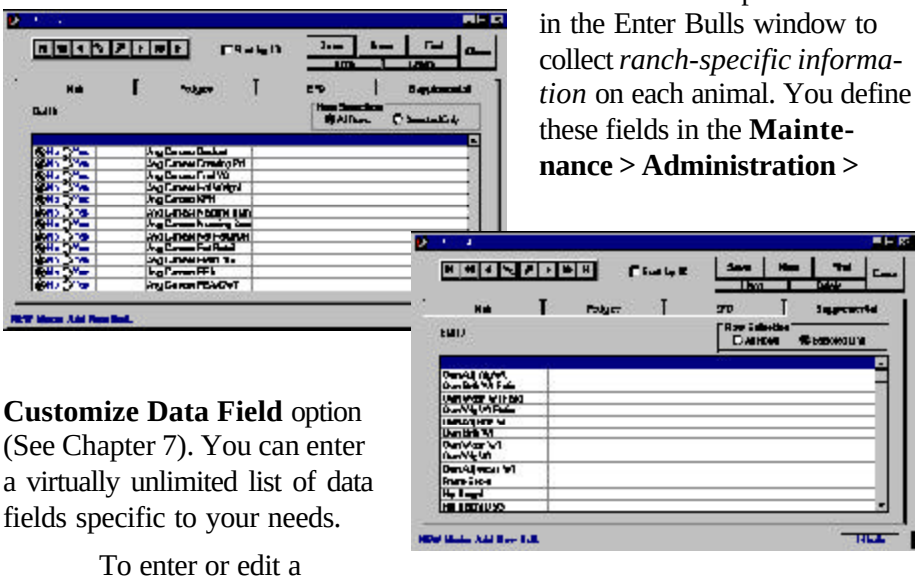
The EPD form contains user-defined records that you set up in **Maintenance > Administration > Customize Data Fields**. When you tab on the EPD form, the first thing you'll encounter is the viewing option radio buttons. You can view All Rows, or Selected Only (see Figures 4-11 and 4-12). If you chose the All Rows view, Cow Sense will display a form with which you can select from a number of EPD data fields and values that you customize using the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7). You chose these fields by clicking on the Yes or No radio buttons under Select?. You can also chose the order in which you view and enter data into these fields by changing the number in the Entry Order column. To change the order, place your cursor inside the field you wish to change, press the numeral on your keypad corresponding with the order. Arrow down or up to change the order of other fields. If you don't supply an order, Cow Sense will order fields alphanumerically in ascending order. If some fields are ordered by numeral and some are not, the fields that are not numbered will proceed the fields that are.

NOTE: ENTER POSITIVE EPDS WITHOUT THE PLUS(+) SIGN, BUT USE THE MINUS (-) SIGN FOR NEGATIVE EPDS. COW SENSE HANDLES EPD VALUES AS NUMBERS, NOT TEXT.

If you choose the Selected Only view, Cow Sense will display a form containing only the Field Name and the Value columns. You determine field names and values available using the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7). Cow Sense will only display the field names that you selected using the Yes and No radio buttons in the Select? field of the All Rows view.

Whether you enter values in the Selected Only view or the All Rows view of this form, Cow Sense will validate those values against minimum and maximum values you determine in the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7).

Supplemental Tab (Commercial and Purebred Modes)



FIGURES 4-13 AND 4-14. THE ENTER BULLS WINDOW, SUPPLEMENTAL FORM IN THE "ALL ROWS" (TOP) AND "SELECTED ONLY" (BOTTOM) VIEWS.

This is a powerful tool in the Enter Bulls window to collect *ranch-specific information* on each animal. You define these fields in the **Maintenance > Administration > Customize Data Field** option (See Chapter 7). You can enter a virtually unlimited list of data fields specific to your needs.

To enter or edit a supplemental information record on a specific animal, enter a bull ID in the Bull ID field of the Main form. Click on the Supplemental tab to access the Supplemental form. Enter or edit information on that animal. You can also find a bull record using the Find button on the Main form.

You can choose the All Rows or the Selected Only views (see Figures 4-13 and 4-14). If you choose the All Rows view, Cow Sense will display a form with which you can select from a number of user-defined data fields and values that you determine using the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7). You choose these fields by clicking on the Yes or No radio buttons under Select? You can also choose the *order* in which you view and enter data into these fields by changing the number in the Entry Order column. To change the order, place your cursor inside the field you wish to change, press the numeral on your keypad corresponding with the order. Arrow down or up to change the order of other fields. If you don't supply an order, Cow Sense will order fields in the Selected Only view by the order that they're listed in the Field Name column, which is determined by the order in which they reside in the Customize Data Fields form.

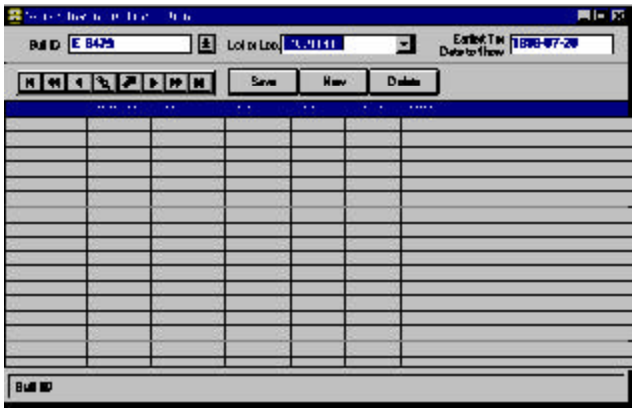
If you choose the Selected Only view, Cow Sense will display a form displaying only the Field Name and the Value columns. You determine field

names and values available using the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7). Cow Sense will only display the field names that you selected using the Yes and No radio buttons in the Select? field of the All Rows view.

Whether you enter values in the Selected Only view or the All Rows view of this form, Cow Sense will validate those values against minimum and maximum values you determine in the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7).

SEMEN INVENTORY

The Semen Inventory option of the Bull menu allows you to track straws of semen that you have purchased or collected, sold or used. You can track semen inventory for both bulls you own (either whole animals or percentages of animals whose records are in your bull database), and bulls you do not own. If you track semen records for bulls you do not own, you must create a bull record for those bulls before you can track their semen inventories.



FIGURES 4-15. THE SEMEN INVENTORY WINDOW.

The data you enter, edit or delete in this window affects the Semen Inventory Report available in the **Reports > Bulls > Semen Inventory** option (see Chapter 5). The Semen Inventory Report, as well as the AI Breeding Report, is also affected by the data you enter in the Enter Breeding Data window (**Enter Data > Cows > Breeding**).

To access the Semen Inventory window, select **Enter Data > Bulls > Semen Inventory** from the main menu bar. You have fields for recording the following semen inventory information:

- *Bull ID*. If you acquire semen from a bull that is in your open herd and whose Status is defined as AI or Both, you can select a Bull ID from your bull database. If you acquire semen from a bull that is not in your open herd, you must first create a bull record for that animal (**Enter Data > Bulls > Enter Bulls**).
- *Lot Number*. This is a number for tracking semen straws you have available from the same source. You can think of it as a serial number or you can use sale lot numbers. Each time you acquire (collect or purchase) a straw (or straws) of semen from a given bull, you will enter a new Semen Inventory record for that bull with a unique lot number. As you subtract straws from that lot, you will record transactions in the Semen Inventory grid. These transactions will affect the total Count in the Semen Inventory Report (see Chapter 5).
- *Type*. This field contains a drop-down list of transactions that you access by clicking on its Hot button.
- *Purchase*. Select this transaction to add straws to inventory—either straws you collected, or straws you acquired through purchase.
- *Sale*. Select this transaction to subtract straws from inventory on a given lot, generally straws that you sell. Do not use this transaction to subtract straws in this form if you use the Enter Breeding Data window to record AI breeding records. If you record AI breeding in the Enter Breeding Data window, Cow Sense will automatically decrement the total straw count on a semen lot in the Semen Inventory report, and you will not need to make adjustments in this window.
- *Adjust*. Select this transaction to add or subtract straws to/from inventory. If you subtract straws, you must put a negative sign (-) in front of the number. Do not use this transaction to subtract straws in this form if you use the Enter Breeding Data window to record AI breeding records. If you record AI breeding in the Enter Breeding Data window, Cow Sense will automatically decrement the total straw count on a semen lot in the Semen Inventory report, and you will not need to make adjustments in this window.
- *Use*. Select this transaction to subtract straws from inventory, *but only use this option if you use straws for breeding, but you have not entered information in the Enter Breeding Data window (**Enter Data > Cows > Breeding**)*. A case where you may use this option is if you use straws of semen from bulls in this open herd to breed cows in a

NOTE: TO KEEP SEMEN INVENTORY FOR BULLS THAT DO NOT RESIDE IN YOUR HERD, YOU MUST FIRST CREATE A BULL RECORD FOR EACH OF THEM USING THE **ENTER DATA > BULLS** OPTION.

different Cow Sense herd (perhaps a relative's herd). If you record AI breeding in the Enter Breeding Data window, Cow Sense will automatically decrement the total straw count on a semen lot in the Semen Inventory report, and you will not need to make adjustments in this window.

- *Count.* Select this transaction to enter physical inventory counts that will reset the perpetual inventory Count in the Semen Inventory Report. For example, if you enter an opening purchase of 50 straws for a bull, your inventory report will show:
  Purch Start = 0 (In = 50, End = 50)
  If you then take inventory after entering your purchase and only find 48 straws, you then enter an inventory count in this field of 48, and your inventory report will then show:
  Purch Start = 0 (In = 50, End = 50)
  Count Start = 50 (Out = 2, End = 48).
  When you use Count, you must specify a time (Start or End) to tell whether the inventory was taken at the end of breeding or the beginning. It makes a difference whether you count your inventory before you breed your cattle or at the end. You have two options for recording time: Start and End. The Count operator is the only option that uses the Time field (see below).
- *Date*. This field is for tracking the date associated with the Type field. For example, if you purchased 10 straws of semen on a bull, you would record the date of Purchase in this field. If you took a physical inventory of straws on that lot you would record the inventory Count date in this field. If you sold straws, or bred cows that were not in the open Cow Sense herd, you would record the date of Sale or Use in this field.
- *Time*. This field is associated with the Count option in the Type field. Use the Hot button on this field to select Start or End in order to record whether you counted inventory at the start of breeding or at the end. This field links with the Count option of the Type field to affect the End Count numbers in the Semen Inventory Report (see Chapter 5).
- *Quantity.* Use this field to record the number of straws that you acquired (collected or purchased) or used (sold or bred to cows *outside* the open Cow Sense herd), or adjusted, or counted in a given lot for a given bull. This number will affect the total count available in the Semen Inventory Report (see Chapter 5).

- *Memo*. Record free-form information about a lot of semen in this field. Example information may be the price you paid per straw, or the price you will charge per straw, or the conditions under which semen was collected.

To enter a new Semen Inventory record, select a Bull ID using the navigation tool bar or the Hot button on the Bull ID. Enter a lot number for the new semen record you want to create. Click the New button. Cow Sense will record the Bull ID in the Bull ID field on the Semen Inventory grid. TAB past the Lot Number field to the Type field to record the transaction on that lot of semen (see a description of transactions above). TAB to the Date field and record the transaction date. TAB to the Time field and select Start or End from the drop-down list available by clicking the Hot button if you use the Count transaction in the Type field; otherwise, you can skip this field. TAB to the Quantity field to record the number of straws originally available in that lot. TAB to the Memo field to record special free-form information about that lot of semen. When you have finished entering data on a lot of semen, click the Save button.

To edit a semen inventory record, use the navigation tool bar or the Hot button to select the Bull ID of the record you want to edit. Click the Hot button to select the Lot number you want to edit. Cow Sense will display the record you chose in the Semen Inventory grid. Make changes inside the grid, using the TAB key to navigate forward and the SHIFT + TAB keys to navigate backward through the grid. When you're finished making changes, click the Save button.

To delete a transaction on a lot of semen, select the transaction by placing your cursor on the Bull ID you wish to delete in the data grid. Click the Delete button. Cow Sense will display a warning box. To complete the deletion, click the Yes button, and Cow Sense will remove the transaction record from your data grid.

TIP: CREATE RECORDS FOR *ALL* YOUR COWS WHEN YOU ESTABLISH A NEW HERD DATABASE IN ORDER TO BUILD THE MOST COMPLETE BREEDING AND CALVING RECORD SYSTEM POSSIBLE. YOU CAN ADD NEW COW RECORDS AS YOU ADD COWS TO YOUR HERD.

COWS

USING FIELD FORMS

When you initially establish your herd database, you may want to enter cow records by working off the *Setup Cow Field Form* or off of a custom field form (see the Field Forms section of this chapter). Cow Sense also has a *Breeding Cow Field Form* that you can use in conjunction with the **Breeding** option in the **Enter Data > Cows** menu.

ENTER COWS

The Enter Cows window contains fields in which to record data on the breeding cows in your herd. Enter all your cows when you establish a new herd database. Then add any additional cows from outside sources as they enter your herd or breeding program. When you want to add replacement heifers from your own herd, use the **Maintenance > New Cycle > Replacements > Heifers** option (see Chapter 7). Also, use the Enter Cows window to edit cow information or add remarks.

NOTE: YOU CANNOT DELETE A COW FROM THE HERD IF SHE HAS A CURRENT CALF RECORD.

Once you've entered information in a cow record, Cow Sense uses her ID or other information in other records where it's appropriate, saving you from re-entering data pertinent to that animal *or her offspring*.

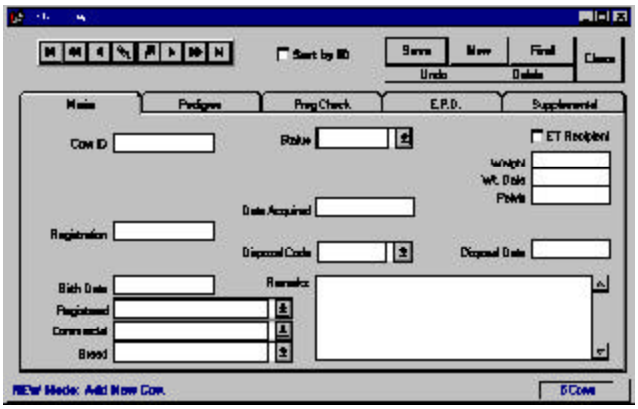


FIGURE 4-16.
THE ENTER COWS WINDOW, MAIN FORM.

The Purebred mode of Cow Sense has tabbed forms on which to record general information (Main), Pedigree, pregnancy evaluation (Preg Check), EPD and Supplemental information. The Commercial mode does not have a tabbed Pedigree or EPD form. The EZ-75 and Lite modes do not have tabbed Pedigree, EPD or Supplemental forms.

NOTE: YOU CAN ADD SEVERAL OTHER FIELDS TO YOUR DATA ENTRY FORMS— DEPENDING ON THE MODE OF COW SENSE YOU ARE USING— USING THE **MAINTENANCE > ADMINISTRATION > SETUP > ENTRY OPTIONS** OR **MAINTENANCE > ADMINISTRATION > CUSTOMIZE DATA FIELDS** FUNCTIONS. SEE CHAPTER 7 FOR MORE INFORMATION.

Main Form

Some of the fields on the Main form appear when you select them using the **Maintenance > Administration > Setup > Entry Options** or **Maintenance > Administration > Customize Data Fields**. Others are standard in every Enter Cow Main form regardless of mode (Lite, Commercial, or Purebred). They include:

- *Cow ID*. Information in this field is required and it is unique, meaning that only one cow can have that ID in that herd. If you fail to

enter a Cow ID, Cow Sense will display a validation message prompting you to do so.

- *Birth Date*. This is the cow's date of birth. It is required, but you enter an approximate date if you don't know the cow's exact age.
- *Cow Group 1* (user defined). This field contains data files you established in the Define Groups option of the Enter Data drop-down menu. You are limited to the selections you defined. For example, if you called Cow Group 1 "Ownership", and you defined your group selections as "Dad's Cows", "Kid's Cows" and "Our Cows", the only information you could put in this field is "Dad's Cows", "Kid's Cows" or "Our Cows". You can click the Hot button at the right side of the data entry box to see the selections you have available. This is a default field; the text will appear in red until you save it.
- *Cow Group 2* (user defined). Same as Cow Group 1 above.
- *Breed*. This field contains data files you established in the Set Up and Cows forms of the **Enter Data > Define Groups** window. You are limited to the selections you have included in the database. You can click the Hot button at the right side of the field box to see the selections you have available or you can type the first few characters of a breed and Cow Sense will fill in the rest of the name. This is a default field; the text will appear in red until you save the record.
- *Status*. Information in this field defines whether a cow is active, going or gone from the herd. Going cows are open cows you've shipped, but that you still want to include in your database for this breeding cycle because they were exposed to a bull in the herd. Cow Sense will change the "Going" record to a "Gone" record after you run a new cycle (see Chapter 7). This is a default field; the text will appear in red until you save the record. Information in this field is required—if you fail to enter a Status, Cow Sense will display a validation message prompting you to do so.
- *Date Acquired*. Use this field to record the date you place the cow in your herd. This is a **default** field; the text will appear in **red** until you save the record.
- *Weight.* Use this field to record the cow's weight (usually during pregnancy evaluation).
- *Weight Date*. This field is for recording the date of weigh-in–generally the same date as the cow's pregnancy evaluation.

- *Pelvis*. Use this field to record the cow's pelvic measurement. This is a numeric field only; you can not enter alpha characters.
- *Disposal Code*. This field contains a Hot button with which to select from a list of reasons for culling or disposing of a cow. This list is consistent with Beef Improvement Federation standards. Click the Hot button and select a disposal reason from the drop-down list.
- *Disposal Date*. This field is for recording the date on which you disposed of the cow.
- *Remarks*. Use the remarks field to make notes regarding such information as the cow's disposition. You have unlimited room in which to record information in this field.
- *ET Recipient* (Purebred Mode only). Click on this box to designate a cow as an embryo transfer recipient. Cow Sense automatically excludes these cows from the New Cycle process.
- *ET Donor* (Purebred Mode only). Click on this box to designate a cow as an embryo transfer donor. Cow Sense automatically excludes these cows from the New Cycle process.

To enter new cow records, click **Enter Data > Cows > Enter Cows** from the main menu bar. The Enter Cows window will appear and default to the Main form (see Figure 4-16). When you are entering cow records for a new herd the indicator in the lower right hand corner of the window will initially register "0 cows". As you Save records, that number will reflect the total number of cows in that herd. Each time you select **Cows > Enter Cows** from the Enter Data main menu, Cow Sense will provide you with a blank Enter Cows window. Cow Sense will place the cursor in the Cow ID field of the Main form. Type in a cow ID. Advance to the next data entry field by TABBING or by clicking on the field. The next field you'll come to depends on which entry options you've chosen using the **Maintenance > Administration > Setup** Entry Options form, and the Add/Select fields for Cows window from the **Maintenance > Administration > Customize Data Fields > Cows** option. For example, if you have no special entry options selected, the next field will be Birth Date; if you chose Electronic ID as an entry option, E.I.D. will be the next field on your Enter Data window.

Continue through the Enter Cows Main form until you've entered all the information available on a cow. Then click the Save button in the upper right hand corner of the window or continue to the Preg Check tab. When you save a record, Cow Sense will display a new Enter Cows Main window to record another cow.

Pedigree Form (Purebred mode only)

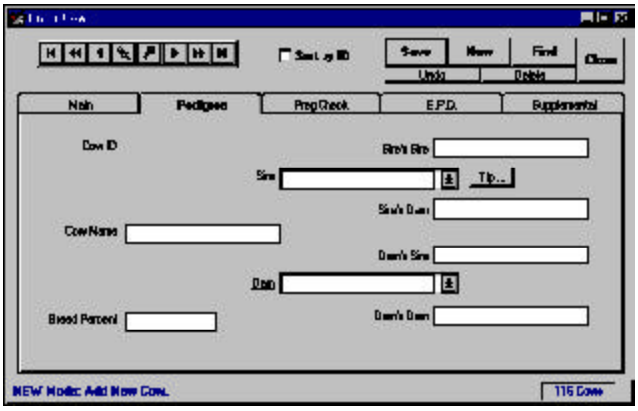


FIGURE 4-17.
THE ENTER COWS WINDOW, PEDIGREE FORM.

TIP: WHEN YOU BUILD PEDIGREES, BEGIN WITH THE OLDEST SIRE AND DAM IN THE HERD FIRST TO GET THE MOST BENEFIT FROM THE LOOKUP FEATURE.

You can keep three generations of a pedigree record for each cow. You can access the Pedigree form two ways. If you press the TAB key after the Remarks field in the Main form, Cow Sense will advance to the Pedigree form (see Figure 4-17) and list the Cow ID you started with in the Main form. Otherwise, you can find a cow record using the Find button or you can enter a new Cow ID in the Main form and then click on the Pedigree tab to build a cow pedigree. Cow Sense will display the Cow ID and take you to the Cow Name field (you do not have to enter a cow name). Enter a Cow Name or proceed to the Sire field. To choose a sire, you can either type in a sire, or you can choose a sire from your herd by clicking on the Hot button, which will look up all the sires in your herd database. The sire doesn't have to be in your herd database. If the sire is in the database and you've previously built his Pedigree, Cow Sense will automatically enter information in the Sire's Sire and Sire's Dam fields.

TIP. THE BEST PLACE TO VIEW PEDIGREES IS IN THE INDIVIDUAL SUMMARY REPORTS (SEE CHAPTER 5) BECAUSE YOU CAN ACCESS AN UNLIMITED NUMBER OF GENERATIONS FROM THESE REPORTS.

Use the same procedure to fill in the cow's Dam, Dam's Sire and Dam's Dam. Finally, proceed to the Breed Percent field. This is a numeric field in which to enter the percent purity of the breed. For example, you would enter a value of 100 for a purebred and 50 for a half-blood animal.

Preg Check Form

This form is for collecting pregnancy examination data–either chuteside or by using a printout of the Preg Check form, or a Custom report form.

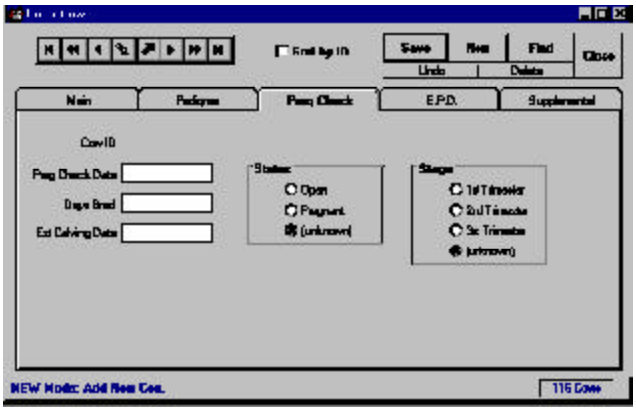


FIGURE 4-18.
THE ENTER COWS WINDOW, PREG CHECK FORM.

To enter or edit a Preg Check record on a specific animal, enter a cow ID in the Cow ID field of the Main form. Click on the Preg Check tab to access the Preg Check form. Enter or edit information on that animal. You can also find a cow record using the Find button on the Main form.

Cow Sense provides two fields for you to enter information on the Preg Check form: Preg Check Date and Days Bred. It uses the data in these fields to calculate the Estimated Calving Date, Status (open, pregnant, unknown), and Stage (1st, 2nd, 3rd trimester or unknown).

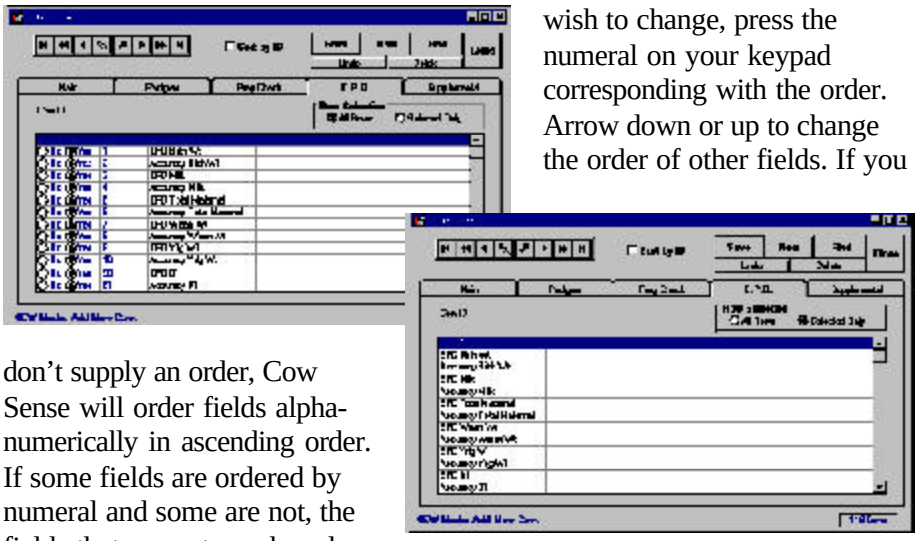
EPD Form (Purebred mode only)

To enter or edit expected progeny differences information record on a specific animal, enter a cow ID in the Cow ID field of the Main form. Click on the EPD tab to access the EPD form (see Figures 4-19 and 4-20). Enter or edit information on that animal. You can also find a cow record using the Find button on the Main form.

The EPD form contains user-defined records that you set up in **Maintenance > Administration > Customize Data Fields**. When you tab on the EPD form, the first thing you'll encounter is the viewing option radio buttons. You can view All Rows, or Selected Only (see Figures 4-19 and 4-20). If you choose the All Rows view, Cow Sense will display a form with which you can select from a number of EPD data fields and values that you customize using the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7). You chose these fields by clicking on the Yes or No radio buttons under Select?. You can also choose the order in which you view and enter data into these fields by changing the number in the Entry Order column. To change the order, place your cursor inside the field you

NOTE: BECAUSE THE PROGRAM MUST REMOVE PREGNANCY CHECKING DATA FROM THE PREVIOUS CYCLE BEFORE YOU CAN ENTER PREGNANCY DATA FOR THE CURRENT CYCLE, COW SENSE CLEARS THE PREG CHECK FIELDS WHEN YOU USE THE RUN NEW CYCLE COMMAND (SEE CHAPTER 7). THEREFORE, PRIOR TO RUNNING A NEW CYCLE, CREATE A CUSTOM COW REPORT (SEE CHAPTER 5) THAT, ALONG WITH COW ID, CONTAINS PREG CHECK DATE, DAYS BRED, ESTIMATED CALVING DATE, STATUS AND STAGE. SAVE THE REPORT LAYOUT AND THEN PRINT THE REPORT. YOU WILL HAVE THE PRINTED INFORMATION AVAILABLE FOR REFERENCE, AND YOU WILL HAVE THE SAVED REPORT LAYOUT TO USE IN SUBSEQUENT CYCLES.

PURGING PREG CHECK DATA WILL NOT AFFECT THE ESTIMATED CALVING DATES THAT COW SENSE CALCULATES WHEN ENTERING BREEDING DATA.



FIGURES 4-19 AND 4-20. THE ENTER COWS WINDOW, EPD FORM IN THE "ALL ROWS" (TOP) AND "SELECTED ONLY" (BOTTOM) VIEWS.

wish to change, press the numeral on your keypad corresponding with the order. Arrow down or up to change the order of other fields. If you don't supply an order, Cow Sense will order fields alpha-numerically in ascending order. If some fields are ordered by numeral and some are not, the fields that are not numbered will proceed the fields that are.

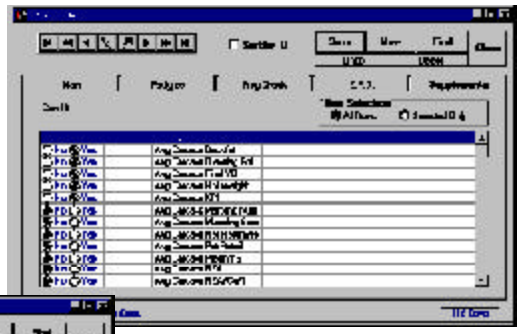
If you chose the Selected Only view, Cow Sense will display a form containing only the Field Name and the Value columns. You determine field names and values available using the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7). Cow Sense will only display the field names that you selected using the Yes and No radio buttons in the Select? field of the All Rows view.

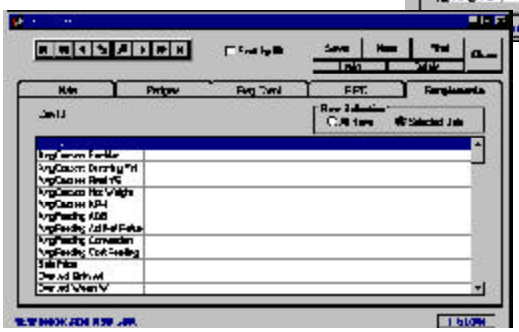
Whether you enter values in the Selected Only view or the All Rows view of this form, Cow Sense will validate those values against minimum and maximum values you determine in the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7).

Supplemental Form (Purebred and Commercial modes only)

This is a powerful tool in the Enter Cows window to collect *ranch-specific information* on each animal. You define these fields in the **Maintenance > Administration > Customize Data Field** option (See Chapter 7). You can enter a virtually unlimited list of data fields specific to your needs.

To enter or edit a supplemental information record on a specific animal, enter a cow ID in the Cow ID field of the Main form. Click on the Supplemental tab to access the Supplemental form. Enter or edit information on that animal. You can also find a cow record using the Find button on the Main form.





FIGURES 4-21 AND 4-22. THE ENTER COWS WINDOW, SUPPLEMENTAL FORM IN THE "ALL ROWS" (TOP) AND "SELECTED ONLY" (BOTTOM) VIEWS.

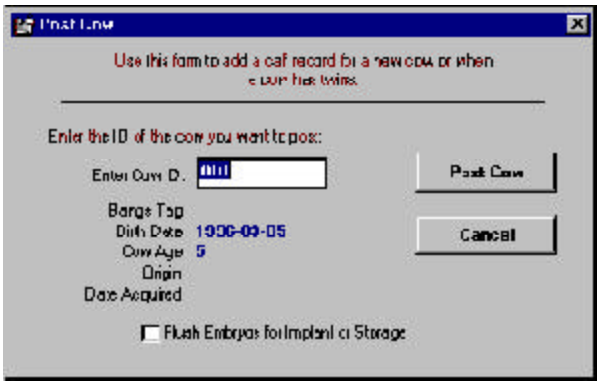
You can view All Rows, or Selected Only (see Figures 4-21 and 4-22). If you chose the All Rows view, Cow Sense will display a form with which you can select from a number of user-defined data fields and values that you determine using the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7). You choose these fields by clicking on the Yes or No radio buttons under Select? You can also choose the *order* in which you view and enter data in these fields by changing the number in the Entry Order column. To change the order, place your cursor inside the field you wish to change, press the numeral on your keypad corresponding with the order. Arrow down or up to change the order of other fields. If you don't supply an order, Cow Sense will order fields in the Selected Only view by the order that they're listed in the Field Name column, which is determined by the order in which they reside in the Customize Data Fields form.

If you chose the Selected Only view, Cow Sense will display a form displaying only the Field Name and the Value columns. You determine field names and values available using the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7). Cow Sense will only display the field names that you selected using the Yes and No radio buttons in the Select? field of the All Rows view.

Whether you enter values in the Selected Only view or the All Rows view of this form, Cow Sense will validate those values against minimum and maximum values you determine in the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7).

POST COW

FIGURE 4-23.
THE POST COW WINDOW.



When you run a new cycle (**Maintenance > New Cycle > Run New Cycle**), Cow Sense creates a blank calf record for every Active or Going cow in anticipation of calving (usually you run a new cycle when the first calf of the calving season hits the ground—see Chapter 7). However, you may want to add more calf records after you've run a new cycle (for example, in the case of twins or adding a purchased cow) and the Post Cow option in the Enter Data drop-down menu provides a way to do that.

The Post Cow function also has application to an operation that is flushing, collecting and implanting embryos from donor cows.

When you use the Post Cow command, Cow Sense creates a new record in the current calf file, just as it does when you run a new cycle.

Adding a New Cow

If you add a cow to your herd after you run a new cycle, (for instance, you purchased a cow at a sale which will calve in the current production cycle) you'll need to add her to the current cycle. To do so, first create a record for the cow using the **Enter Data > Cows > Enter Cows** option. Then use the **Enter Data > Cows > Post Cow** option to create a blank calf record for that cow. In the Post Cow window, type the cow's ID in the Enter Cow ID field. Check the other information, such as the Bangs Tag number, the Birth Date, the Cow Age, the Origin and the Date Acquired. If you're sure all the information is correct, click the Post Cow button and Cow Sense will create a calf record for that cow.

Adding Twin Records

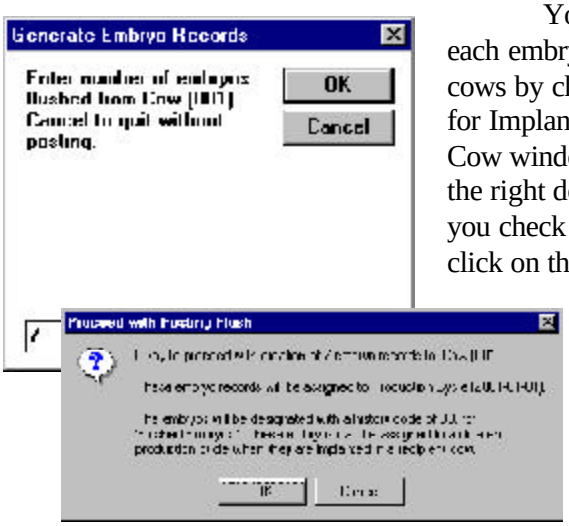
If a cow has twins, use the **Enter Data > Cows > Post Cow** option to create a second calf record for her. If a cow (or more likely a ewe) has more than twins, create a record for each additional offspring. In the Post Cow window, type the cow's ID in the Enter Cow ID field. Check the other information, such as the Bangs Tag number, the Birth Date, the Cow Age, the Origin and the Date Acquired. If you're sure all the information is correct, click the Post Cow button and Cow Sense will create a second (or third) progeny record for that cow.

TIP: IF YOU GRAFT A CALF FROM WITHIN YOUR HERD KEEP THE CALF RECORD WITH THE ORIGINAL COW AND MAKE NOTATIONS IN THE REMARKS FIELDS OF EACH COW TO RECORD. DO NOT CREATE MULTIPLE RECORDS FOR A CALF.

Adding Grafted Calf Records

If you graft a *purchased* calf onto a cow, use the **Enter Data > Cows > Post Cow** option to create a second calf record for her (the first calf record will be for her original calf). In the Post Cow window, type the cow's ID in the Enter Cow ID field and press the TAB key to engage the system. Check the other information, such as the Bangs Tag number, the Birth Date, the Cow Age, the Origin and the Date Acquired. If you're sure all the information is correct, click the Post Cow button and Cow Sense will create a second calf record for that cow.

Flushing Embryos



You can enter a calf record for each embryo you flush from donor cows by checking the Flush Embryos for Implant or Storage box in the Post Cow window. First be sure you have the right donor cow ID selected. After you check The Flush Embryos box, click on the Post Cow button and Cow Sense will ask you for the number of embryos you flushed from the cow (see Figure 4-24). Enter a value and then click the OK button to proceed. Cow Sense will display a Proceed with Posting Flush window (see Figure 4-25). Click the OK button to continue. If you run a calving update before you post embryos to donors, you will have to rerun the calving update.

FIGURES 4-24 TO 4-26. THE GENERATE EMBRYO RECORDS WINDOW AND THE PROCEED WITH POSTING FLUSH WINDOW ASSOCIATED WITH THE POST COW OPTION.

NOTE: REFER TO THE CALVES SECTION OF THIS CHAPTER FOR INSTRUCTIONS ON HANDLING ET CALF RECORDS.

TIP: PRIOR TO CREATING EMBRYO RECORDS WITH POST COW, IDENTIFY ALL DONOR AND RECIPIENT COWS IN THE ENTER COWS WINDOW (SELECT **ENTER DATA > COWS** FROM THE MAIN MENU BAR. SEE PREVIOUS INSTRUCTIONS IN THIS CHAPTER). COW SENSE EXCLUDES COWS DESIGNATED AS RECIPIENTS AND DONORS FROM THE NEW CYCLE PROCESS (SEE CHAPTER 7). THAT WAY, YOU POST DONORS IN THE CYCLE IN WHICH THE EMBRYOS WERE FLUSHED.

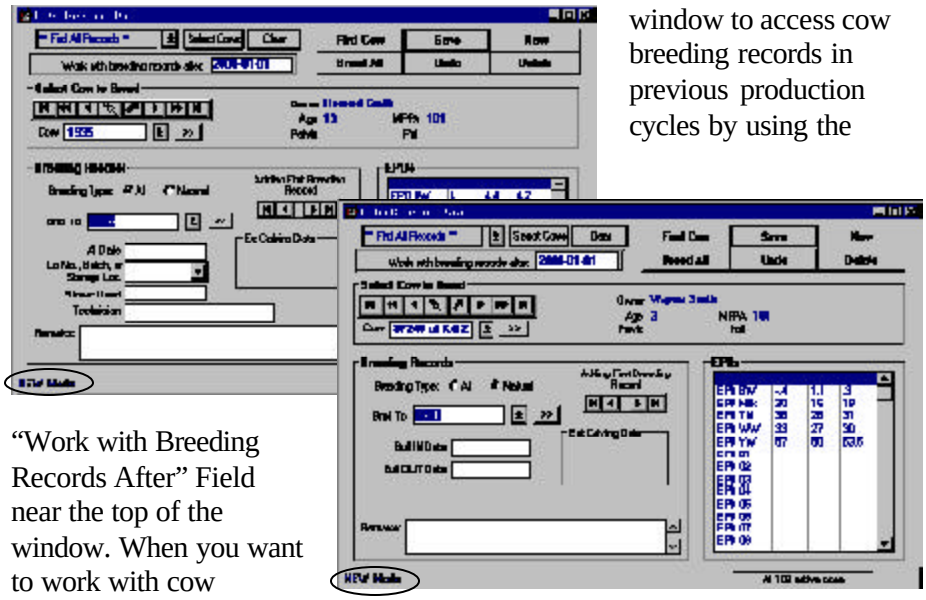
When you post embryos to this cow, Cow Sense will create records for each embryo in the **Enter Data > Calves > Calving** window for that cow's ID. Cow Sense will not assign a calf ID for each embryo, but each of the embryo records will receive a History Code designation of 80 (Embryo - Flushed). Refer to the instructions in this chapter for **Enter Data > Calves > Calving** for instructions on managing embryo transfer calves.

Cow Sense maintains embryo records in the production cycle in which you collected (flushed) them. The Run New Cycle command has no effect on ET calf records because Cow Sense suppresses ET donor and recipient cow records when you execute the Run New Cycle command. Therefore, Cow Sense does not automatically create calf records for these cows. If you sell the embryo, you can record the sale price and date in a calf supplemental fields (**Enter Data > Calves > Supplemental**). You can delete embryo records for embryos you destroy.

BREEDING

Use the **Enter Data > Cows > Breeding** option to establish breeding records for each cow in your herd. Cow Sense doesn't require that you keep Breeding data. If you keep records, however, this feature gives you estimated calving dates based on when you artificially inseminated, implanted, or put the bull in with your cows. It also allows you to easily track calf sires.

FIGURES 4-26 AND 4-27. THE ENTER BREEDING DATA WINDOW SETUP FOR AI BREEDING INFORMATION AND NATURAL SERVICE BREEDING INFORMATION. NOTE THE *NEW MODE* DESIGNATION (AS OPPOSED TO THE *EDIT MODE* DESIGNATION) IN THE LOWER LEFT CORNER OF THE WINDOW.



You can use this window to access cow breeding records in previous production cycles by using the "Work with Breeding Records After" Field near the top of the window. When you want to work with cow

breeding records that include breeding dates that precede the production cycle in which you're operating, type an appropriate date (for example, 3-6-2002) in the Work with Breeding Records After field, and Cow Sense will include all breeding records on file from that date forward.

To access the Enter Data Breeding window, select **Enter Data > Cows > Breeding** from the main menu bar. The top portion of the Enter Breeding Data window, which displays fields for cow data, stays constant. You can enter breeding records for one cow at a time, or you can use the Select Cow button to globally enter data on a group of cows.

If you have not established a breeding record for a cow, you will be in the *New Mode* of the Enter Breeding Record window, as indicated by the *New Mode* designation in the lower left hand corner of the window. If you have established a breeding record for a cow, you will be in the *Edit Mode* of the Enter Breeding Record window, as indicated by the *Edit Mode* designation in the lower left hand corner of the window. When you are in Edit mode, any changes you make in the record will overwrite existing information.

TIP: YOU CAN USE THE BREEDING WINDOW TO ACCESS COW BREEDING RECORDS IN PREVIOUS PRODUCTION CYCLES AS WELL AS THE CURRENT PRODUCTION CYCLE BY USING THE "WORK WITH BREEDING RECORDS AFTER" FIELD NEAR THE TOP OF THE WINDOW. TYPE AN APPROPRIATE DATE IN THE WORK WITH BREEDING RECORDS AFTER FIELD, AND COW SENSE WILL INCLUDE ALL BREEDING RECORDS ON FILE FROM THAT DATE FORWARD.

Individual vs. Multiple Breeding Records

Entering Breeding Records on One Animal at a Time

To enter breeding records on one cow at a time, use the Find Cow button to enter a specific Cow ID, or use the navigation tool bar to select a Cow ID. Cow Sense will display the Define Group 1 (user-defined), Age, Pelvis, MPPA and Poll data on that individual.

Next select the bull information in the Enter Data window. After you have the proper bull information, and remarks, click the Save button. Cow Sense will automatically update the mode from *New* to *Edit*.

To enter another breeding record on another cow, click the New button. To delete a breeding record, click the Delete button. To start over *before* saving a record, click the Undo button.

NOTE: SEE THE QUERIES SECTION IN CHAPTER 5 FOR MORE DETAILED INSTRUCTIONS ON RUNNING QUERIES IN COW SENSE.

Entering Breeding Records on Several Animals at Once

To enter breeding records on a group of cows, first be sure you are in New mode. If not, click the New button for a fresh Enter Breeding Data window. Use the Select button to run a query on the animals you want to breed. Some possible query criteria might be to query on location, owner, registration status, or breed. See Chapter 5 for more detailed instructions on running queries.

Next select the bull information in the Enter Data window. After you have the proper bull information and remarks, click the Save button, which will record a breeding record for the first cow record in the group. Click the Breed All button to create a breeding record for the remaining cows in the group. Cow Sense will display a warning box to be sure that you want to breed the remaining cows in the query. Click the OK button to proceed.

Entering Multiple Breeding Records Per Animal

You can enter more than one breeding record on an individual cow; for instance, if you AI a cow and then expose her to a herd bull, you can record that information. Or if you AI a cow on different dates, you can record that information.

Sire Selection

In the Breed Selection section of the Enter Breeding Data window, Cow Sense lets you select from either AI sires or natural service (Herd Bull) sires. Cow Sense distinguishes between the two Breeding Type classifications based on the Type field in the Enter Bulls window Main form. If you have specified Both (AI or Herd Bull), for a bull, Cow Sense will make that animal's record available in both the AI and Natural Breeding Type lists.

AI Sires

To select an AI sire, click the AI radio button in the Breeding Type field. Chose from a drop-down list of AI sires by clicking the Hot button next to the Select Sire field. To view that bull's Individual Summary record, click the >> button. To review all historical breeding events for a cow for all production cycles, use the Review Breeding navigation tool bar.

The AI Breeding Records provides fields for you to enter the following information:

- *AI Date*. This is the date for breeding the cow in the Select Cow to Breed section of the Enter Breeding Data window for the current breeding record (remember, you can have more than one breeding per cow per production cycle).
- *Inventory/Lot.* Click on the Hot button to select semen straw lots available on the AI bull. If you have not entered data on that bull in the Semen Inventory window, Cow Sense will let you select (none).
- *Straws Used*. Enter the number of straws used in that lot for that breeding date. If you enter a number larger than the amount available based on your entry in the Semen Inventory report, Cow Sense will

decrement the Count value to a negative number in that report. Enter the total number of straws you use for all cows if you are globally entering information on breeding several animals with the same lot of semen on the same date.

- *Technician*. This is a free-form field in which to enter the AI technician responsible for the current breeding record.
- *Remarks*. This is a free-form field for entering remarks associated with the current breeding.

Cow Sense automatically calculates the Estimated Calving Date based on the AI date. The EPDs that Cow Sense displays are for the bull identified in the Select Sire window, the cow and the resulting progeny.

NOTE: THE PUREBRED MODE MATING PLANNER TOOL ALLOWS YOU TO SELECT A SIRE AND VIEW THE EXPORTED EPDS FOR THAT CALF AS A RESULT OF THAT MATING. YOU CAN THEN SELECT A DIFFERENT SIRE TO DETERMINE THE OPTIMUM MATING FOR THAT COW.

Natural Sires

To select a natural service (Herd Bull) sire, click the Natural radio button in the Breeding Type field. Choose from a drop-down list of Herd Bull sires by clicking the Hot button next to the Select Sire field. To view that bull's Individual Summary record, click the >> button. To review all historical breedings for a cow, use the Review Breeding navigation tool bar.

The Natural Breeding Records provides fields for you to enter the following information:

- *Bull IN Date.* This is the date you placed the bull with the cow (individual) or cows (Breed All) for the current breeding record (remember, you can have more than one breeding per cow per cycle).
- *Bull OUT Date*. This is the date you pull the bull from the cow(s).

Cow Sense automatically calculates the Estimated Calving Date range based on the Bull IN and Bull Out dates. The EPDs that Cow Sense displays are for the bull identified in the Select Sire window, the cow and the resulting progeny.

CALVES

USING FIELD FORMS

The **Enter Data > Calves** option is designed for you to work off the Calving, Weaning and Yearling *Calving Field Forms* (see the Field Forms section of this chapter). Calving Field Forms are sorted by Cow ID. The Enter Calves windows call up animals by Cow ID as well. If you don't use the Calving Field Forms when you enter calving data, you may call up records using the Find Cow or Find Calf buttons, or you can type a number

NOTE: THE LAYOUT OF FIELD FORMS IS SIMILAR TO THE LAYOUT OF REPORTS. YOU CAN USE THE SAME REPORT TOOLS, SUCH AS SORT, SEARCH (QUERY), PRINT, GLOBAL EDIT AND SAVE-TO-FILE. REFER TO THE REPORT TOOLS SECTION OF CHAPTER 5 FOR MORE INFORMATION ON USING THE DIFFERENT BUTTONS IN THE FIELD FORMS WINDOWS.

in the Cow ID field and press the TAB key to continue. Click the Undo button to clear the fields of a record you haven't saved yet. Click the Delete button to completely remove the record from your database (you can't recover a record if you delete it).

ADDING TWIN, GRAFTED CALF, OR ET RECORDS

If you need to make a record for a grafted calf that you *purchased*, a twin, or a calf from an embryo transfer, you first need to create a calf record for the Cow ID. See the Post Cow segment of the Cows section of this chapter. If you graft a calf from your own herd, keep a record in the Remarks section of the birth dam's and the foster dam's record. Do not create another calf record for the foster dam.

Special Embryo Transfer Calf Record Considerations

NOTE: WHEN YOU IMPLANT AN EMBRYO, ASSIGN AN "81" IN THE HISTORY CODE OF THAT ET CALF'S RECORD. ALSO, USE THE ENTER BREEDING DATA WINDOW (**ENTER DATA > COWS > BREEDING**) TO FIND THE RECIPIENT RECORD FOR THAT ET CALF, AND ENTER AN ESTIMATED CALVING DATE BASED ON IMPLANT DATE. EMBRYO TRANSFER CALVES WILL APPEAR ON THE PROGENY LISTING OF BOTH THE DONOR AND RECIPIENT COWS. COW SENSE CAN COMPUTE ADJUSTED WEIGHTS USING THE DAM VALUES OF THE RECIPIENT.

When you flush embryos and create embryo records with the Post Cow option using the Donor's ID, you:

1. Establish a calf record for each embryo.
2. Assign those embryos to a cohort. This cohort will be the one you see listed in the Production Cycle Selector box (item M in Figure 1-4).
3. Assign those embryos with a History Code of 80 (Embryo Flushed).
4. Do not assign those embryos with Calf ID numbers.

Once you have established ET calf records with Post Cow, you can update ET calf records using either the Enter Calves [Calving] window (**Enter Data > Calves > Calving**) or the Tabular Calf Entry window (**Enter Data > Calves > Tabular Entry**). You will probably find the Tabular Calf Entry method preferable to the Enter Calves [Calving] method for entering and editing ET calf records. In fact, the Cow Sense Open Library contains a pre-made Tabular Calf Entry layout called "Process Embryos." You can load this form into your herd database using the <Open Library>, available when you click the Hot button on the Layout List on the Tabular Calf Entry tool bar (see Figure 4-33, item C). General instructions on using both the Enter Calves [Calving] window and the Tabular Calf Entry window follow in this chapter.

If you store (freeze) an embryo, you should change the History Code designation for that embryo's record to 83 (Embryo - Storage), and you may wish to assign the embryo an ID number.

If you implant an embryo into a recipient cow in your own herd, change the History code for that embryo record to 81 (Embryo- Implanted) and enter the ET Recipient ID in the ET Recip ID field (accessible in the Tabular Calf Entry window). Remember, that Cow Sense maintains embryo records in the production cycle in which you collect (flushed) them. You will have to change the Cohort Start Date in all implanted embryo records to reflect the production cycle in which you expect ET calves to be born. You must use the Tabular Calf Entry window to change cohort dates. Further, an ET calf will not be born during an existing production cycle, you must first establish a production cycle by selecting the New button in the Production Cycles form of the Cow Sense Set Up window, accessible by selecting **Maintenance > Administration > Setup > Production Cycles** from the main menu bar (see Chapter 7). You must also be sure that the recipient cow has a record on file, and you can manually record an estimated calving date for that ET calf birth in the recipient's record in the Preg Check form of the Enter Cows window (**Enter Data > Cows > Enter Cows**).

TIP: BE SURE TO CHANGE THE STATUS OF THE ET CALF RECORD IN THE BORN AS FIELD WHEN AN ET CALF IS BORN.

TIP: WHEN YOU CREATE ET CALF RECORDS WITH THE POST COW COMMAND, COW SENSE AUTOMATICALLY BUILDS THOSE RECORDS WITH THE OMIT FROM RATIOS BOX IN THE ENTER CALVES [CALVING] WINDOW CHECKED. IF YOU WANT TO INCLUDE ET CALVES IN THE RATIO PROCESS, UNCHECK THIS BOX IN ET CALF RECORDS.

You can enter additional calving information for ET calves as they're born in the Enter Calves [Calving] window. When an ET calf is born, you should change the History code for that calf to reflect his condition (for example, 1 (Live Calf)), and the Born As code to E (Embryo Transfer) or ES (Split Embryo). When you change the Born As code, Cow Sense will prompt you for a recipient cow ID (if you did not previously enter one) in order to track production information related to the recipient's mothering ability.

ENTERING CALF RECORDS

The **Enter Data > Calves** option is set up to build on itself, which keeps you from duplicating data entry. This saves time and reduces the opportunity for entry errors. First you enter calving data, then, in the EZ-75, Commercial and Purebred modes, you enter weaning data and then yearling data. That way only new information related to the current process is required.

NOTE: BEFORE YOU CAN ENTER ANY INFORMATION ON CALVES, YOU FIRST HAVE TO CREATE A BLANK CALF RECORD FOR EACH COW IN YOUR HERD. TO DO THIS, USE THE **MAINTENANCE > NEW CYCLE > RUN NEW CYCLE** COMMAND FROM THE MAIN MENU BAR (SEE CHAPTER 7) OR THE POST COW OPTIONS (SEE THE COWS SECTION OF THIS CHAPTER).

In addition to the standard Enter Data buttons in the Calf Enter Data windows (Save, Find Cow, Find Calf, Undo and Delete), you have a Supplemental Data Entry button, which opens up the Enter Calves [Supplemental] window. The Enter Calves [Supplemental] window contains forms in which you can enter *user-defined* data. Refer to the Supplemental segment of this Calves section for more information regarding the Enter Calves [Supplemental] feature.

Enter Calves [Calving]

Use the Enter Calves [Calving] window to enter all information relating to a cow's calving history, even if the cow was open, aborted or her pregnancy terminated in any other way. You also use the Enter Calves [Calving] window to record information related to the calf's condition (see Figure 4-28).

The Enter Calves [Calving] window has Hot buttons on most of its fields, which call up standardized lists. These lists make data entry faster and they make the information in your database more uniform. Some of the fields appear when you select them using the **Maintenance > Administration Setup > Entry Options**. Others are standard in every Enter Calves [Calving] window regardless of mode (Lite, Commercial, or Purebred). They include:

TIP: USE THE SUPPLEMENTAL DATA ENTRY BUTTON TO OPEN UP THE ENTER CALVES [SUPPLEMENTAL] WINDOW. SEE INSTRUCTIONS FOR USING THE ENTER CALVES [SUPPLEMENTAL] WINDOW LATER IN THIS CHAPTER.

- *Cow ID*. The information in this field is automatic. When you open up an Enter Calves [Calving] window, Cow Sense pulls up the first cow in your file. You can use the toolbars to the right of the ID fields to navigate through records. Otherwise, select a cow clicking the Find Cow button, or by clicking on the Cow ID field and typing in her ID.
- *Calf ID*. Record the calf ID in this field. It can be the same ID as the Cow ID if you select "ID Same As Cow" when you use the Run New Cycle Command under **Maintenance > Administration > New Cycle > Run New Cycle** (see Chapter 7).
- *Birth Date*. This is the calf's date of birth. It is required, but you can make it an approximate date. This is a default field; the text will appear in red until you save the record. Cow Sense will warn you if the birth date is 11 days outside the estimated birth date based on the cow's Breeding record. When you are entering several calf records at a time, Cow Sense will display the birth date of the previous calf record by default as a way to increase data entry efficiency. You can use the + and - keys to increment and decrement the default date.
- *Calf History*. Use this field to record the current status of the calf. The calf history is a key field that captures the outcome of the breeding event that occurred nine months previous to calving time. This is a default field; the text will appear in red until you save the record. You must record a code in this field. Your options are:

  1 Live Calf (this is the default)

  2 Calf died after weaning

3	Calf died after branding
4	Calf died before branding
5	Calf dead at birth
6	Abortion
7	Open Cow
8	Bred cow didn't calve (other)
9	Bred cow sold
80	Embryo - flushed
81	Embryo - implanted
82	Embryo - in storage
99	Missing data

- *Calving Ease*. Use this field to record calving ease. This is a default field; the text will appear in red until you save the record. You must record a code in this field. Your options are:

1	No difficulty, no help (this is the default)
2	Minor difficulty, some help
3	Major difficulty, mechanical help
4	Cesarean
5	Abnormal presentation

- *Sex*. Record whether the calf is a bull, heifer or steer. You must have a B, H or S in this field.
- *Born As*. You must record a letter in this field. This is a default field; the text will appear in red until you save the record. Use this field to record whether the calf is a:

S	Single
TH	Twin to heifer
TB	Twin to bull
E	Embryo transfer
ES	Split embryo
C	Clone
R	Triplet

TIP: BE SURE TO CHANGE AN EMBRYO STATUS IN THE "BORN AS" FIELD OF THE ENTER CALVES WINDOW WHEN AN ET CALF IS BORN.

- *Raised As*. You must record a letter in this field. This is a default field; the text will appear in red until you save the record. Use this field to record whether the calf is a:

S	Single on Own Dam
F	Single on Foster Dam
T	Twin on Own Dam
G	Twin on Foster Dam
A	Artificially Raised

- *Sire ID*. Use this field to record the calf's sire. If you previously recorded a breeding event on this calf's dam and Cow Sense then created a calf record based on the dam's ID during the Run New Cycle process, Cow Sense will automatically record the Sire ID in this field based on the calf's expected birth date. If you previously recorded an artificial insemination breeding event for a calf and she is born 11 days past the estimated birth date, Cow Sense will ask you to confirm the sire of the calf from a list of potential sires. This is a default field; the text will appear in red until you save the record. If you did not previously record a breeding event and you know the name or number of the sire, type in the first character or so and Cow Sense will automatically enter the rest of the name or number.
- *Calf Group 1* (user defined). This field contains data files you established in the **Enter Data > Define Groups** option. You are limited to the selections you defined. For example, if you called Calf Group 1 "Supplemental Feed", and you defined your group selections as "Yes" and "No" the only information you could put in this field is "Yes" or "No". You can click the Hot button at the right side of the field box to see the selections you have available. This is a default field; the text will appear in red until you save it.
- *Calf Group 2* (user defined). Same as Calf Group 1 above.
- *Calf Breed*. This includes the breeds you left in or added to the Breed selection in the **Enter Data > Define Groups** option. You are limited to the selections you have included in the database. You can click the Hot button at the right side of the data entry box to see the selections you have available. This is a default field; the text will appear in red until you save the record.
- *Remarks*. Use the remarks field to make notes regarding such information as the cow's disposition. You have unlimited room in which to record information in this field.

In addition to the standard data fields you have two check boxes in the Enter Calves [Calving] window. The first check box is Omit from ratios. Check this box if you don't want to include a calf in ratio calculations. For example, you may not want to ratio a calf if it is a twin, an embryo transfer calf, or a grafted calf. If you creep feed a calf, click on the Creep Feed check box.

Also, if you checked certain validation criteria in the **Maintenance > Administration > Setup > Entry Options** form, Cow Sense may provide other data fields and limit you to the information you enter based on the validation criteria you specify (see Chapter 7).

TIP: FOR ET CALVES, YOU MAY WANT TO CHECK THE "OMIT FROM RATIOS" BOX IN THE ENTER CALVES [CALVING] WINDOW.

To enter new calf records, click **Enter Data > Calves > Calving** from the main menu bar The Enter Calves [Calving] window will appear (see Figure 4-28). The next field you'll come to depends on which entry options you've chosen using the **Maintenance > Administration > Setup** Entry Options form, and the Add/Select fields for Cows window from the **Maintenance > Administration > Customize Data Fields >> Calves** option. For example, if you have no special entry options selected, the next field will be Birth Date; if you chose Electronic ID as an entry option, E.I.D. will be the next field on your Enter Data window. When you're finished entering data on an individual calf, click the Save button and Cow Sense will call up the next Cow ID in your current herd database.

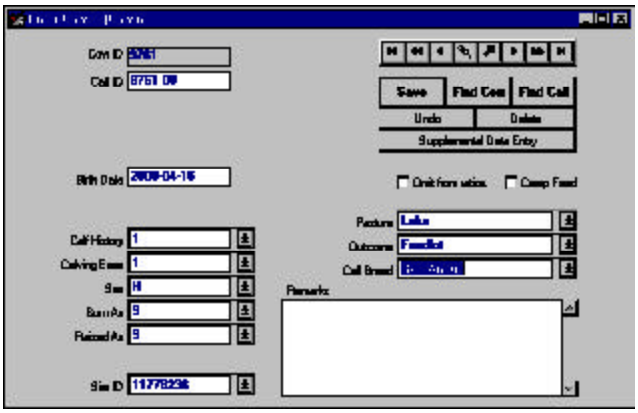


FIGURE 4-28. THE ENTER CALVES [CALVING] WINDOW.

If you change information in the Enter Calves [Calving] window after you've run the Calving Update from the **Maintenance > Current Cycle** menu, you'll have to rerun the Calving Update.

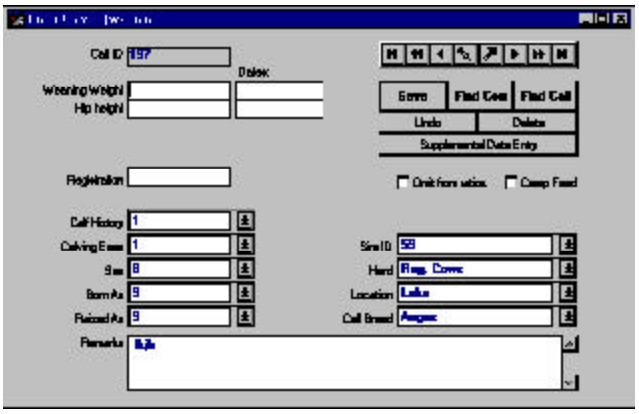
NOTE: THE ENTER CALVES [WEANING] AND [YEARLING] WINDOWS ARE NOT AVAILABLE IN THE LITE MODE OF COW SENSE.

Enter Calves [Weaning]

Use the Enter Calves [Weaning] window to record weaning weights for live calves and the date that you weighed them. The first date you enter will become the default date; and the text will appear in red in subsequent calf records until you change the date and/or save the record.

This record also allows you to keep information on hip height for calculating frame score, and in the Purebred mode of Cow Sense, you also have a field for recording the calf's registration number.

FIGURE 4-29. THE ENTER CALVES [WEANING] WINDOW.



NOTE: BEFORE YOU CAN ENTER WEANING DATA YOU FIRST HAVE TO RUN A CALVING UPDATE. TO DO THIS, SELECT THE **CURRENT CYCLE > CALVING UPDATE** COMMAND FROM THE **MAINTENANCE** MENU (SEE CHAPTER 7).

Additionally, you can use this window to update information you entered in the Enter Calves [Calving] window. Cow Sense displays calving information in this window for your review. You may change it here if appropriate. For example, if a calf died after you entered its information at calving time, you can change the Calf History field to reflect that event. If you change the sex of a calf (from a bull to a steer, for example) you must rerun the Calving Update (Cow Sense will keep track of this for you and remind you to rerun the update).

To enter weaning data or to update calf records after you've run the Calving Update, click **Enter Data > Calves > Weaning** from the main menu bar. The Enter Calves [Weaning] window will appear (see Figure 4-29). When you're finished entering data on an individual calf, click the Save button and Cow Sense will call up the next Cow ID in your current herd database.

If you change information in the Enter Calves [Weaning] window after you've run the Weaning Update from the **Maintenance > Current Cycle** menu, you'll have to rerun the Weaning Update.

Enter Calves [Yearling]

Use the Enter Calves [Yearling] window to record yearling weights for live calves and the date that you weighed them. This record also allows you to update or enter information for hip height for calculating frame score, and enter pelvic exam data and scrotal circumference from breeding soundness evaluations. Cow Sense calculates the pelvic area when you enter data for pelvic height and width.

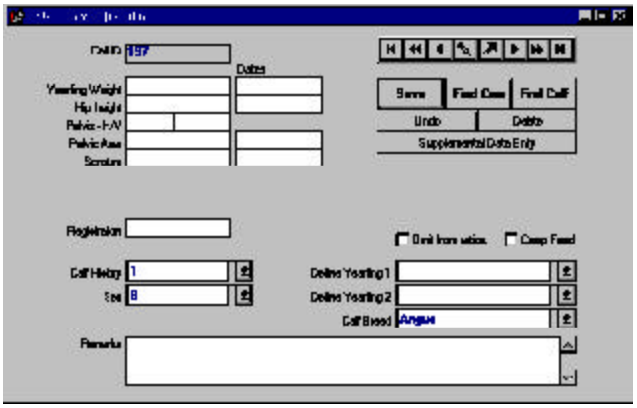


FIGURE 4-30. THE ENTER CALVES [YEARLING] WINDOW.

You can also use this window to update information you entered in the Enter Calves [Calving] and [Weaning] windows. Cow Sense displays calving and weaning information in this window for your review. You may change it here if appropriate. For example, if a calf died after you entered its information at calving or weaning, you can change the Calf History field to reflect that event.

To enter yearling data or to update calf records after you've run the Calving Update and the Weaning Update, click **Enter Data > Calves > Yearling** from the main menu bar. The Enter Calves [Yearling] window will appear (see Figure 4-30). When you're finished entering data on an individual calf, click the Save button and Cow Sense will call up the next Cow ID in your current herd database.

If you change information in the Enter Calves [Yearling] window after you've run the Yearling Update from the **Maintenance > Current Cycle** menu, you'll have to rerun the Yearling Update.

NOTE: BEFORE YOU CAN ENTER YEARLING DATA YOU FIRST HAVE TO RUN A WEANING UPDATE. TO DO THIS, SELECT THE **CURRENT CYCLE > WEANING UPDATE** COMMAND FROM THE **MAINTENANCE** MENU (SEE CHAPTER 7). YOU ALSO MUST HAVE THE USE YEARLING WEIGHTS CHECK BOX ACTIVATED IN **MAINTENANCE > ADMINISTRATION > SETUP > ENTRY OPTIONS** (SEE CHAPTER 7).

SUPPLEMENTAL

The Supplemental window is a powerful tool for collecting Calf EPD data, Feedlot Data, Carcass Data, and other user-defined Supplemental

NOTE: IN ADDITION TO USING THE SUPPLEMENTAL WINDOW, YOU ALSO CAN COLLECT CARCASS AND FEEDING PERFORMANCE DATA IN THE TABULAR CALF ENTRY WINDOW. REFER TO THE NEXT SECTION FOR MORE INFORMATION.

data. The procedure for entering and editing information in each of the forms is the same. While Cow Sense comes with established data fields in each of the forms, *you determine* what values you want to collect in each form.

You have two methods for accessing the Enter Calves [Supplemental] window. If you have an Enter Calves [Calving], [Weaning], or [Yearling] record open, you can access the Enter Calves [Supplemental] window by clicking the Supplemental Data Entry button. Otherwise you can access the Enter Calves [Supplemental] window by selecting **Enter Data > Calves > Supplemental** from the main menu bar.

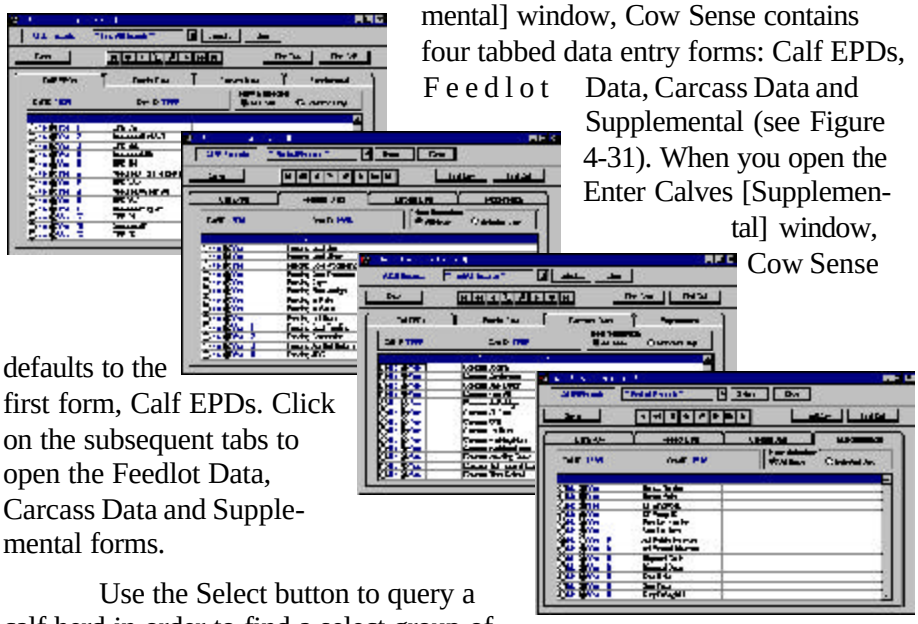


FIGURE 4-31. THE ENTER CALVES [SUPPLEMENTAL] FORMS IN THE "ALL ROWS" VIEW.

Within the Enter Calves [Supplemental] window, Cow Sense contains four tabbed data entry forms: Calf EPDs, Feedlot Data, Carcass Data and Supplemental (see Figure 4-31). When you open the Enter Calves [Supplemental] window, Cow Sense defaults to the first form, Calf EPDs. Click on the subsequent tabs to open the Feedlot Data, Carcass Data and Supplemental forms.

NOTE: REFER TO CHAPTER 5 FOR MORE INFORMATION ON USING THE SELECT BUTTON.

Use the Select button to query a calf herd in order to find a select group of animals on which to enter or edit information (e.g., all heifers born in 2000). Refer to Chapter 5 for more information on using the Select button.

Because Calf IDs are linked to Cow IDs in Cow Sense, the navigation tool bar keys off the Cow IDs. If you know the Calf ID or the Cow ID for which you wish to enter or edit calf data, click the Find Cow or Find Calf button to retrieve a calf record.

In each of the data entry forms, you have the option of viewing All Rows (see Figure 4-31), or Selected Only (see Figure 4-32). Switch between views by clicking either the All Rows or Selected Only radio button.

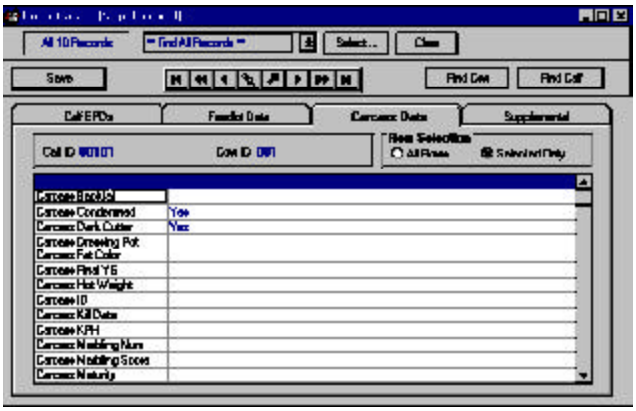


FIGURE 4-32. THE ENTER CALVES [SUPPLEMENTAL] CARCASS DATA FORM IN THE "SELECTED ONLY" VIEW.

If you chose the All Rows view, Cow Sense will display a form with which you can select from a number of data fields and values that you determine using the **Maintenance > Administration > Customize Data Fields > Calves** option (See Chapter 7). You choose these fields by clicking on the Yes or No radio buttons under Select? You can also choose the order in which you view and enter data into these fields by changing the number in the Entry Order column. To change the order, place your cursor inside the field you wish to change, press the numeral on your keypad corresponding with the order. Arrow down or up to change the order of other fields. If you don't supply an order, Cow Sense will order fields in the Selected Only view by the order that they're listed in the Field Name column, which is determined by the order in which they reside in the Add/Select Fields for Calves form (see Chapter 7).

If you chose the Selected Only view, Cow Sense will display a form displaying only the Field Name and the Value columns. You determine field names and values available using the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7). Cow Sense will only display the field names that you selected using the Yes and No radio buttons in the Select? field of the All Rows view.

Whether you enter values in the Selected Only view or the All Rows view of these forms, Cow Sense will validate those values against minimum and maximum values you determine in the **Maintenance > Administration > Customize Data Fields** option (See Chapter 7).

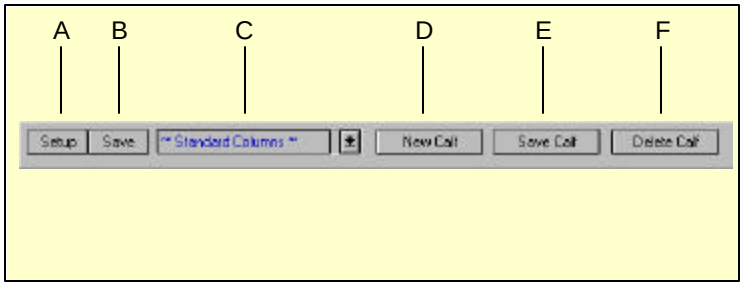
TABULAR CALF ENTRY

The Tabular Calf Entry option is designed for you to enter historical information on a calf without having to go through the individual entry routines associated with the Calving, Weaning and Yearling Enter Data options. The Tabular Calf Entry window allows you to see and enter data on

NOTE: THE CALF SUPPLEMENTAL FORMS ARE A GOOD PLACE TO INCLUDE BIF APPROVED CALF DISPOSAL CODES. THEY INCLUDE: 1. CALF STILLBORN / FULL TERM 2. CALF DIED AT BIRTH - DEFECT, 3. CALF DIED AT BIRTH - OTHER, 4. CALF BORN LIVE, DIED BEFORE WEANING - DISEASE, 5. CALF BORN LIVE, DIED BEFORE WEANING - OTHER, 6. CALF SOLD BEFORE WEANING, 10. YEARLING DIED AFTER WEANING - DISEASE, 11. YEARLING DIED AFTER WEANING - OTHER, 12. YEARLING CULLED - FEET & LEGS, 13. YEARLING CULLED - PERFORMANCE, 14. YEARLING CULLED - TEMPERAMENT, 15. YEARLING SOLD UNEXPOSED, 16. YEARLING SOLD OPEN, 17. YEARLING SOLD PREGNANT.

FIGURE 4-33.
THE TABULAR CALF ENTRY LAYOUT TOOLBAR.

Using the Tabular Calf Entry layout toolbar



A. Use the Setup button to select specific fields you want in a Tabular Calf Entry form layout.
B. Use the Save button to save a layout you design. Cow Sense will add the layout to the Layout List (see C)
C. Use the Hot button on the right of this Layout List to retrieve previously-saved Tabular Calf Entry form layouts. Also use this tool to select Midwest MicroSystems-designed layouts from the <Open Library>.
D. Use the New Calf button to add a calf record to the calf table in the current production cycle cohort.
E. Use the Save Calf button to save changes to a calf record you edit, or to save a new calf record you add to the calf table in the current production cycle cohort.
F. Use the Delete Calf button to delete a calf record from the calf table in the current production cycle cohort.

NOTE: REFER TO THE REPORT TOOLS SECTION OF CHAPTER 5 FOR MORE INFORMATION ON USING THE DIFFERENT BUTTONS IN THE TABULAR CALF ENTRY WINDOW.

NOTE: IF YOU HAVE RUN A NEW CYCLE ON YOUR HERD, AND HAVE NOT ENTERED CALF DATA USING THE ENTER DATA [CALVING] WINDOW, YOU WILL NOT HAVE ANY CALF IDS AVAILABLE IN THE TABULAR CALF ENTRY FORMAT; YOU WILL, HOWEVER, HAVE COW IDS FOR ALL ACTIVE OR GOING COWS. THEREFORE, YOU CAN ENTER NEW CALF RECORDS USING THIS FORM.

all the calves in the herd at the same time and you can use the Tabular Calf Entry format if you want to customize Enter Data windows using a columnar layout (it looks like the screen layouts for most reports and it is similar to the Treatment Items window).

Because the form in the Tabular Calf Entry window works like the Cow Sense Custom report forms, refer to the Report Tools section of Chapter 5 for more information on using the different buttons in the Tabular Calf Entry window.

To open the Tabular Calf Entry window, select **Enter Data > Calves > Tabular Entry** from the main menu bar. Cow Sense will display a columnar window and default to the Cow Sense Standard Columns: Calf ID, Name, History, Sex, Calving Ease, Birth Date, Born As, Raised As, Poll, Breed, Herd, Cow ID, Bull ID, Birth Weight, Wean Weight, Wean Wt Date, Cohort Start Date, Remarks. See Figure 4-34.

You can use the form as is or you can decide which fields you want in your custom Enter Data window.

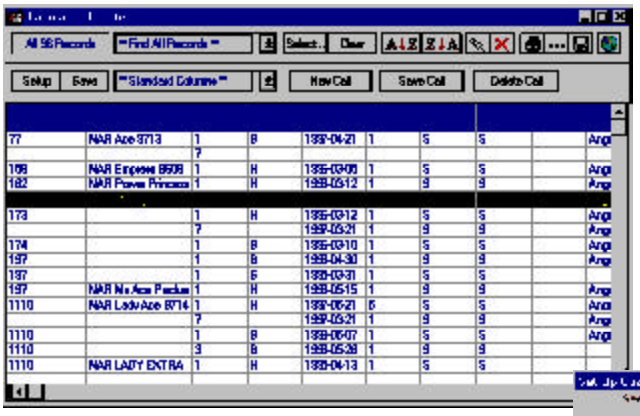


FIGURE 4-34.
THE TABULAR CALF ENTRY WINDOW.

To design a custom Tabular Calf Entry form, click the Setup (item A in Figure 4-33) button to select which fields you want included. A Set Up Custom Report window will appear showing a list of the calf data columns available (see Figure 4-35). Field names are subcategorized under major field categories. Click on the Yes radio button of a major field category in order to view/select the fields below it.

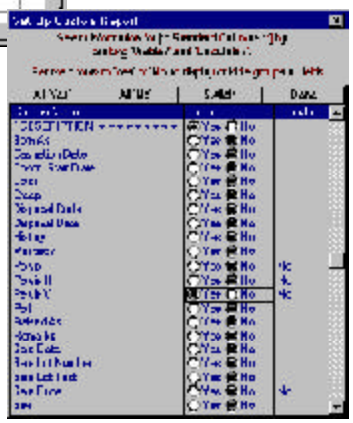


FIGURE 4-35.
THE SETUP CUSTOM REPORT WINDOW (TABULAR CALF ENTRY).

Select which columns you want in your customized Tabular Calf Entry form by clicking the YES button if you want that information or the NO button if you don't. If you only want a few columns included, click the *All 'No'* button and then click the YES button for the fields you want. If you want most of the available columns, click the *All 'Yes'* button and then click the NO button to select the columns you don't want. If you want to reverse your selection, click the *Switch* tab. When you're finished making your selection, click the *Done* button and Cow Sense will display a *customized* Tabular Calf Entry window.

If you want put the tabular entry columns in a different order, place your cursor over the title of the column (for example, Calf ID). Hold down the left mouse button. The cursor will change from the standard Windows arrow to a two-pronged arrow, and the entire column will highlight. Drag the two-pronged arrow cursor right or left to move the column to the desired location. You will see the column move as you drag it. Release the left mouse button to lock in the column's new location.

If you want to save a customized Tabular Calf Entry window layout, click the Save button (item B in Figure 4-33). Cow Sense will display a

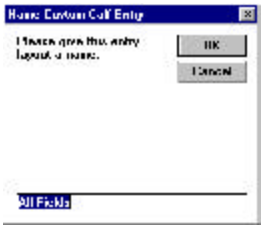


FIGURE 4-36.
THE NAME CUSTOM CALF ENTRY DIALOG BOX.

Name Custom Calf Entry window (see Figure 4-36). Enter a name for the custom form and click the OK button. To retrieve a custom form that you saved previously, click the Hot button to the right of the Layout List (item C in Figure 4-33) and Cow Sense will display a drop-down list of all the saved Tabular Calf Entry forms. Scroll through the list to find the form you want.

As with reports (see Chapter 5), you can select a certain group of calves (for example, all heifer calves) using the query features available when you click the Select button.

TREATMENTS

Use the **Enter Data > Treatments** option to keep a log of treatments (including medications, veterinary procedures, vaccinations, and parasite control), and keep records of treatments given to individuals and groups.

BUILDING THE TREATMENT ITEMS DATABASE

The first step in using the Cow Sense Treatments option is to build the Treatment Items database. To do this select **Enter Data > Treatments > Enter/View Items** from the main menu bar. A Treatment items window will appear in which you can enter information about antibiotics, pesticides, probiotics, animal health procedures, vaccines, or other items or services related to animal health (see Figure 4-37). Cow Sense comes with a preloaded pharmacy of treatment items. You can both add treatments to this list or subtract treatments from the list to customize it for your operation.

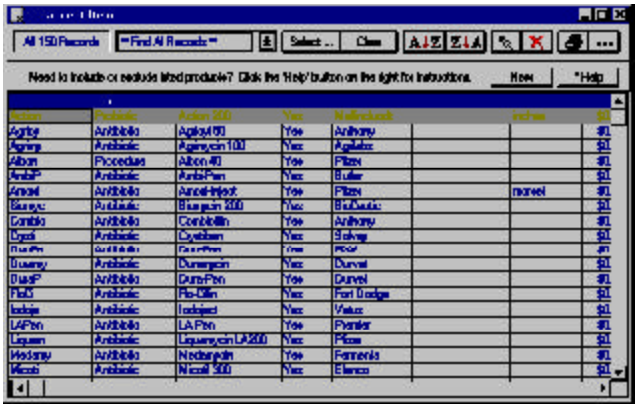


FIGURE 4-37.
THE TREATMENT ITEMS WINDOW.

All of the fields in the Treatment Items window are optional beyond the Product ID column, but the more information you enter into this form the more information you'll have on hand for filling in the Treatment Entry form for individuals or groups of cattle. Further, some information in the preloaded treatments is ranch and brand-specific, so if you choose to keep any or all of these treatments, you will likely want to enter information such as Supplier, Cost Per Unit, Doses on Hand, Indications, Dosage, and Notes (such as lot numbers).

The Treatment Items window has the same query tool bar as many of the Reports windows. See "Using the Query Tool Bar" in Chapter 5 for information on using this toolbar.

Adding Treatment Items

In order to add treatment items that you use in your herd health program, click the New button and Cow Sense will highlight (make gray) the first empty row in the Treatment Items window. Click inside the Product ID column in the highlighted row and Cow Sense will turn the field green and place a flashing cursor inside the green box. You must enter a value in this field. Enter an abbreviated name for a product or service (for example, LA 200). Proceed to the next column in the highlighted row by pressing the tab key or by clicking on the column using the mouse. Cow Sense does not require you to enter values in the remainder of the row, but the more data you enter, the more complete your records will be. The following is a list and explanation of the field names in the Treatment Items window:

NOTE: THE LAYOUT OF THE TREATMENT ITEMS WINDOW IS SIMILAR TO THE LAYOUT OF REPORTS AND YOU CAN USE THE SAME SEARCH AND SORT (QUERY) FUNCTIONS YOU USE FOR REPORTS. SEE CHAPTER 5 FOR INSTRUCTIONS ON RUNNING QUERIES.

- *Product ID*. This is an abbreviated name of the product or service for which you are entering information You can enter up to 20 characters (including spaces) in this field. This will be the identifier that appears in a drop-down list of options when you click the Hot button in the Item column of the Treatment Entry dialog box. Example: "Bovishield 4".
- *Class*. This defines the type of treatment or service. You select one of six options by clicking the Hot button and then clicking one of the choices, which include: antibiotic, other, pesticide, probiotic, procedure, vaccine. Example: "Vaccine".
- *Name*. Use this field to enter an explicit description about the product or service. In some cases, use the same identifier that you used in the Product ID field; in others, enter more detailed information. You can enter up to 70 characters (including spaces) in this field. Example: "Bovishield 4: ML IBR PI3 BRSV BVD".

- *Include?*. If you type “Yes” in this column, the product or procedure will appear in a drop-down list of options when you click the Hot button in the Item column of the Treatment Entry window. If you type “No:” the product or procedure will not appear in the drop-down list of options when you click the Hot button in the Item column of the Treatment Entry window. Example: “Yes”.
- *Manufacturer*. This is where you can put the maker of the product. You may also put tracking numbers in this field if you’re concerned about product safety or efficacy. Example: “Pfizer”.
- *Supplier*. Use this field to record who provides the product for you. This may be a farm supply store, a veterinary products company or your veterinarian. Example: “Walco”.
- *Unit Measure*. This is where you record the unit quantity in which the product or service is dispensed (or measured) or provided. Example: “cc” or “ml”.
- *Cost per Unit*. Use this field to record the cost per unit (such as cc or head or dose) specified in the Unit Measure column. Example: “$0.65”.
- *On Hand*. Use this field to record the number of units on hand. Record the total number of units specified in the Unit Measure column in this field. This number will decrease as you use up units, which you specify in the Dosage column of the Treatment Entry window. Example: if you have five 25 ml bottles of Bovishield 4, you will have 125 units on hand. Enter “125”.
- *Indications*. Use this text field to record why you use a product or service. Of course, some items (such as pregnancy evaluations) will be fairly explanatory. Example: “MLV” (Modified live vaccine) for calves against IBR, PI3, BRSV, BVD”.
- *How to Administer*. This field is for recording specific administration instructions. Example, “IM in the neck”.
- *Dosage*. In this text field you record the recommended dosage for a product or service. Example: “2 ml/head”.
- *Withdrawal.* Use this field to record the number of days you must wait, after administration of a product, before you can slaughter an animal. Example: “28 days”.
- *Notes*. The Notes field is for including any other information you may find helpful regarding a product or procedure. Example: “Lot 13347835”.

After you have finished entering information on a treatment item, TAB to proceed to the next row or click the New button to add another record. You can add new treatment items at any time.

Removing Treatment Items

To delete a Treatment Item, Click on that Treatment Item row and press the DELETE key. Cow Sense will display a warning box (see Figure 4-38) asking you if you want to delete all items, the highlighted item, or cancel. Click the appropriate button to proceed. Deletions are permanent; you probably will not want to delete *all* treatments. You can re-enter a deleted treatment any time.

FIGURE 4-38. THE DELETE TREATMENT ITEMS WARNING BOX.

Printing Treatment Items

If you want a printout of the Treatment Items database, you can click the Printer icon button and you will see a copy of the Treatment Items list on your screen.

THE PRINTER ICON BUTTON.

Resizing Grids

The printout will not hold all columns in the database (it prints on an 8½" X 11" paper size). If you want to select certain columns for your printout, close the columns you don't want by placing your cursor on the right hand column divider line. The cursor will turn into a double arrow. Drag the double arrow left and the column will close. Closed columns will not appear on the printout. When you close the Treatment Items window, Cow Sense will restore all the columns to their original size and position.

Once you have clicked the Printer Icon button and you see the printout on your screen, you can scroll through pages of the printout using the Fast Back, Back One, Forward One and Fast Forward buttons. To send the printout to your printer, click the Print-to-Printer button. To send the printout to a file (to use in a database or spreadsheet), click the Print-to-File button. To enlarge or reduce the viewing size of the form on your screen, click the Size button. See Figure 4-39.

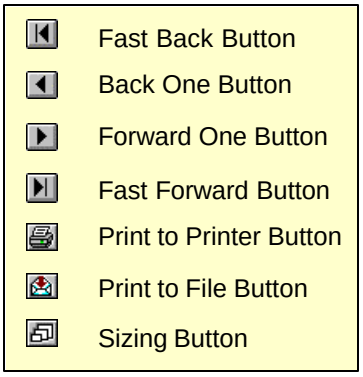


FIGURE 4-39. THE PRINT LAYOUT FUNCTION BUTTONS. USE THESE BUTTONS TO MANIPULATE AND PRINT YOUR DATABASE OR REPORT.

TREAT CATTLE

Once you have established a database of common treatment products and procedures, you will be ready to start recording information on individual or group treatments. You can also use the Treat Cattle option in the to add treatment products or procedures to the Treatment Items database.

To treat an individual or a group of animals, select **Enter Data > Treatments > Treat Cattle** from the main menu bar. A Treatment Entry window will appear (see Figure 4-40).

Type in a treatment Identifier, up to 40 characters long (including spaces). This is a required field. You have a lot flexibility in identifying treatments; you can do so by identifying a disease or procedure or treatment, or by identifying animal ID(s). With 40 character spaces, you can also use a combination for an identifier. You can run searches using the Identifier field, so you have a lot of power to bring up reports on specific types of treatments using this field. Examples include "2000 Preg Check", "2002 Bulls Breed Sound", "Pinkeye # 287H", "Scours", "External Parasites", "Bangs 2000 Heifers". Next go to the Date field by TABBING or by clicking it with your mouse. Type in the Date of the treatment or procedure. The Date field is also required. Continue through the Veterinarian and Notes (unlimited text) fields and type in information as needed. Next press the TAB key, or click in the Item column in the Treatment tab.

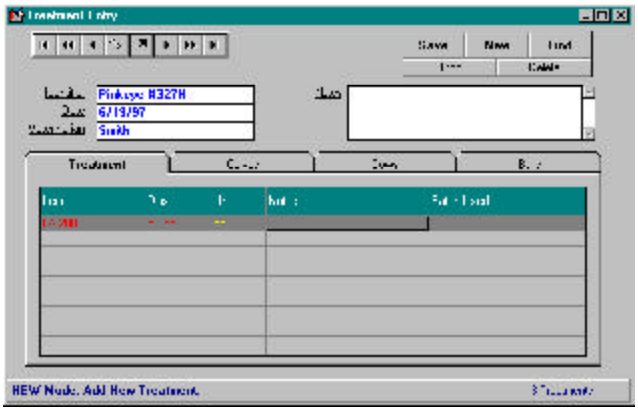


FIGURE 4-40. THE TREATMENT ENTRY WINDOW, TREATMENT FORM.

If you have already defined products or procedures using **Enter Data > Treatments > Enter/View Items** option, you can select a treatment by clicking the Hot button to call up a list of treatments.

If the treatment you want isn't in the database, type an abbreviated name for the treatment (no more than 20 characters, including spaces) in the Items field and TAB to the Dosage field. Cow Sense will ask you if you want to add the treatment (see Figure 4-41). Click the Yes button.

Cow Sense will then display a Treatment Item window in which you can enter information about the new product or procedure (see Figure 4-42). The fields are the same as those in the **Enter Data > Treatments > Enter View Items** option; only the layout is different. Follow the previous instructions under **Enter/View Items** to add information about a new product or procedure.

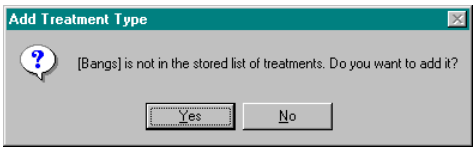


FIGURE 4-41. THE ADD TREATMENT TYPE BOX.

After you have called up a treatment from the Treatment Items database, or added a new one, enter a value for dosage. This will be the total dosage for the animal(s); therefore, if your dosage is on a per-hundredweight basis, for example, the amount visible in the Treatment Items window might be 5 ml/cwt, but the total dosage for a 600-pound calf will be 30 ml. The value you enter here will cause the value in the Units on Hand column of the Treatment Items database to decrease by that amount, multiplied by the number of head treated.

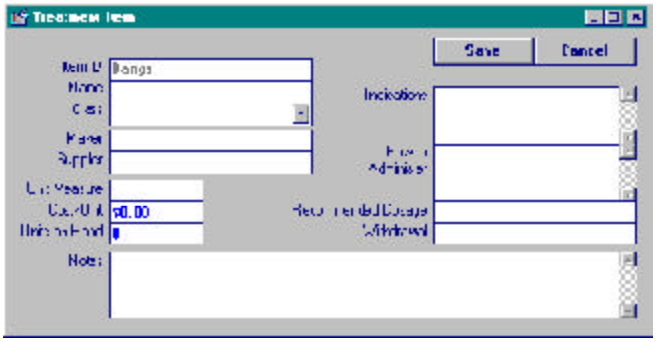


FIGURE 4-42. THE SINGLE TREATMENT ITEM WINDOW.

If you are unsure what that value is, click the Hot button in the Dosage field and Cow Sense will call up the Treatment Item - Review or Edit window pertaining to that treatment (see Figure 4-43). You can retrieve a dosage value from the Recommended Dosage field of this window. Next enter any Notes pertaining to that particular treatment and enter a Batch Used number if you need to track product safety or efficacy.

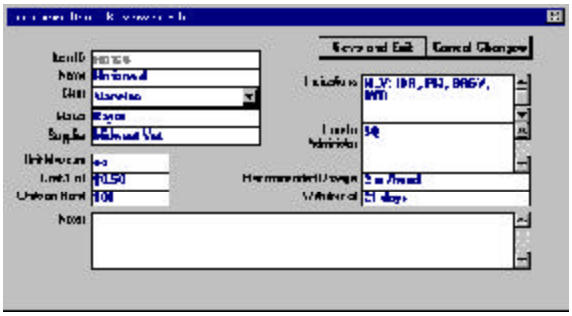


FIGURE 4-43. THE TREATMENT ITEM - REVIEW OR EDIT WINDOW.

You can then select a route of delivery. This is optional, but important for Beef Quality Assurance (BQA) measures. If the route you are using isn't listed (for example, conjunctival), use the Other designation. By clicking on the Hot button, you can choose from the following options:

- *SC*. Subcutaneous.
- *IV*. Intravenous.
- *IM*. Intramuscular.
- *IU*. Intrauterine.
- *IMM*. Intramammary.
- *IN*. Intranasal.
- *IR*. Intrarectal.
- *Oral*. By mouth.
- *Topical*. Topical
- *Other*.

You can then select a location for implantation or injection. When you click on the Hot button in the Location field, you can choose from the following BQA-sanctioned options (see Figure 4-44 for a diagram of BQA-approved injection sites):

- *LE*. Left ear.
- *RE*. Right ear.
- *LN*. Left neck.
- *RN*. Right neck.

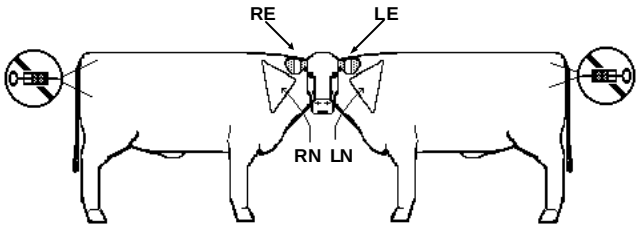


FIGURE 4-44. BQA-APPROVED INJECTION SITES. DRAWING COURTESY OF DR. DEE GRIFFIN, FEEDLOT VETERINARIAN AND ASSOCIATE PROFESSOR, UNIVERSITY OF NEBRASKA GREAT PLAINS VETERINARY EDUCATIONAL CENTER, CLAY CENTER NE.

Next, click on the Calves, Cows, or Bulls tab to select the animal(s) you're treating. Cow Sense will list all animals associated with the group (calves, cows or bulls) in the box on the right (see Figure 4-45). If you want to narrow the group (for example, treat only heifer calves) you can use the

query functions by clicking the Select… button. See Chapter 5 for more information on using query tools. If you do not use the tabs to track animals you will not have records in the Calf Treatments, Cow Treatments and Bull Treatments reports.

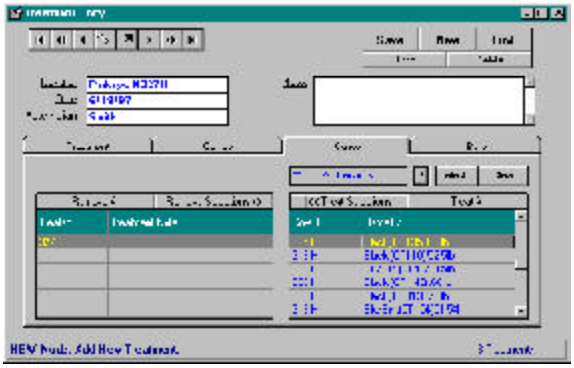


FIGURE 4-45. THE TREATMENT ENTRY WINDOW, ANIMAL SELECTION FORM.

NOTE. YOU CAN USE THE QUERY FUNCTIONS BY CLICKING THE SELECT… BUTTON. SEE CHAPTER 5 FOR MORE INFORMATION ON USING QUERY TOOLS.

To select all animals in a group, click the Treat All button and Cow Sense will copy all the animal IDs in the right box (ID column) to the left box (Treated column). To select an individual or individuals, place the mouse cursor in the far left area of the Cow, Calf or Bull ID you want and the cursor will turn into a white check mark. Click, and Cow Sense will highlight the selected record by making it light gray. You can select more than one record at a time. After you have selected the individual(s) you want to treat, click the << Treat Selections button and Cow Sense will copy the selected animal ID(s) to the left hand box (Treated column).

If you make a mistake, you can remove selected animals by clicking the Remove All button to remove all animals in the Treated column of the left box. You can remove individuals by placing your cursor in the far left area of the Treated column for the animal(s) you want to remove (the cursor will turn into a white check mark), click, and Cow Sense will highlight the selected record by making it black. Then you can remove selected records by clicking the Remove Selections >> button. Once you have the animal(s) you want to treat selected in the Treated column of the left box, click the Save button and Cow Sense will save the particular treatment you have entered.

If you make a mistake, and you want to start over before you save the treatment, click the Undo button. If you make a mistake and you want to remove a treatment record after saving it, locate the treatment using the navigation tool bar in the upper left area of the Treatment Entry window and then click the Delete button.

FIELD FORMS

TIP: TO CREATE CUSTOM FIELD FORMS, USE THE CUSTOM REPORTS OPTIONS FOR COWS, BULLS, CALVES, AND BREEDING. SEE CHAPTER 5 FOR MORE INFORMATION ON CREATING CUSTOM REPORTS.

Cow Sense provides Field Forms that you can print and take to the field to collect data on cows and calves. Using these forms will make your data entry back at the computer easier because the order of the forms is the same as the order in which records will appear in your Enter Data windows.

The first step in setting up field forms (excluding Cow Setup Form) is to sort off individuals in the herd for which you'll be collecting data. When you first open a Field Form window, Cow Sense will present you with all the cows or calves in the herd. Use the Query tool bar to select IDs that you want in your printed field form. This tool bar is the same as the tool bar in the Reports windows. You can find detailed instructions on running queries (searching and sorting records) in Chapter 5.

If you wish to view a complete record on an individual, click on the animal ID and then click the Hot button to the right of the ID to call up an Individual Cow or Calf Summary.

PRINTING FIELD FORMS

THE PRINTER ICON BUTTON.

When you finish selecting the animals that you want included on your printed form, click the Printer Icon button and you will see a copy of the field form on your screen. If you want to give a field form a specific title, click the Title […] button and Cow Sense will provide a window in which you can enter a title for your form.

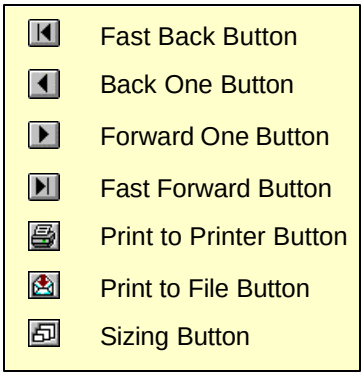


FIGURE 4-46. THE PRINT LAYOUT FUNCTION BUTTONS. USE THESE BUTTONS TO MANIPULATE AND PRINT YOUR DATABASE OR REPORT.

You can scroll through pages of the on-screen field form using the Fast Back, Back One, Forward One and Fast Forward buttons. To send the printout to your printer, click the Print-to-Printer button. To send the printout to a file (to use in a database or spreadsheet), click the Print-to-File button. To enlarge or reduce the viewing size of the form on your screen, click the Size button. See Figure 4-46.

CUSTOMIZING FIELD FORMS

To customize field forms, use the Custom options for cows, bulls, calves and breeding in the Reports menu. Use the Show Grid option in the print preview to create lines on which to record information in the field. See Chapter 5 for more information on setting up and printing custom reports.

Cows

Cow Sense provides three different field forms for cows. They are Setup, Breeding and Preg Check.

Setup

Unlike the Breeding and Preg Check field forms, the Setup form doesn't have cow IDs listed. The Setup Form is designed for you to gather initial information for entering cow data into Cow Sense, so the form has blank fields for you to gather the specific information you want to start your herd. To use the Setup Field Form, click **Enter Data > Field Forms > Cows > Setup** from the main menu bar. Cow Sense will display the form ready for you to print. Print as many copies as you need to set up your herd (or photo-copy the form).

To print the form, select **Enter Data > Field Forms > Cows > Setup** from the main menu bar. Cow Sense will display a print-preview of the Setup field form. Click the Print-to-printer button to get a hard copy of the form to take to the chute.

Breeding

Use the Breeding field form to plan and record matings. This is an especially useful form for artificial insemination. On this form, Cow Sense preprints the Cow ID, Cow Age, Poll, Pelvis, MPPA, Cow's Sire, and Cow Group 1 (user-defined, see **Enter Data > Define Groups**). It provides blank spaces for you to fill in AI Sire, Cleanup Sire, AI Date, Bull IN Date and Bull OUT Date. You may opt to fill in sires before you artificially inseminate to help you remember which cows you want to inseminate with which bull semen, or you may chose to fill in all the breeding information as you inseminate each cow.

To print the form, select **Enter Data > Field Forms > Cows > Breeding** from the main menu bar. Cow Sense will display a columnar window of all the cows in the herd.

If you want to gather data on a certain group of cows, click the Select… button and Cow Sense will call up query criteria (refer to Chapter 5 for instructions on running queries).

Click the Printer icon button to view the field form on your screen and prepare for printing the form to your printer. If the form appears correct, click the Print-to-printer button to get a hard copy of the form to take to the chute.

Preg Check

Use the Preg Check field form to collect pregnancy status, and general cow condition at preg check time. You will record information regarding pregnancy status in the Calf History field of the Enter Calves [Calving] window. You can record the condition score, mouth and weight information in the Enter Cows window. Cow Sense preprints Cow ID, Bangs Tag, Cow Age and Remarks on this field. It leaves blanks for you to record Pregnancy Status, Condition Score, Mouth and Weight.

To print the form, select **Enter Data > Field Forms > Cows > Preg Check** from main menu bar. Cow Sense will display a columnar window of all the cows in the herd.

If you want to gather data on a certain group of cows, click the Select… button and Cow Sense will call up query criteria (refer to Chapter 5 for instructions on running queries).

Click the Printer icon button to view the field form on your screen and prepare for printing. If the form appears correct, click the Print-to-printer button to get a hard copy of the form to take to the chute.

CALVES

Cow Sense provides three different field forms for calves. They are Calving (all modes) Weaning and Yearling (EZ-75, Commercial and Pure-bred modes). Each of these forms have preprinted ID numbers that follow the order of the cow or calf ID numbers in your Cow Sense database.

Calving

On this form, Cow Sense preprints the Cow ID field. It provides blank spaces for you to fill in the Calf ID, Calf history, Birth Date, Calving Ease, Birth Weight, Sire ID, Calf Group, Sex, Poll, and Remarks.

To print the form, select **Enter Data > Field Forms > Calves > Calving** from the main menu bar. Cow Sense will display a columnar window of all the cows in the herd.

If you want to gather data on a certain group of animals, click the Select… button and Cow Sense will call up query criteria (refer to Chapter 5 for instructions on running queries).

Click the Printer icon button to view the field form on your screen and prepare for printing the form to your printer. If the form appears correct, click the Print-to-printer button to get a hard copy of the form to take to the calving pasture or pen.

Weaning

On this form, Cow Sense preprints the Calf ID, Sex, Poll, Calf Group and Remarks fields. It provides blank spaces for you to fill in the Weaning Weight, Weight Date, Hip Height and Creep Feed.

To print the form, select **Enter Data > Field forms > Calves > Weaning** from the main menu bar. Cow Sense will display a columnar window of all the calves in the herd.

If you want to gather data on a certain group of animals, click the Select… button and Cow Sense will call up query criteria (refer to Chapter 5 for instructions on running queries).

Click the Printer icon button to view the field form on your screen and prepare for printing the form to your printer. If the form appears correct, click the Print-to-printer button to get a hard copy of the form to take to the field.

Yearling

On this form, Cow Sense preprints the Calf ID, Sex, Poll, and Remarks fields. It provides blank spaces for you to fill in the Yearling Weight, Weight Date, Pelvis measurements, Scrotum size and Yearling Group.

To print the form, select **Enter Data > Field Forms > Calves > Yearling** from the main menu bar. Cow Sense will display a columnar window of all the calves in the herd.

If you want to gather data on a certain group of animals, click the Select… button and Cow Sense will call up query criteria (refer to Chapter 5 for instructions on running queries).

Click the Printer icon button to view the field form on your screen and prepare for printing the form to your printer. If the form appears correct, click the Print-to-printer button to get a hard copy of the form to take to the field.

Chapter 5: The Reports Menu

Reports are at the heart of Cow Sense, which offers both a set of standard reports that are quick and powerful, as well as a dynamic report generator that allows you to create custom reports.

Shared among all the reports are a set of report tools that give you the ability to select subsets of animal records for analysis and management decisions. Cow Sense makes several computations for you, which gives you immediate averages and counts for animals that you have selected for the report. This information is valuable not only for ranking individuals within your own herd, but also for comparing subsets of your herd that relate to management practices. This is the ultimate benefit of Cow Sense: tools that give you information to make informed management decisions that improve your ranch practices and increase profits.

TIP: TAKE TIME TO MASTER THE REPORT TOOL BAR FUNCTIONS TO UNLEASH THE REPORTING POWER OF COW SENSE AT YOUR FINGERTIPS.

In order to increase your reporting power, give special notice to the Match function in the Report menu. This function lets you use selection criteria from one set of records to select animal files in a different set of records. For instance, you can use the Match function to select calves based on cow or bull performance; or you can use the Match function to select breeding stock based on past calf feedlot or carcass performance.

SAMPLE PDF REPORTS

Look on your installation CD for PDF sample reports from the Cow Sense sample herd that you can view on-screen or print.

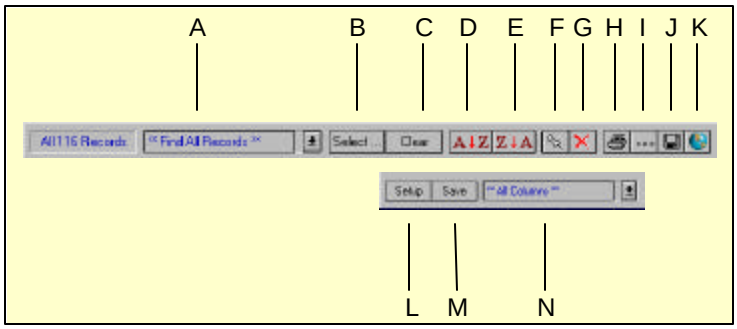
REPORT TOOLS

The Report tool bar is standard on all Cow Sense report windows; you'll also find it on various windows within the Enter Data menu such as the Tabular Calf Entry window and most of the Field Forms windows. Mastering the functions within this tool bar will unleash the reporting power of Cow Sense at your fingertips.

FIGURE 5-1. THE REPORTS TOOL BAR.

NOTE: YOU CAN OPEN SEVERAL REPORT WINDOWS AT ONCE IN COW SENSE, WHICH ALLOWS YOU TO COMPARE SUBSETS OF ANIMALS AGAINST ONE ANOTHER AND AGAINST THE ENTIRE HERD.

Using the report tool bar (A-K) and custom report tool bar (L-N)



A. Use the Hot button on this Saved Selection box to select a previously created and saved query.
B. This button takes you to the query window.
C. Use this button to clear a created search.
D. Use this button to sort records in ascending alphabetic or numeric order.
E. Use this button to sort records in descending alphabetic or numeric order.
F. Use this button to mark all records with a "Yes" in order to conduct a query or export records for sales or other analysis.
G. Use this button to mark all records with a "No" in order not to conduct a query, or to export records for sales or other analysis.
H. Use this button to open the print preview window.
I. Use this button to type a header for the printed report.
J. Use this button to export a Cow Sense report to a tab-delimited file to use in a word processor, spreadsheet or database.
K. Use this button to make global edits in specific fields in several animal records at once.
L. Use the Setup button to select specific fields you want in a **Custom** form layout.
M. Use the Save button to save a **Custom** layout you design. Cow Sense will add the layout to the Layout List (see N)
N. Use the Hot button on the right of this Layout List to retrieve previously-saved **Custom** form layouts. Also use this tool to select Midwest MicroSystems-designed layouts from the <Open Library>.

USING THE SAVED SELECTION BOX: QUERY LIBRARY

Cow Sense comes with a library of sample queries to aid you in learning to build your own. Queries are questions you pose to the database in order to generate a subset of your herd. You can load these samples into your own herd and use them, or modify them to your needs. To retrieve the query library, click the Hot button on the Saved Selection box (item A in Figure 5-1) in any report window, or the Layout List box (item N in Figure 5-1) in any Custom Report window. Select the **<Open Library>** option. A Query Library For ... window will appear (see Figure 5-2).

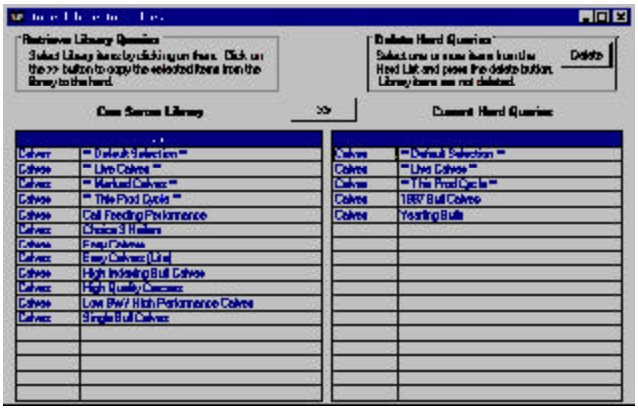


FIGURE 5-2.
THE QUERY LIBRARY WINDOW.

Copying Library Queries to the Current Herd

The available library for queries will depend on whether you have a cow, bull, calf, breeding or herd health report open. The process for acquiring a query from the library is the same for any of the reports. You access these queries by copying them to your current herd file. To do this, place your cursor over the query name you would like to transfer. The cursor will become a white check mark. Click your mouse to select a query. You can select more than one query at a time. A black highlight will mark selected queries. To deselect a query, click on it again with the check mark. After you have selected the query(ies) you wish to copy, click the double arrow button (>>) to transfer library queries to your herd file. Cow Sense will ask you if it is all right to copy. Click the Yes button to proceed.

Deleting Queries from your Herd File

Although you cannot delete queries from the Cow Sense library, you can delete unwanted queries from your herd file. If you want to delete unused queries from your herd file, in the Query Library window, select the query(ies) you want to delete with the white check mark cursor. A black highlight will mark the selected queries. To deselect a query, click on it again with the check mark. After you have selected the query(ies) to delete, click the Delete button in the Delete Herd Queries box in the upper right corner of the window. Cow Sense will ask you if you want to continue. Click the Yes button to proceed.

RETRIEVING SAVED QUERIES

To retrieve a saved query, click the Hot button in the Saved Selection box (item A in Figure 5-1). Cow Sense will display a drop-down list of saved

sample and user-defined queries for that herd. Make a selection and Cow Sense will filter records according to that query criteria. For more information on creating and saving queries, see the next section on Using Selecting and Sorting Tools.

USING THE SELECTING AND SORTING TOOLS

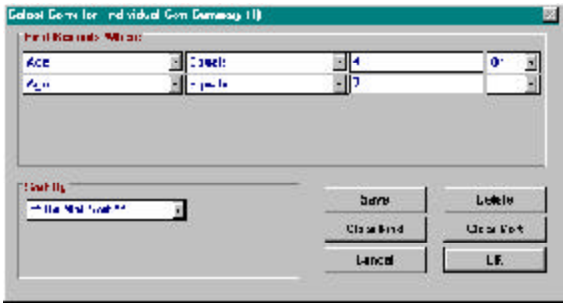


FIGURE 5-3. THE SELECT ... FOR... WINDOW

If you want to access data on only a certain group of animals, click the Select… button (item B in Figure 5-1) in any Cow Sense report window and Cow Sense will display a Select…for: window (see Figure 5-3) for selecting (querying) animals and sorting them in a list.

Find Records Where

To select a specific group of animals for a report, click the Hot button in the Field Name box and select a field on which to conduct a search from the drop-down list (for example, MPPA). Cow Sense will then display boxes to enter a relational operator (such as “Begins With”, or “Equal”, or “Contains”), a definition (such as the numeral “100”), and a logical operator (“and” or “or”). Cow Sense lets you chose up to five total search criteria using the logical operators.

Click the Clear Find button to reset query format.

Click the Save button to name and save the query format. To retrieve a format that you’ve saved, click the Hot button on the right side of the Saved Selection box (item A in Figure 5-1) in the Report window and choose from the list of saved formats. (To return to all records--clearing the selection format-- click Clear button (item C in Figure 5-1).

Sort By

You may organize your data using up to three sorting options in either ascending or descending order. Once again, use the Hot button to select the first sort field. Then select a sort direction (ascending or descending). Your first selection opens the next sort option and so on.

After you define your query criteria (for example, Cow ID) press the OK button to begin selecting animal records for which you want to gather

information. After the Select window closes, the report will display the animal records you've defined in the order you've specified. The header boxes will list the total number of records selected and the name of the selection criteria (if you used the Save button in the Select ... for .... window). The header in the report window will also recalculate and display summary values.

Click the Clear Sort button to reset sorting options.

USING THE ASCENDING AND DESCENDING BUTTONS

To quickly order records in ascending or descending order, use the Ascending and Descending sort buttons (items D and E respectively in Figure 5-1). Before using these buttons, you'll have to specify which field it is that you want to order. For example, if you wish to order records by Age--oldest to youngest, click on the Age field, and then click the Descending button (item E in Figure 5-1).

CHOOSING INDIVIDUAL RECORDS: THE MARKING TOOL

You may encounter an occasion when none of the fields in a database contains the information you need to establish a query. For example, say a buyer drives through a herd of cows and chooses individuals with no common identifier. In that case, you can use the Marking tools in a Report window (items F and G in Figure 5-1) in conjunction with the Marked? field in order to establish your own query set.

The default for the Marked? field is "No". You can mark all selected records in a report with a "Yes" using the push pin on the toolbar (item F in Figure 5-1) or mark all selected records with a "No" (basically "unmark" them) using the red X on the toolbar (item G in Figure 5-1). If you want to view or print a listing of animals using the Marked? function, in a Listing, Individual Summary or Custom Report, just unmark all records (item G in Figure 5-1) to clear any previous settings; then scroll through the list and select the record you want and click inside the Marked? field to turn the "No" to "Yes". If you want to change a record from "Yes" to "No", just click inside the Marked? field of that record again.

TIP: IF YOU'RE USING THE MARKED? FUNCTION, YOU CAN BEGIN WITH A LARGER SET THAT IS IDENTIFIABLE WITH A QUERY (FOR EXAMPLE, YOU CAN SELECT ALL TWO-YEAR-OLDS), MARK ALL THOSE RECORDS WITH A "YES" AND THEN SORT OFF INDIVIDUALS BY CLICKING "NO" IN THE MARKED? FIELD.

PRINTING REPORTS

If you want a printout of any report, click the Printer icon button (item H in Figure 5-1) and Cow Sense will display a print-preview of the report.

Standard Cow Sense Reports

Once you have opened the print-preview, you can scroll through pages of the printout using the Fast Back, Back One, Forward One and Fast Forward buttons. To send the printout to your printer, click the Print-to-Printer button. To send the printout to a file (to use in a database or spreadsheet), click the Print-to-File (Export) button. To enlarge or reduce the viewing size of the form on your screen, click the Sizing button. See Figure 5-4.

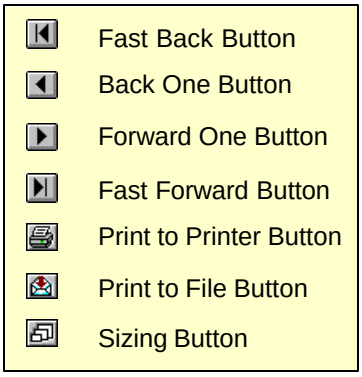
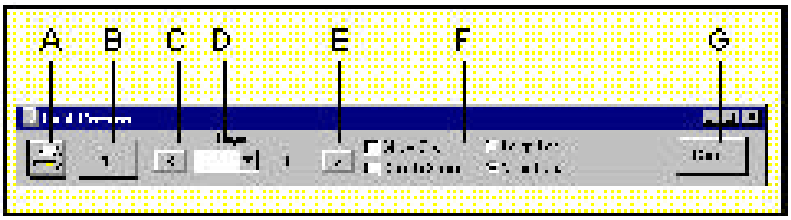


FIGURE 5-4. THE PRINT LAYOUT FUNCTION BUTTONS. USE THESE BUTTONS TO MANIPULATE AND PRINT YOUR DATABASE OR REPORT.

Printing Custom Reports



A. Print to Printer Button. Clicking this button send the custom report to the printer. After the report prints, it automatically closes.
B. Export Button. Clicking this button opens up an export box for exporting the custom report to a tab-delimited text file. After the report exports, it automatically closes.
C. Advance Back Button. Clicking this button advances you back in the custom report one page at a time.
D. Page Window. Clicking the Hot button on this window allows you to select and open a specific page in the custom report.
E. Advance Forward Button. Clicking this button advances you forward in the custom report one page at a time.
F. Format Check Boxes.
   - Clicking on the Show Grid box puts horizontal and vertical lines around the data fields in the custom report. This is especially useful for creating custom field forms (see Chapter 4).
   - Clicking on the Double Space box gives each row in your report two spaces rather than one.
   - Clicking on the Large Font box sets the size of the custom report text to approximately 11 point. Advantage: easy to read, especially if you take the report out in the field. Disadvantage: may make the report span more pages.
   - Clicking on the Small Font box sets the size of the custom report text to approximately 9 point. Advantage: more information fits on fewer pages. Disadvantage: smaller font size makes text harder to read.
G. Cancel. Clicking this button closes the print preview.

FIGURE 5-5. THE PRINT LAYOUT FUNCTION BUTTONS FOR CUSTOM REPORTS. USE THESE BUTTONS TO MANIPULATE AND PRINT YOUR REPORT OR FIELD FORM.

NOTE: ONLY A CERTAIN NUMBER OF COLUMNS WILL FIT ON A PRINTED REPORT, WHICH IS DICTATED BY THE PRINTER AND THE SIZE OF PAPTER YOU ARE USING. IF YOU USE A PRINTER THAT ONLY PRINTS STANDARD 8 ½ BY 11 LETTER, OR 8½ BY 14 LEGAL PAPER, YOU CAN GET MORE COLUMNS ON A REPORT BY PRINTING IN LANDSCAPE FORMAT. SEE THE PRINTER SETUP SECTION IN CHAPTER 3 FOR MORE INFORMATION.

Once you have opened the print-preview, you can scroll through pages of the printout using the advance buttons and the Page window. To send the printout to your printer, click the Print-to-Printer button. To send the printout to a text file (to use in a word processor, database or spreadsheet), click the Save-To-Export button. You do not have to go through print preview to export files. See the following explanation in the Save-To-Export Button section of this chapter. To change the format, select from the Format Check Boxes options. See Figure 5-5.

IDENTIFYING REPORTS

If you want to give a printed report a title or identifier, click the Add Note button (item I in figure 5-1). Cow Sense will display an Add Notes box (see Figure 5-6) in which you can type a description for the report printout. Click the Save button to imprint the identifier on the printout. Cow Sense adds this notation as a subhead on the report. Click the Clear button to clear the title. Click the Cancel button to abort.

FIGURE 5-6.
THE ADD NOTES BOX.

TIP: IF YOU ADD A SUBHEAD TO A REPORT LAYOUT THAT YOU'VE SAVED, AND YOU DO NOT WANT THAT TITLE ON SUBSEQUENT REPORTS, FIRST PRINT THE REPORT, AND THEN CLICK THE ADD NOTE BUTTON AGAIN TO CALL UP THE ADD NOTE BOX AND REMOVE THE IDENTIFIER.

SAVE-TO-EXPORT BUTTON

Use the Save-to-Export button (item J in Figure 5-1) to export Cow Sense Report data to a tab delimited text file (with a .txt extension) for importing into spreadsheet, word processing or database programs. When you click this button, Cow Sense will display a Export warning box. Click the Yes button to continue. Cow Sense will then display a Save File As window where you can choose a directory folder path and file name for your exported data file. The default path for saving exported Cow Sense data is c:\cowsense\export. Use standard Windows protocol to change directory paths if you want to save the file to a different folder. Type in a file name and click the OK button. Cow Sense will display a box asking if you want to keep the Cow Sense field headings. Click the Yes button if you do and the No button if you don't. Cow Sense will then display a message telling you whether or not your export was successful. Click the OK button.

To retrieve an exported file use Windows Explorer, or the File > Open command inside the program in which you wish you use the exported data. If you used the Cow Sense default folder for finding the exported file(s), you will find your tab delimited text file in the c:\cowsense\export folder; it will have a .txt extension.

GLOBAL EDIT BUTTON

Use the Global Edit button (item K in Figure 5-1) to enter or edit the same data values on several records. Before you use the Global Edit feature, be sure to select the group of animal records you want to globally update by using the Select Button protocol (see the previous section in this chapter on Using Selecting and Sorting Tools).

To use the Global Edit feature, click the Global Edit button. Cow Sense will display a Global Edit window. Select the field you want to change by clicking on the Hot button in the Select Field for Changing box. Next use the radio buttons in the lower left box to define what values you want to change. You can choose either to Change All Values or Only a Specific Value. Finally, use the radio buttons in the lower right box to Replace the existing value (if any) or Append to the existing value. If you don't have a value to replace or append, it doesn't matter which option you choose.

For example, say you have defined Cow Group 2 (Enter Data > Define Groups) as "Pasture", and you want to change the pasture designation for a group of cows from "Smith West" to "West Hill". First open the Custom Cow report and click the Global Edit button. Click the Select Field for Changing Hot button and choose Pasture from the drop-down list. Next, in the Change box, select the Only Specific Value radio button to activate the Hot button in the Value field below; click on the Hot button and select Smith West from the drop-down list (you defined these pastures in Enter Data > Define Groups >> Cow). Now, because you are in a field with specific values, Cow Sense will have the Append to Existing Entry radio button deactivated in the Replace box. Click the Hot button in the field below the Replace/Append radio buttons, and select West Hill from the drop-down list. Now click the Apply Change button. Cow Sense will display a warning box showing you how many records you will be changing and giving you an option to proceed. Click the Yes button to proceed. Cow Sense will display a box telling you how many records were affected. Click the OK button.

COWS

Cow Sense provides powerful reporting capabilities for you to assess the performance of your cow herd. You can evaluate individual performance or compare the performance of different female groups.

INDIVIDUAL SUMMARY

The Individual Cow Summary report provides a complete history for one cow, including cumulative performance measures, editable remarks, and

access to all a cow's progeny, her pedigree and EPDs (Purebred mode only), and her own calf record if you had previously developed a Cow Sense calf record for her.

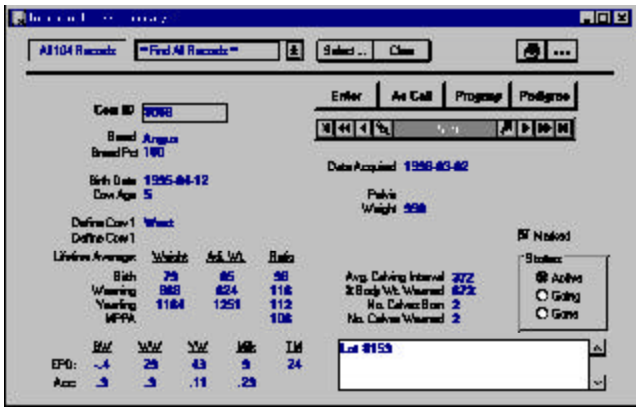


FIGURE 5-7. THE INDIVIDUAL COW SUMMARY REPORT WINDOW.

To access the Individual Cow Summary report, select **Reports > Cows > Individual Summary** from the main menu bar. Cow Sense will display the first cow record in your herd (see Figure 5-7). To select a different record, use the navigation tool bar or type another ID in the Cow ID field.

To print the Individual Cow Summary, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

Accessing Other Windows from the Individual Cow Summary

You can use the Enter, As Calf, Progeny and Pedigree buttons in the Individual Cow Summary window to open other windows related to a cow's record.

Enter

If you click the Enter button in the Individual Cow Summary window, you can pull up an Enter Individual Cow window [##] in which you can edit the cow's record. Use the Save button in the Enter Individual Cow window to save changes to an animal's record. Use the Close button in the Enter Individual Cow window to close the Enter Individual Cow window and return to the open Individual Cow Summary window.

As Calf

If you had entered a calf record for a cow, and that record resides in the open herd (**File > Open Herd**), you can open the cow's calf record by clicking the As Calf button in the Individual Cow Summary window.

To print the Individual (as) Calf Summary: Cow report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

Progeny

To access a complete history of the cow's offspring, click the Progeny button and Cow Sense will display a Lifetime Production for Cow ID: ## report. This listing provides information for all the calves a cow has produced, including each calf's birth date, sex, sire ID, calving ease score, history (for example, 1 = "live calf"), weights and weight ratios. Also, you can click the Hot button on any animal's calf ID field and Cow Sense will pull up that calf's Individual Summary report. To return to the Individual Cow Summary from the Progeny report, click the Cow Summary button.

Pedigree

To view the cow's pedigree. Purebred mode only) click the Pedigree button in the Individual Cow Summary window. Close this window b y clicking the X in the upper right corner of the window.

COW LISTING

The Cow: Listing report (see Figure 5-8) catalogues each cow in the herd (or all you've selected using query features) and lists her bangs tag, age, origin, breed, and remarks. It also allows you to "mark" a record or records to define a query and it displays the average age of all cows in the herd or query.

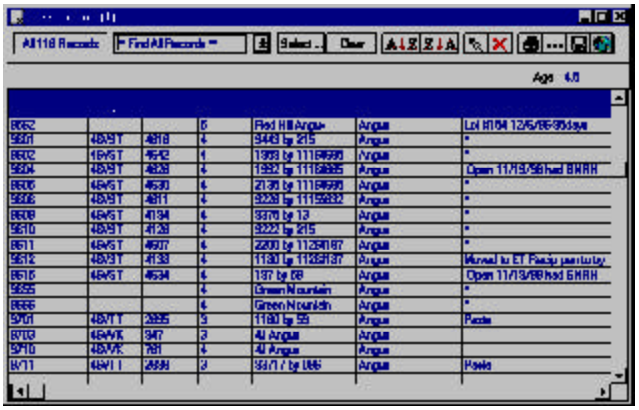


FIGURE 5-8. THE COW LISTING REPORT WINDOW.

To access the Cow: Listing report, select **Reports > Cows > Cow Listing** from the main menu bar. Cow Sense will display all cows in the herd. You can select a certain group of cows (for example, cows within a certain age group) using the query features available when you click the Select button.

If you want to see an Individual Cow Summary for any cow in the list, click on that individual's Cow ID and then click the Hot button to the right of the ID. Cow Sense will take you to that cow's Individual Cow Summary unless you have **Window > Data Entry Mode** selected (see

TIP: YOU CAN ACCESS A DATA ENTRY WINDOW FOR ANY ANIMAL IN ANY COW REPORT (EXCEPT INDIVIDUAL SUMMARY) BY FIRST SELECTING **WINDOW > DATA ENTRY MODE** FROM THE MAIN MENU BAR, AND THEN CLICKING THE HOT BUTTON IN THE ANIMAL ID FIELD. SEE DATA ENTRY MODE IN CHAPTER 9 FOR MORE INFORMATION.

Chapter 9). To print the Cow: Listing report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

COW CONDITION

The Cow: Condition report (see Figure 5-9) lists the age, status, body condition, mouth, weight, pelvic area and remarks of each cow in the herd (or all you've selected using query features).

To access the Cow: Condition report, click **Reports > Cows > Cow Condition** from the main menu bar. Cow Sense will display all cows in the herd. You can select a certain group of cows (for example, cows within a certain age group) using the query features available when you click the Select button.

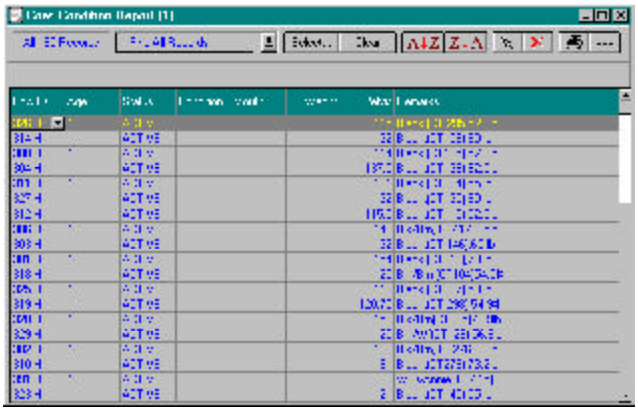


FIGURE 5-9. THE COW CONDITION REPORT WINDOW.

If you want to see an Individual Cow Summary for any cow in the list, click on that individual's Cow ID and then click the Hot button to the right of the ID. Cow Sense will take you to that cow's Individual Cow Summary unless you have **Window > Data Entry Mode** selected (see Chapter 9). To print the Cow: Condition report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

CALVING

The Cow: Calving report (see Figure 5-10) lists the age and location, number of calves born, average birth weight, adjusted birth weight and birth weight ratio of offspring, average calving interval and remarks of each cow in a herd or query. It also lists a herd average for birth weight, adjusted birth weight, birth weight ratio, calving interval, age, and number of calves born for all the cows in the query. (Weight information is not available in the Lite mode).

To access the Cow: Calving report, select **Reports > Cows > Calving** from the main menu bar. Cow Sense will display all cows in the herd.

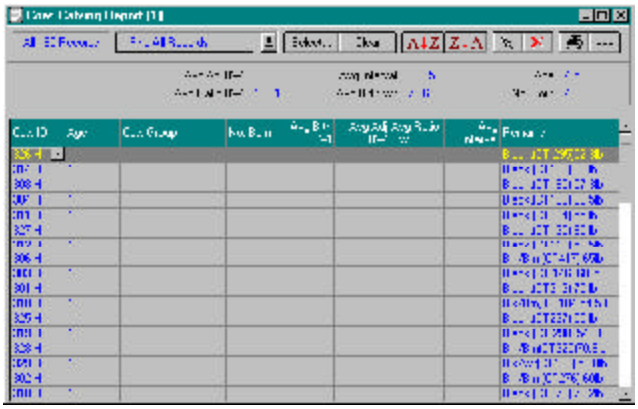


FIGURE 5-10.
THE COW: CALVING REPORT WINDOW.

You can select a certain group of cows (for example, cows within a certain age group) using the query features available when you click the Select button.

If you want to see an Individual Cow Summary for any cow in the list, click on that individual's Cow ID and then click the Hot button to the right of the ID. Cow Sense will take you to that cow's Individual Cow Summary unless you have **Window > Data Entry Mode** selected (see Chapter 9). To print the Cow: Listing, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

WEANING

In EZ-75, Commercial and Purebred modes, the Cow: Weaning report (see Figure 5-11) lists the age and location, number of calves weaned, average weaning weight, adjusted weaning weight and weaning weight ratio of offspring, cow MPPA and remarks of each cow in a herd or query. It also lists a herd average for weaning weight, adjusted weaning weight, weaning weight ratio, cow MPPA, age, and number of calves weaned for all the cows in the query.

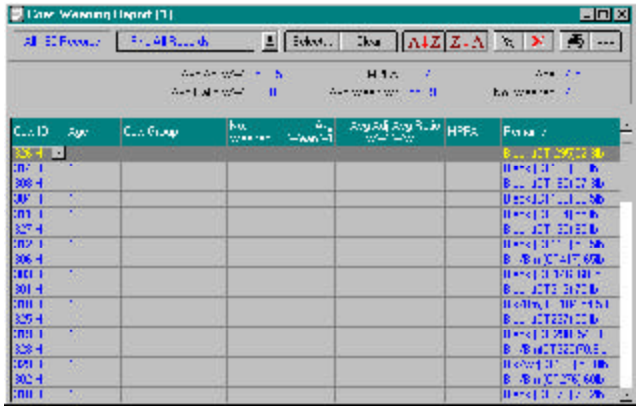


FIGURE 5-11.
THE COW: WEANING REPORT WINDOW.

To access the Cow: Weaning report, select **Reports > Cows > Weaning** from the main menu bar. Cow Sense will display all cows in the

herd. You can select a certain group of cows (for example, cows within a certain age group) using the query features available when you click the Select button.

If you want to see an Individual Cow Summary for any cow in the list, click on that individual's Cow ID and then click the Hot button to the right of the ID. Cow Sense will take you to that cow's Individual Cow Summary unless you have **Window > Data Entry Mode** selected (see Chapter 9). To print the Cow: Weaning report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

YEARLING

In EZ-75, Commercial and Purebred modes, the Cow: Yearling report (see Figure 5-12) lists the age, cow group 1 (user-defined), average yearling weight, adjusted yearling weight and yearling weight ratio of offspring, and the number of yearlings per cow of each cow in a herd or query. It also lists a herd average for yearling weight, adjusted yearling weight, yearling weight ratio, age, and number of yearling calves per cow for all the cows in the query.

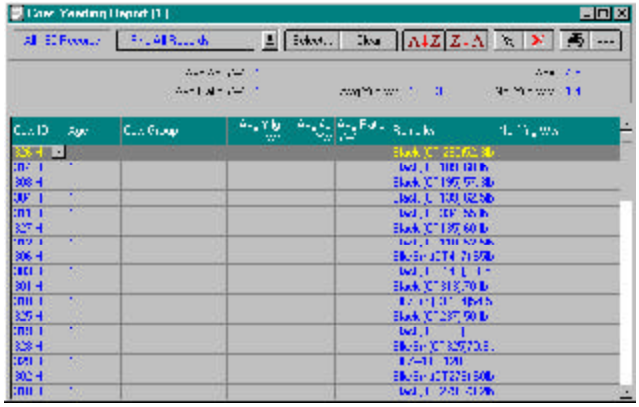


FIGURE 5-12. THE COW: YEARLING REPORT WINDOW

To access the Cow: Yearling report, select **Reports > Cows > Yearling** from the main menu bar. Cow Sense will display all cows in the herd. You can select a certain group of cows (for example, cows within a certain age group) using the query features available when you click the Select button.

If you want to see an Individual Cow Summary for any cow in the list, click on that individual's Cow ID and then click the Hot button to the right of the ID. Cow Sense will take you to that cow's Individual Cow Summary unless you have **Window > Data Entry Mode** selected (see Chapter 9). To print the Cow: Yearling report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

PERFORMANCE

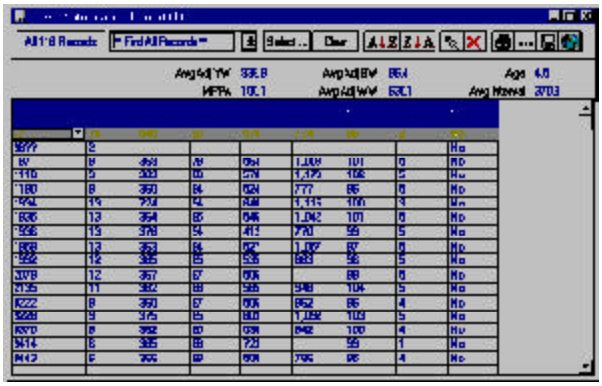


FIGURE 5-13.
THE COW: PERFORMANCE REPORT WINDOW.

In EZ-75, Commercial and Purebred modes, the Cow: Performance report (see Figure 5-13) catalogues each cow in the herd (or all you've selected using query features) and lists her age, the average breeding interval, the average adjusted calf birth weaning and yearling weights, the cow MPPA, and the number of calves born to each cow.

To access the Cow: Performance report, select **Reports > Cows > Performance** from the main menu bar. Cow Sense will display all cows in the herd. You can select a certain group of cows (for example, cows within a certain age group) using the query features available when you click the Select button.

If you want to see an Individual Cow Summary for any cow in the list, click on that cow's Cow ID and then click the Hot button to the right of the ID. Cow Sense will take you to that cow's Individual Cow Summary unless you have **Window > Data Entry Mode** selected (see Chapter 9). To print the Cow: Performance report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

EPD (PUREBRED MODE ONLY)

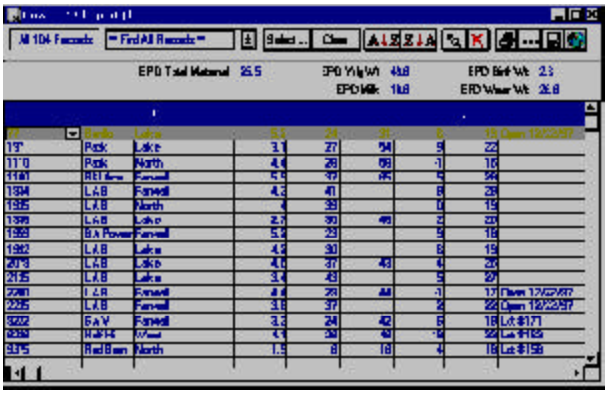


FIGURE 5-14.
THE COW: EPD REPORT WINDOW.

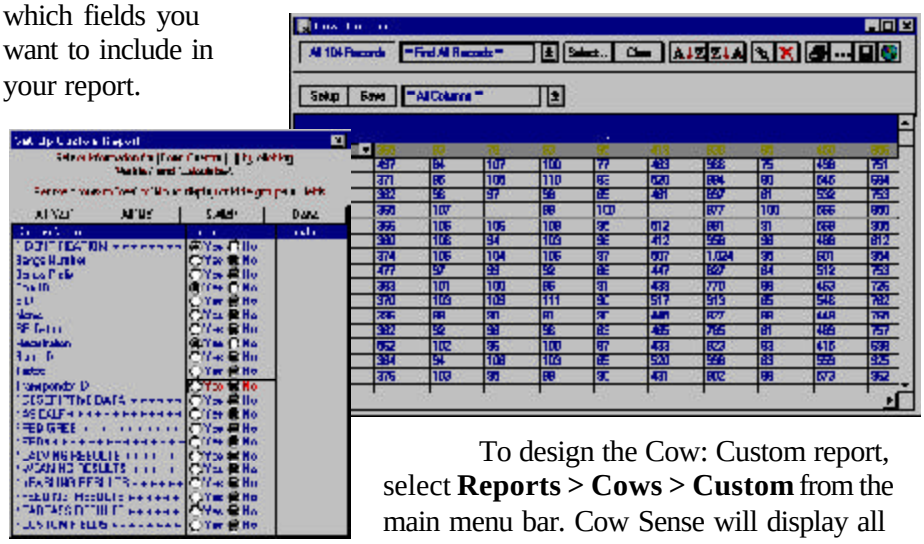
The Cow: EPD report (see Figure 5-14) lists cow group 1 (user-defined), poll status and remarks of each cow in a herd or query as well as each cow's total maternal, yearling weight, birth weight, milk and weaning weight EPDs.

To access the Cow: EPD report, select **Reports > Cows > EPD** from the main menu bar. Cow Sense will display all cows in the herd. You can select a certain group of cows (for example, cows within a certain age group) using the query features available when you click the Select button.

If you want to see an Individual Cow Summary for any cow in the list, click on that individual's Cow ID and then click the Hot button to the right of the ID. Cow Sense will take you to that cow's Individual Cow Summary unless you have **Window > Data Entry Mode** selected (see Chapter 9). To print the Cow: EPD report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

CUSTOM

The Cow: Custom report, available in the Lite, Commercial and Purebred modes, starts with every available cow data field in Cow Sense. You then decide which fields you want to include in your report.



FIGURES 5-15 AND 5-16. THE COW: CUSTOM REPORT WINDOW AND THE SET UP CUSTOM REPORT WINDOW.

To design the Cow: Custom report, select **Reports > Cows > Custom** from the main menu bar. Cow Sense will display all cow records in the herd and all the data fields available (see Figure 5-15). Click the Setup button to access the Setup Custom Report window (see Figure 5-16) in order to select which fields you want in your report.

TIP: YOU CAN NAVIGATE THROUGH THE SET UP CUSTOM REPORT LISTINGS USING THE ARROW UP AND ARROW DOWN KEYS ON YOUR KEYBOARD.

In the Setup Custom Report window field names are subcategorized under the major field categories of IDENTIFICATION, DESCRIPTIVE DATA, AS CALF, PEDIGREE, EPDS, CALVING RESULTS, WEANING RESULTS, YEARLING RESULTS, FEEDING RESULTS, CARCASS RESULTS, AND CUSTOM FIELDS. To view/select specific fields under these major categories, first open the category by

clicking the YES radio button (or pressing "Y" on your keyboard) of the major field category (for example, IDENTIFICATION). To select fields to include in your custom report, click the YES radio button on that field listing, or press "Y" on your keyboard (you can navigate up or down through the field listings by using the arrow up or down keys on the keyboard). If a field is turned on with a Yes radio button and you do not want it included, click the NO radio button or press "N" on your keyboard. If you only want a few columns in your report, click the All 'No' button and then click the YES button for the fields you want. If you want most of the available columns, click the All 'Yes' button and then click the NO button to select the columns you don't want. If you decide to reverse your selection, click the Switch button. When you're finished making your selection, click the Done button and Cow Sense will display your Cow: Custom window. If you want to save a custom report, click the Save button in the Cow: Custom Report window. Cow Sense will display a Name Custom Report box (see Figure 5-17). Enter the name of the custom report and click the OK button. To retrieve a custom report that you saved previously, click the Hot button on the Saved Selections box (item A in Figure 5-1) and Cow Sense will display a drop-down list of all the saved custom reports. Scroll through the list to find the report you want.

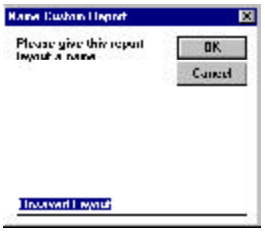


FIGURE 5-17.
THE NAME CUSTOM REPORT BOX.

NOTE: THE NUMBER OF COLUMNS THAT WILL PRINT ON A CUSTOM REPORT IS DICTATED BY THE PRINTER AND THE SIZE OF PAPTER YOU ARE USING. IF YOU USE A PRINTER THAT ONLY PRINTS STANDARD 8 ½ BY 11 LETTER, OR 8½ BY 14 LEGAL PAPER, YOU CAN GET MORE COLUMNS ON A REPORT BY PRINTING IN LANDSCAPE FORMAT. SEE THE PRINTER SETUP SECTION IN CHAPTER 3 FOR MORE INFORMATION.

As with the other reports, you can select a certain group of cows (for example, cows within a certain age group) using the query features available when you click the Select button.

To arrange columns in a different order, place your cursor over the title of the column (for example, Cow ID). Hold down the left mouse button. The cursor will change from the standard Windows arrow to a two-pronged arrow, and the entire column will highlight. Drag the two-pronged arrow cursor right or left to move the column to the desired location. You will see the column move as you drag it. Release the left mouse button to lock in the column's new location. Cow Sense will preserve the column order you specify when you save your custom report.

If you want to see an Individual Cow Summary for any cow in the list, click on that cow's Cow ID and then click the Hot button to the right of the ID. Cow Sense will take you to that cow's Individual Cow Summary unless you have **Window > Data Entry Mode** selected (see Chapter 9). To print the Cow: Custom report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

BULLS

Cow Sense provides powerful reporting capabilities for you to assess the performance of your bulls. You can evaluate individual performance or compare the performance of bulls against others in your herd.

INDIVIDUAL SUMMARY

The Individual Bull Summary report provides a complete history for one bull, including cumulative performance measures, editable remarks, and access to all a bull's progeny, his pedigree (Purebred mode only) and his calf record (if you previously created one for him in Cow Sense).

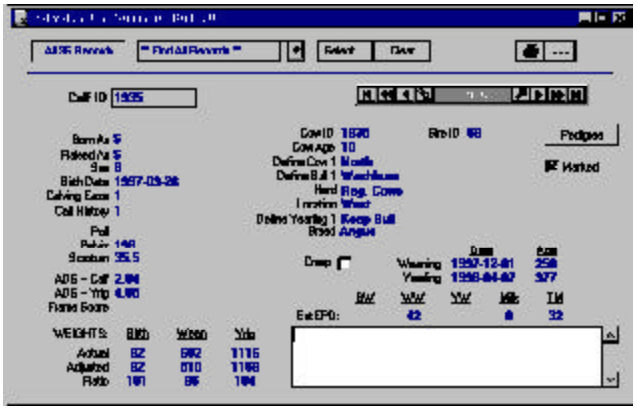


FIGURE 5-18. THE INDIVIDUAL BULL SUMMARY REPORT WINDOW.

To access the Individual Bull Summary report, select **Reports > Bulls > Individual Summary** from the main menu bar. Cow Sense will display the first bull record in your herd (see Figure 5-18). To select a different bull record, use the navigation tool bar or type a different ID in the Bull ID field. To print the Individual Bull Summary, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

Accessing Other Windows from the Individual Cow Summary

You can use the Enter, As Calf, Progeny and Pedigree buttons in the Individual Cow Summary window to open other windows related to a cow's record.

Enter

If you click the Enter button in the Individual Cow Summary window, you can pull up an Enter Individual Cow window [##] in which you can edit the cow's record. Use the Save button in the Enter Individual Cow window to save changes to an animal's record. Use the Close button in the

Enter Individual Cow window to close the Enter Individual Cow window and return to the open Individual Cow Summary window.

As Calf

If you had entered a calf record for a bull, and that record resides in the open herd (**File > Open Herd**), you can open the bull's calf record by clicking the As Calf button in the Individual Bull Summary window. To print the Individual (as) Calf Summary: Bull report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

Access a Progeny Report

To access a complete history of the bull's offspring, click the Progeny button and Cow Sense will display a Lifetime Production for Bull ID: ## report. This listing provides information for all the calves a bull has produced, including each calf's birth date, sex, dam ID, calving ease score, history (for example, 1 = "live calf"), weights and weight ratios. Also, you can click the Hot button on any animal's calf ID field and Cow Sense will pull up that calf's Individual Summary report. To return to the Individual Bull Summary from the Progeny report, click the Bull Summary button).

Pedigree Report

To view the bull's pedigree (Purebred mode only), click the Pedigree button. Close this window by clicking the X in the upper right corner of the window.

BULL LISTING

The Bull: Listing report catalogues each bull in the herd (or all you've selected using query features) and his age, origin, bull group 1 (user-defined. See **Enter Data > Define Groups**) and remarks. It also allows you to "mark" a record or records to define a query and it displays the average age of all bulls in the herd or query.

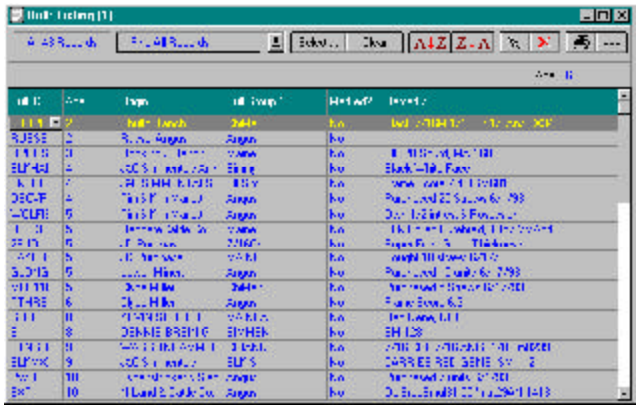


FIGURE 5-19.
THE BULL LISTING REPORT WINDOW.

To access the Bull: Listing report, select **Reports > Bulls > Bull Listing** from the main menu bar. Cow Sense will display all bulls in the herd (see Figure 5-19). You can select a certain group of bulls (for example, heifer bulls) using the query features available when you click the Select button.

If you want to see an Individual Bull Summary for any bull in the list, click on that individual's Bull ID and then click the Hot button to the right of the ID. Cow Sense will take you to that bull's Individual Bull Summary unless you have **Window > Data Entry Mode** selected (see Chapter 9). To print the Bull: Listing, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

TIP: YOU CAN ACCESS A DATA ENTRY WINDOW FOR ANY ANIMAL IN ANY BULL REPORT (EXCEPT INDIVIDUAL SUMMARY) BY FIRST SELECTING **WINDOW > DATA ENTRY MODE** FROM THE MAIN MENU BAR, AND THEN CLICKING THE HOT BUTTON IN THE ANIMAL ID FIELD. SEE DATA ENTRY MODE IN CHAPTER 9 FOR MORE INFORMATION.

CALVING

The Bull: Calving report (see Figure 5-20) lists the bull group 1 (user defined), number of calves born, average calving ease, birth weight, adjusted birth weight and birth weight ratio of each bull's offspring, and remarks of each bull in a herd or query. It also lists a herd average for birth weight, adjusted birth weight, birth weight ratio (weight information is not available in Lite mode), number of calves born and average calving ease for all the bulls in the query.

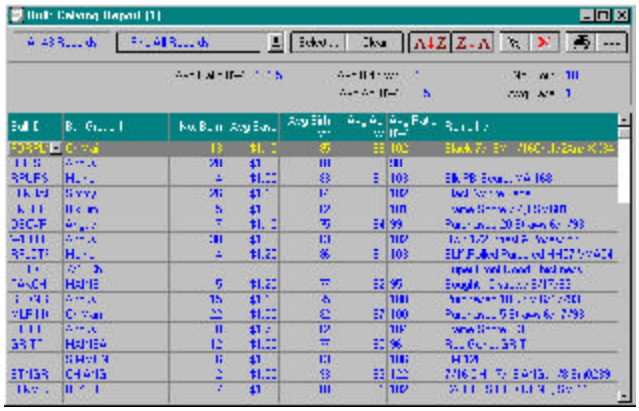


FIGURE 5-20. THE BULL CALVING REPORT WINDOW.

To access the Bull: Calving report, select **Reports > Bulls > Calving** from the main menu bar. Cow Sense will display all bulls in the herd. You can select a certain group of bulls (for example, heifer bulls) using the query features available when you click the Select button.

If you want to see an Individual Bull Summary for any bull in the list, click on that individual's Bull ID and then click the Hot button to the right of the ID. Cow Sense will take you to that bull's Individual Bull Summary unless you have **Window > Data Entry Mode** selected (see Chapter

9). To print the Bull: Calving report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

WEANING

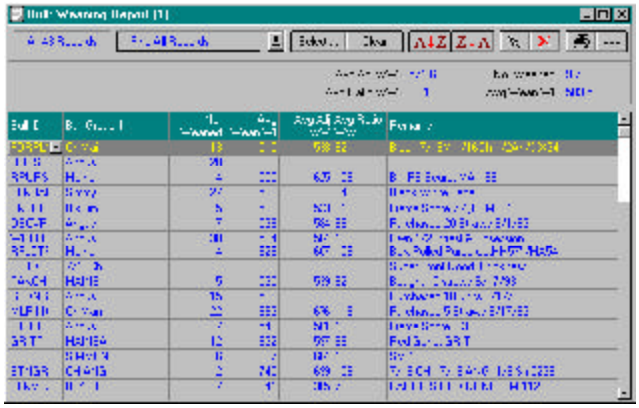


FIGURE 5-21. THE BULL WEANING REPORT WINDOW.

In EZ-75, Lite and Commercial modes, the Bull: Weaning report (see Figure 5-21) lists the bull group 1 (user defined. See **Enter Data > Define Groups**), number of calves weaned, average weaning weight, adjusted weaning weight and weaning weight ratio of each bull's offspring, and remarks of each bull in a herd or query. It also lists a herd average for weaning weight, adjusted weaning weight, weaning weight ratio, as well as the number of calves weaned for all the bulls in the query.

To access the Bull: Weaning report, select **Reports > Bulls > Weaning** from the main menu bar. Cow Sense will display all bulls in the herd. To access the Bull: Weaning report, click Reports from the drop-down menu. Click Bulls > Weaning. Cow Sense will display all bulls in the herd. You can select a certain group of bulls (for example, low birth weight bulls) using the query features available when you click the Select button.

If you want to see an Individual Bull Summary for any bull in the list, click on that individual's Bull ID and then click the Hot button to the right of the ID. Cow Sense will take you to that bull's Individual Bull Summary unless you have **Window > Data Entry Mode** selected (see Chapter 9). To print the Bull: Weaning report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

YEARLING

In EZ-75, Commercial and Purebred modes, the Bull: Yearling report (see Figure 5-22) lists the bull group 1 (user defined; see **Enter Data > Define Groups**), number of calves with yearling weights, average yearling

weight, adjusted yearling weight and yearling weight ratio of each bull's offspring, and remarks of each bull in a herd or query. It also lists a herd average for yearling weight, adjusted yearling weight, yearling weight ratio and number of yearling weights for all the bulls in the query.

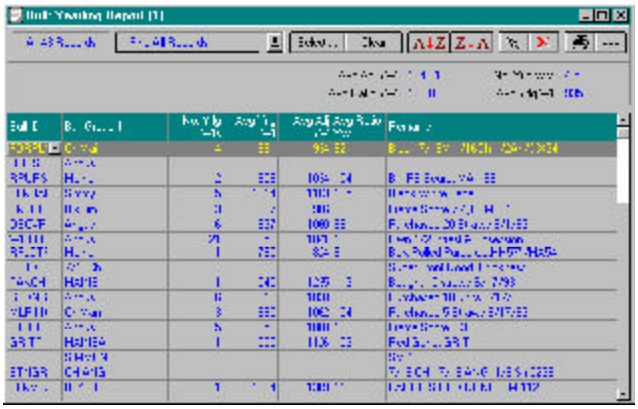


FIGURE 5-22. THE BULL YEARLING REPORT WINDOW.

To access the Bull: Yearling report, select **Reports > Bulls > Yearling** from the main menu bar. Cow Sense will display all bulls in the herd. You can select a certain group of bulls (for example, heifer bulls) using the query features available when you click the Select button.

If you want to see an Individual Bull Summary for any bull in the list, click on that individual's Bull ID and then click the Hot button to the right of the ID. Cow Sense will take you to that bull's Individual Bull Summary unless you have **Window > Data Entry Mode** selected (see Chapter 9). To print the Bull: Yearling report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

RATIO ANALYSIS

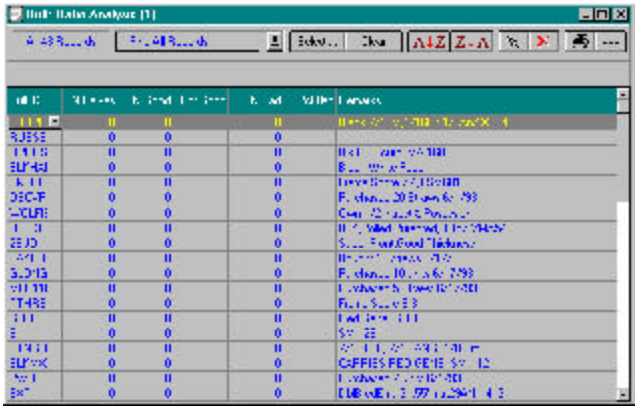


FIGURE 5-23. THE BULL RATIO ANALYSIS REPORT WINDOW.

The Bull: Ratio Analysis report (see Figure 5-23) summarizes the performance of each bull based on all the calves for which birth weight and weaning weight ratios are available. "Good" means that a calf's adjusted birth weight was *below*

the group average and its adjusted weaning weight was *above* the group average. “Bad” means that a calf’s adjusted birth weight was *above* the group average and its adjusted weaning weight was *below* the group average. This report lists the total number of calves for each bull and displays the number of “good” calves, the percent of “good” calves, the number of “bad” calves and the percent of “bad” calves for each bull. It also lists any remarks.

To access the Bull: Ratio Analysis report, select **Reports > Bulls > Ratio Analysis** from the main menu bar. Cow Sense will display all bulls in the herd. You can select a certain group of bulls (for example, low birth weight bulls) using the query features available when you click the Select button.

If you want to see an Individual Bull Summary for any bull in the list, click on that individual’s Bull ID and then click the Hot button to the right of the ID. Cow Sense will take you to that bull’s Individual Bull Summary unless you have **Window > Data Entry Mode** selected (see Chapter 9). To print the Bull: Ratio Analysis report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

COMBINED RATIOS

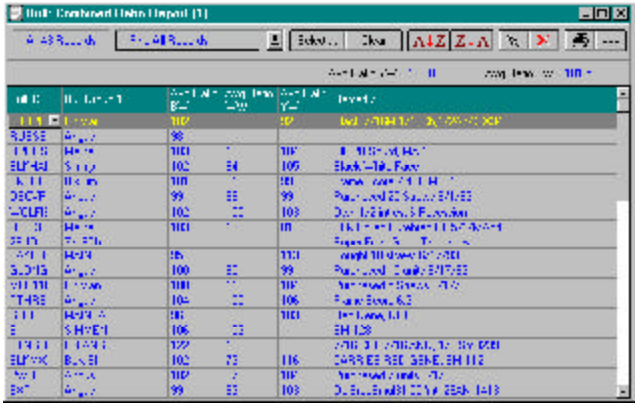


FIGURE 5-24. THE BULL COMBINED RATIOS REPORT WINDOW.

The Bull: Combined Ratio report (see Figure 5-24) lists the average birth, weaning and yearling weight ratios for each bull’s progeny in a herd or query. It also lists remarks for each bull and it displays the average yearling weight, average weaning weight, and average birth weight ratios for all bulls in a query. To access the Bull: Ratio Analysis report, select **Reports > Bulls > Combined Ratios** from the main menu bar. Cow Sense will display all bulls in the herd. You can select a certain group of bulls (for example, low birth weight bulls) using the query features available when you click the Select button.

If you want to see an Individual Bull Summary for any bull in the list, click on that individual’s Bull ID and then click the Hot button to the

right of the ID. Cow Sense will take you to that bull's Individual Bull Summary. unless you have **Window > Data Entry Mode** selected (see Chapter 9). To print the Bull: Combined Ratios Report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

EPD

The Bull: EPD report (see Figure 5-25) lists the bull group 1 (user-defined. See **Enter Data > Define Groups**), poll status and remarks of each bull in a herd or query as well as listing each bull's birth, weaning, yearling weight, milk and total maternal EPDs.

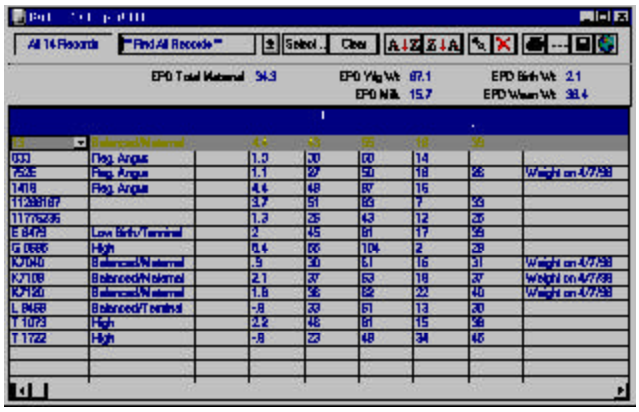


FIGURE 5-25. THE BULL EPD REPORT WINDOW.

To access the Bull: EPD report, select **Reports > Bulls > EPD** from the main menu bar. Cow Sense will display all bulls in the herd. You can select a certain group of bulls (for example, heifer bulls) using the query features available when you click the Select button.

If you want to see an Individual Bull Summary for any bull in the list, click on that individual's Bull ID and then click the Hot button to the right of the ID. Cow Sense will take you to that bull's Individual Bull Summary unless you have **Window > Data Entry Mode** selected (see Chapter 9). To print the Bull: EPD report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

SEMEN INVENTORY

This report gives an account of semen inventory for all bulls identified as AI or Both (AI and Herd Bull) in the Type field of the Enter Bulls window (see Figures 5-26 and 5-27) .

If you do not specify a date range (by turning on the Specify Date Range field), Cow Sense will list all semen inventory transactions for all production cycles. To specify a date range, click on the Specify Date Range box, and type date values inside the accompanying date fields. To print Bull:

Semen Inventory reports, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

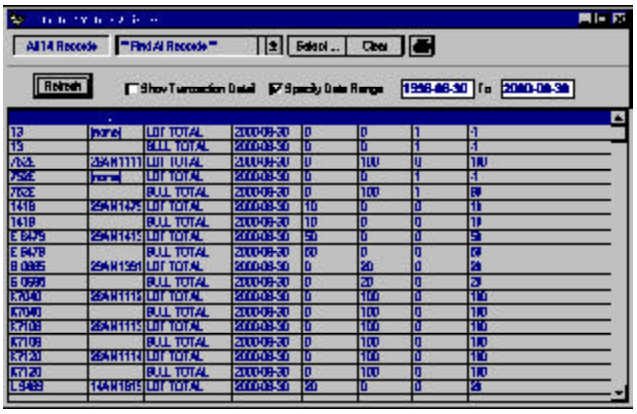
You have two viewing options for the Semen Inventory report.

Without Transaction Detail View

This view lists only the Lot and Bull Totals for each semen inventory record. See Figure 5-26.

- *Bull ID*. You can have more than one listing per bull. The number of listings per bull is dependent on the number of Lots you assign to a bull in the **Enter Data > Bulls > Semen Inventory** data entry window (see Chapter 4).
- *Lot.* Each time you enter a Lot number for new semen inventory (whether you purchase straws or collect them on-site) for a bull, Cow Sense creates a new semen record for that Lot. If you do not specify a lot number when you enter a semen record in the **Enter Data > Bulls > Semen Inventory** data entry window (see Chapter 4), the value in this field will be "(none)".

FIGURE 5-31.
THE SEMEN INVENTORY REPORT WINDOW WITHOUT TRANSACTION DETAIL.



With Transaction Detail

This view lists all transactions associated with each semen inventory record. See Figure 5-27.

- *Transaction*. Each time you enter a different transaction for a Lot of semen, Cow Sense adds a line to this report. The transaction types include Purchase, Sale, Adjust, Use, and Count. For a description of the different Lot types, see the Bull Semen Inventory section of

Chapter 3. The Semen Inventory Report also shows the total straws available per lot (LOT TOTAL) and per bull (BULL TOTAL).

- *Date*. The Date field corresponds to the information in the Transaction field.
- *Start*. The number in this field refers to the starting number of straws available per lot (LOT TOTAL) or per bull (BULL TOTAL).
- *In*. The number in this field refers to the number per lot (LOT TOTAL) or per bull (BULL TOTAL) that you add to the inventory.
- *Out*. The number in this field refers to the number per lot (LOT TOTAL) or per bull (BULL TOTAL) that you subtract from the inventory.
- *End Count*. The number in this field refers to the ending number of straws available per lot (LOT TOTAL) or per bull (BULL TOTAL). It is the net result of the In number and the Out number.

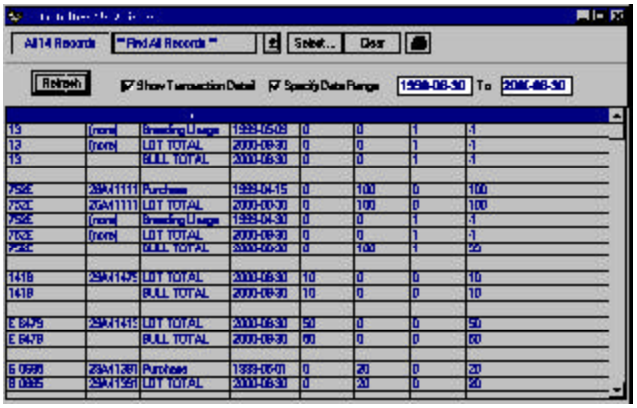


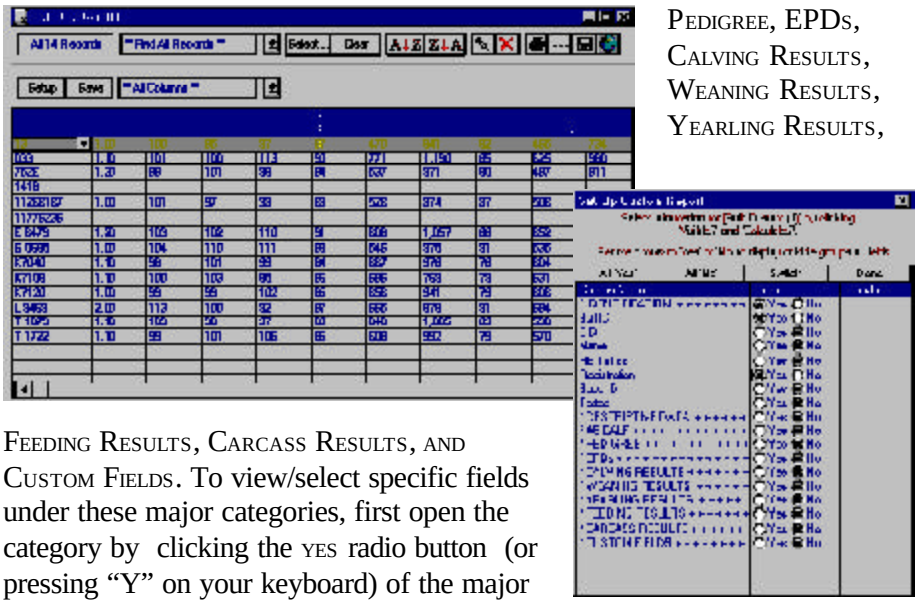
FIGURE 5-27. THE SEMEN INVENTORY REPORT WINDOW WITH TRANSACTION DETAIL.

Custom

In Lite Commercial and Purebred modes, the Bull: Custom report starts with every available bull data field in Cow Sense. You then decide which fields you want in your report.

To design the Bull: Custom report, select **Reports > Bulls > Custom** from the main menu bar. Cow Sense will display all bull records in the herd and all the data fields available (see Figure 5-28). Click the Setup button to access the Setup Custom Report window (see Figure 5-29) in order to select which fields you want in your report.

In the Setup Custom Report window field names are subcategorized under the major field categories of IDENTIFICATION, DESCRIPTIVE DATA, AS CALF,



FIGURES 5-28 AND 5-29. THE BULL: CUSTOM REPORT WINDOW AND THE SET UP CUSTOM REPORT WINDOW.

PEDIGREE, EPDS, CALVING RESULTS, WEANING RESULTS, YEARLING RESULTS, FEEDING RESULTS, CARCASS RESULTS, AND CUSTOM FIELDS. To view/select specific fields under these major categories, first open the category by clicking the YES radio button (or pressing "Y" on your keyboard) of the major field category (for example, IDENTIFICATION). To select a field to include in your custom report, click the YES radio button on that field listing or press "Y" on your keyboard (you can navigate up or down through the field listings by using the arrow up or down keys on the keyboard). If a field is turned on with a Yes radio button and you do not want it included, click the NO radio button or press "N" on your keyboard. If you only want a few columns in your report, click the All 'No' button and then click the YES button for the fields you want. If you want most of the available columns, click the All 'Yes' button and then click the NO button to select the columns you don't want. If you want to reverse your selection, click the Switch button. When you're finished making your selection, click the Done button and Cow Sense will display your Bull: Custom window. If you want to save a custom report, click the Save button in the Bull: Custom Report window (see Figure 5-30). Cow Sense will display a Name Custom Report box. Enter the name of the custom report and click the OK button. To retrieve a custom report that you saved previously, click the Hot button on the Saved Selections box (item A in Figure 5-1) and Cow Sense will display a drop-down list of all the saved custom reports. Scroll through the list to find the report you want.

TIP: YOU CAN NAVIGATE THROUGH THE SET UP CUSTOM REPORT LISTINGS USING THE ARROW UP AND ARROW DOWN KEYS ON YOUR KEYBOARD.

FIGURE 5-30. THE NAME CUSTOM REPORT BOX.

As with the other reports, you can select a certain group of bulls (for example, mature cow bulls) using the query features available when you click the Select button.

To arrange columns in a different order, place your cursor over the title of the column (for example, Bull ID). Hold down the left mouse button. The cursor will change from the standard Windows arrow to a two-pronged arrow, and the entire column will highlight. Drag the two-pronged arrow cursor right or left to move the column to the desired location. You will see the column move as you drag it. Release the left mouse button to lock in the column's new location. Cow Sense will preserve the column order you specify when you save your custom report.

If you want to see an Individual Bull Summary for any bull in the list, click on that individual's Bull ID and then click the Hot button to the right of the ID. Cow Sense will take you to that bull's Individual Cow Summary. To print the Bull: Custom report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

NOTE: THE NUMBER OF COLUMNS THAT WILL PRINT ON A CUSTOM REPORT IS DICTATED BY THE PRINTER AND THE SIZE OF PAPTER YOU ARE USING. IF YOU USE A PRINTER THAT ONLY PRINTS STANDARD 8 ½ BY 11 LETTER, OR 8½ BY 14 LEGAL PAPER, YOU CAN GET MORE COLUMNS ON A REPORT BY PRINTING IN LANDSCAPE FORMAT. SEE THE PRINTER SETUP SECTION IN CHAPTER 3 FOR MORE INFORMATION.

CALVES

Cow Sense provides extensive reports for all calf crops, or production cycles. These reports a powerful tools for measuring herd performance and for making year-to-year comparisons.

INDIVIDUAL SUMMARY

The Individual Calf Summary report (see Figure 5-31) provides a complete history for one calf, including his pedigree (Purebred mode only) and editable remarks.

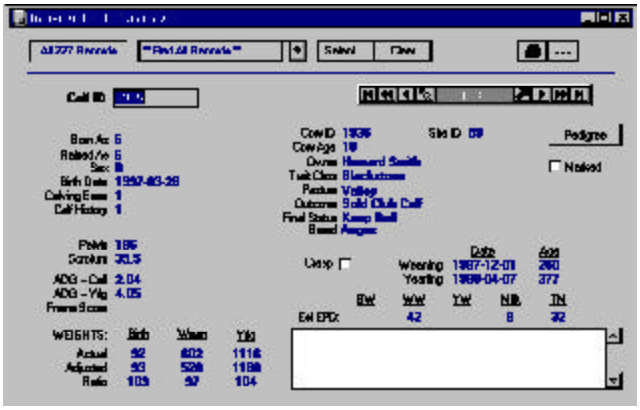


FIGURE 5-31. THE INDIVIDUAL CALF SUMMARY REPORT WINDOW.

To access the Individual Calf Summary report, select **Reports** > **Calves** > **Individual Summary** from the main menu bar. Cow Sense will display the first calf record in your database for the current

production cycle. To select a different calf record, use the navigation tool bar or type a different ID in the Calf ID field.

To view the calf's pedigree (Purebred r mode), click the Pedigree button. To print the Individual Calf Summary, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

CALVING

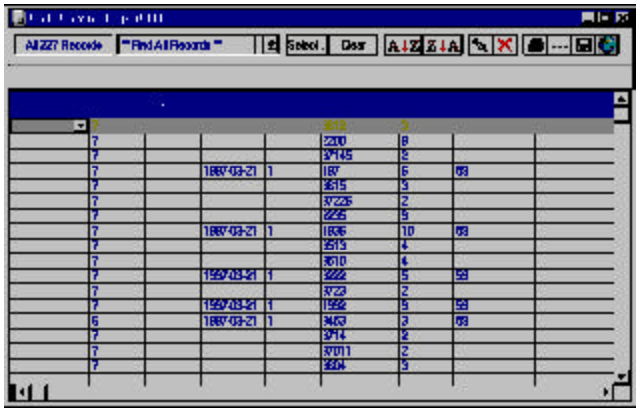


FIGURE 5-32.
THE CALF: CALVING REPORT.

The Calf: Calving report (see Figure 5-32) catalogues each calf in the herd for the current production cycle (or all you've selected using query features) and the calf's history code (whether alive or dead), sex, birth date, calving ease score, dam, dam age, sire, and remarks. It also allows you to "mark" a record to define a query.

To access the Calf: Calving report, select **Reports > Calves > Calving** from the main menu bar. Cow Sense will display all calves in the herd. You can select a certain group of calves (for example, all heifer calves) using the query features available when you click the Select button.

If you want to see an Individual Calf Summary for any calf in the list, click on that individual's Calf ID and then click the Hot button to the right of the ID. Cow Sense will take you to that calf's Individual Calf Summary. To print the Calf: Calving report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

NOTE: COW SENSE WILL NOT GENERATE THE CALF: BIRTH WEIGHT REPORT UNTIL YOU RUN THE CALVING UPDATE IN **MAINTENANCE > CURRENT CYCLE > CALVING UPDATE** (SEE CHAPTER 7). YOU ALSO MUST HAVE THE USE BIRTH WEIGHTS CHECK BOX ACTIVATED IN **MAINTENANCE > ADMINISTRATION > SETUP > ENTRY OPTIONS** (SEE CHAPTER 7) IN ORDER TO PRODUCE THIS REPORT.

BIRTH WEIGHT

In the Commercial and Purebred modes only, the Calf: Birth Weight report (see Figure 5-33) catalogues each calf in the herd for the current production cycle (or all you've selected using query features) and the calf's sex, dam, age of dam, sire, birth weight, adjusted birth weight, adjusted birth weight ratio and remarks. It also gives an average dam age for all calves in the herd or query.

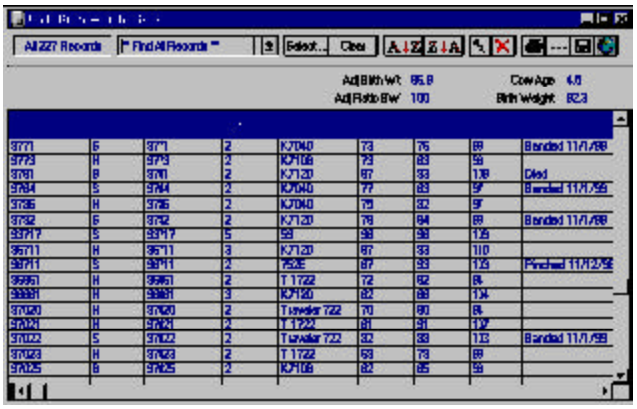


FIGURE 5-33.
THE CALF: BIRTH WEIGHT REPORT.

To access the Calf: Birth Weight report, select **Reports > Calves > Birth Weight** from the main menu bar. Cow Sense will display all calves in the herd. You can select a certain group of calves (for example, calves by a certain bull) using the query features available when you click the Select button.

If you want to see an Individual Calf Summary for any calf in the list, click on that individual's Calf ID and then click the Hot button to the right of the ID. Cow Sense will take you to that calf's Individual Calf Summary. To print the Calf: Birth Weight report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

WEANING WEIGHT

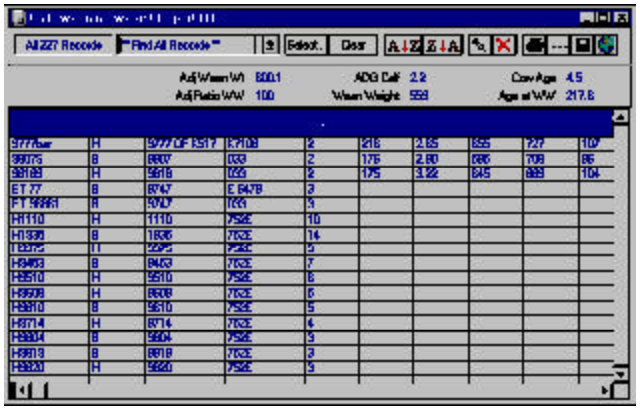


FIGURE 5-34.
THE CALF: WEANING WEIGHT REPORT.

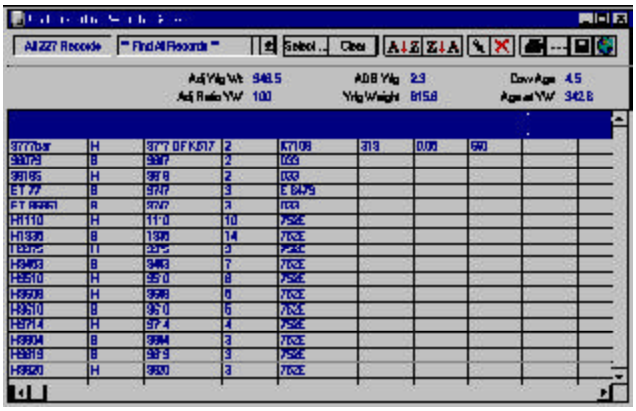
In EZ-75, Commercial and Purebred modes, the Calf: Weaning Weight report (see Figure 5-34) catalogues each calf in the herd for the current production cycle (or all you've selected using query features) and the calf's sex, dam, age of dam, sire, weaning weight, age at weaning, average daily gain, adjusted weaning weight, adjusted weaning weight ratio and remarks. It also gives an average for dam age, weaning weight, adjusted weaning weight, adjusted weaning weight ratio, average daily gain, and calf age at weaning for all the calves in the herd or query.

To access the Calf: Weaning Weight report, select **Reports > Calves > Weaning Weight** from the main menu bar. Cow Sense will display all calves in the herd. You can select a certain group of calves (for example, calves by a certain bull) using the query features available when you click the Select button.

If you want to see an Individual Calf Summary for any calf in the list, click on that individual's Calf ID and then click the Hot button to the right of the ID. Cow Sense will take you to that calf's Individual Calf Summary. To print the Calf: Weaning Weight report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

YEARLING WEIGHT

FIGURE 5-35.
THE CALF: YEARLING WEIGHT REPORT.



NOTE: COW SENSE WILL NOT GENERATE THE CALF: YEARLING WEIGHT REPORT UNTIL YOU RUN THE WEANING UPDATE IN **MAINTENANCE > CURRENT CYCLE > CALVING UPDATE** (SEE CHAPTER 7). YOU ALSO MUST HAVE THE USE YEARLING WEIGHTS CHECK BOX ACTIVATED IN **MAINTENANCE > ADMINISTRATION > SETUP > ENTRY OPTIONS** (SEE CHAPTER 7) IN ORDER TO PRODUCE THIS REPORT.

In EZ-75, Commercial and Purebred modes, the Calf: Yearling Weight report (see Figure 5-35) catalogues each calf in the herd for the current production cycle (or all you've selected using query features) and the calf's sex, dam, age of dam, sire, yearling weight, age at yearling weight date, average daily gain, adjusted yearling weight, adjusted yearling weight ratio and remarks. It also gives an average for dam age, yearling weight, adjusted yearling weight adjusted yearling weight ratio, average daily gain, and calf age at yearling weight date for all the calves in the herd or query.

To access the Calf: Yearling Weight report, select **Reports > Calves > Individual Summary** from the main menu bar.. Cow Sense will display all calves in the herd. You can select a certain group of calves (for example, calves by a certain bull) using the query features available when you click the Select button.

If you want to see an Individual Calf Summary for any calf listed, click on that individual's Calf ID and then click the Hot button to the right of the ID. Cow Sense will take you to that calf's Individual Calf Summary.

To print the Calf: Yearling Weight report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

CURRENT TABLES

Calving Distribution

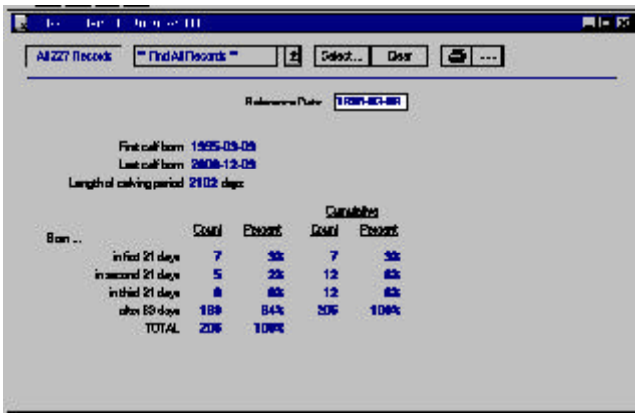


FIGURE 5-36. THE TABLE: CALVING DISTRIBUTION REPORT WINDOW.

TIP: YOU CAN SELECT ANY SUBGROUP FROM THE CALVING DISTRIBUTION REPORT TO DEVELOP A MORE SELECTIVE REPORT. FOR EXAMPLE, TO DETERMINE BREED-BACK ON LAST YEAR'S FIRST CALF HEIFERS, CLICK THE SELECT BUTTON AND QUERY FOR DAM AGE = 3. THE RESULTING CALVING DISTRIBUTION WILL INDICATE HOW WELL THAT SUBGROUP IS BREEDING BACK.

The Table: Calving Distribution report (see Figure 5-36) summarizes calving dates in 21-day periods for the current production cycle. Cow Sense automatically uses the date for the first calf born as the reference date, but you can override that by typing a new date in the Reference Date field at the top of the report window. The report lists the date of the first calf born and the date of the last calf born; it breaks down the number of calves born and the percent of the calf crop in four 21-day intervals.

To access the Table: Calving Distribution report, select **Reports > Calves > Current Tables > Calving Distribution** from the main menu bar. You can select a certain group of calves (for example, calves by a certain bull) using the query features available when you click the Select button.

To print the Table: Calving Distribution report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

Calving Ease

The Table: Calving Ease report (see Figure 5-37) summarizes the number and percent of calving assists you had in the current production cycle.

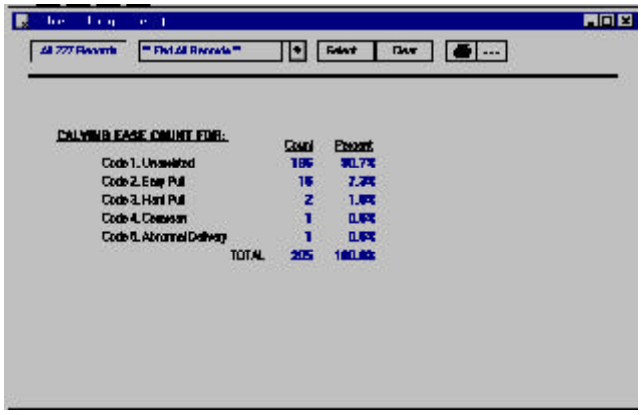


FIGURE 5-37.
THE TABLE: CALVING EASE REPORT WINDOW.

To access the Table: Calving Ease report, select **Reports** > **Calves** > **Current Tables** > **Calving Ease** from the main menu bar. You can select a certain group of calves (for example, calves by a certain bull) using the query features available when you click the Select button.

To print the Table: Calving Ease report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

Birth Weight

In EZ-75, Commercial and Purebred modes, the Table: Birth Weight report (see Figure 5-38) lists the actual birth weight and adjusted birth weight of all the calves in the current production cycle or in a query. It breaks down weights by heifers, bulls and all.

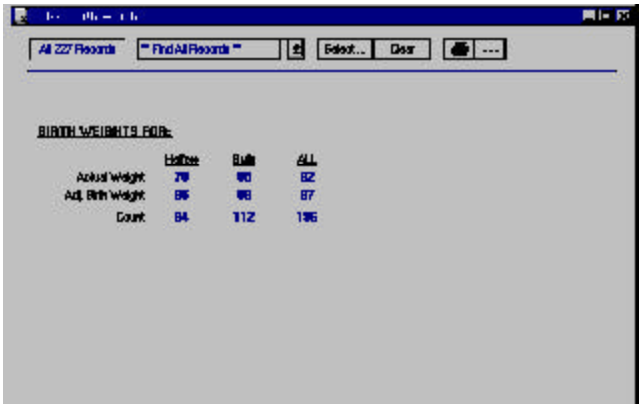


FIGURE 5-38.
THE TABLE: BIRTH WEIGHT REPORT WINDOW.

To access the Table: Birth Weight report, select **Reports > Calves > Current Tables > Birth Weight** from the main menu bar. You can select a certain group of calves (for example, calves by a certain bull) using the query features available when you click the Select button. To print the Table: Birth Weight report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

Weaning Weight

In EZ-75, Commercial and Purebred modes, the Table: Weaning Weight report (see Figure 5-39) lists the actual weaning weight and adjusted 205-day weight of all the calves in the current production cycle or in a query. It breaks down weights by heifers, steers, bulls and all.

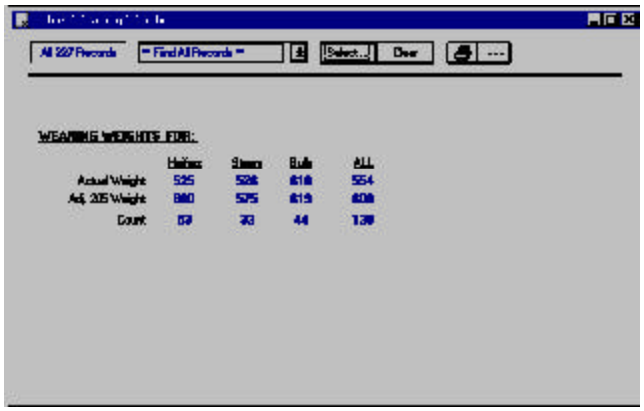


FIGURE 5-39. THE TABLE: WEANING WEIGHT REPORT WINDOW.

To access the Table: Weaning Weight report, select **Reports > Calves > Current Tables > Weaning Weight** from the main menu bar. You can select a certain group of calves (for example, calves by a certain bull) using the query features available when you click the Select button. To print the Table: Weaning Weight report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

Yearling Weight

In EZ-75, Commercial and Purebred modes, the Table: Yearling Weight report (see Figure 5-40) lists the actual yearling weight and adjusted 365-day weight of all the calves in the current production cycle or in a query. It breaks down weights by heifers, steers, bulls and all.

To access the Table: Yearling Weight report, select **Reports > Calves > Current Tables > Yearling Weight** from the main menu bar. You can select a certain group of calves (for example, calves based on cow age) using the query features available when you click the Select button. To print

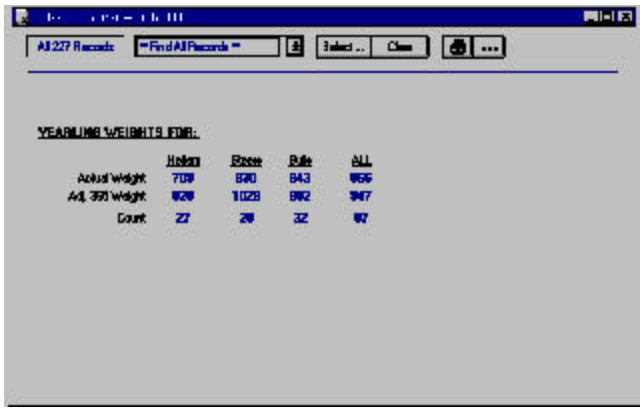


FIGURE 5-40.
THE TABLE: YEARLING WEIGHT REPORT WINDOW.

the Table: Yearling Weight report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

CALF RATIO SUMMARY

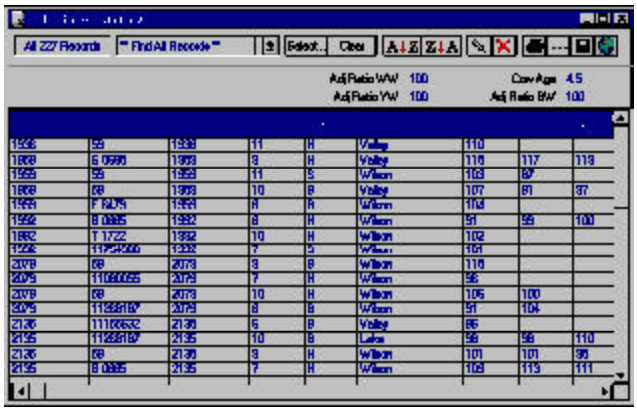


FIGURE 5-41.
THE CALF RATIO SUMMARY REPORT WINDOW.

In EZ-75, Commercial and Purebred modes, the Calf: Ratio Summary report (see Figure 5-41) lists each calf in the herd for the current production cycle (or all you've selected using query features) and each calf's sex, group 1 designation (user defined. See **Enter Data > Define Groups**), dam, age of dam, sire, adjusted birth weight ratio, adjusted weaning weight ratio, adjusted yearling weight ratio and remarks. It also lists the average adjusted birth weigh, weaning weight and yearling weight, and dam age for all calves in the herd.

To access the Calf: Ratio Summary report, select **Reports > Calves > Calf Ratio Summary** from the main menu bar. Cow Sense will display all calves in the herd. You can select a certain group of calves (for example, calves by a certain bull) using the query features available when you click the Select button.

If you want to see an Individual Calf Summary for any calf in the list, click on that individual's Calf ID and then click the Hot button to the right of the ID. Cow Sense will take you to that calf's Individual Calf Summary. To print the Calf: Ratio Summary report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

PRODUCTION SUMMARY

In EZ-75, Commercial and Purebred modes, the Current Production Summary report (see Figure 5-42) displays an actual count and a percentage of the herd for total cows exposed, open cows, abortions, and exposed cows that died or were sold. It lists actual count and percentages for total cows calved, multiples and grafts, weaning calf loses, live calves weaned, calves lost after weaning and total yearlings. It also itemizes actual numbers and percentages for weaning calf losses, the sex of live calves and assisted births, plus it reports actual and adjusted birth, weaning and yearling weights, total pounds weaned and pounds weaned per cow exposed.

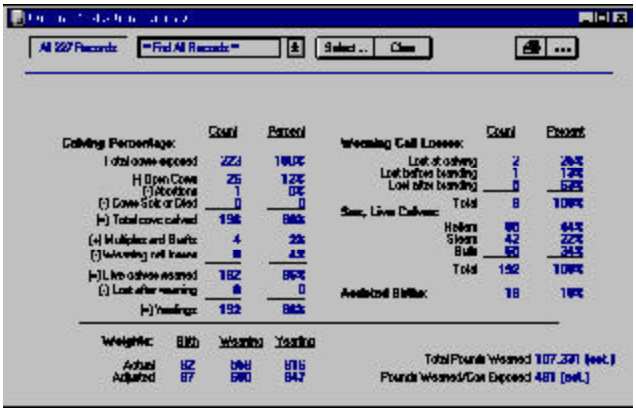


FIGURE 5-42. THE CURRENT PRODUCTION SUMMARY REPORT WINDOW.

To access the Current Production Summary report, select **Reports** > **Calves** > **Production Summary** from the main menu bar. Cow Sense will display all calves in the herd. You can select a certain group of calves (for example, calves by a certain bull) using the query features available when you click the Select button. To print the Current Production Summary report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

SPA PRODUCTION REPORT

In the Commercial and Purebred modes only, the SPA Production report summarizes herd performance measures in the format used by the Standardized Performance Analysis program for the current production

cycle. See Figure 5-43. These values may be combined with independent SPA financial analysis for a very detailed account of your operation and a comparison of your operation to other operations across the country. For more information about Cow Calf and SPA, refer to the glossary in the User's Guide as well as the Adobe Acrobat file titled SPA.pdf (from the main menu, select **Help > SPA Guidelines**).

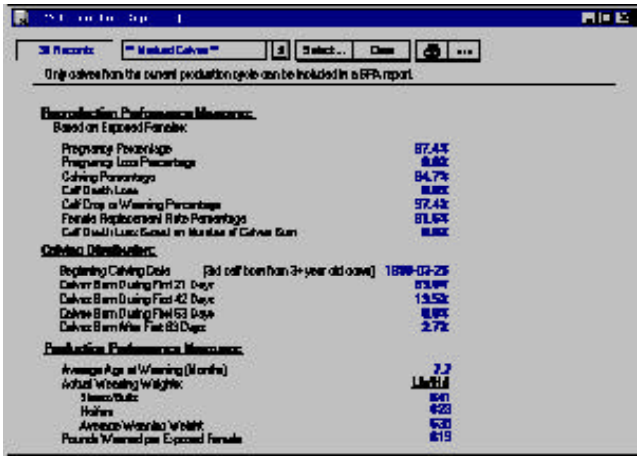


FIGURE 5-43. THE SPA PRODUCTION REPORT WINDOW.

To access the SPA Production report, select **Reports > Calves > SPA Production Report** from the main menu bar. You can select a certain group of animals using the query features available when you click the Select button. To print the SPA Production report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

CUSTOM

The Calf: Custom report starts with every available Calf data field in Cow Sense. You then decide which fields you want in your report.

To design the Calf: Custom report, select **Reports > Calves > Custom** from the main menu bar. Cow Sense will display all calves in the herd and all the data fields available (see Figure 5-44). Click the Setup button to access the Setup Custom Report window (see Figure 5-45) in order to select which fields you want in your report.

In the Setup Custom Report window field names are subcategorized under the major field categories of IDENTIFICATION, DESCRIPTION, BREEDING, CALVING RESULTS, WEANING RESULTS, YEARLING RESULTS, EPDS, FEEDING RESULTS, CARCASS RESULTS, AND CUSTOM FIELDS. To view/select specific fields

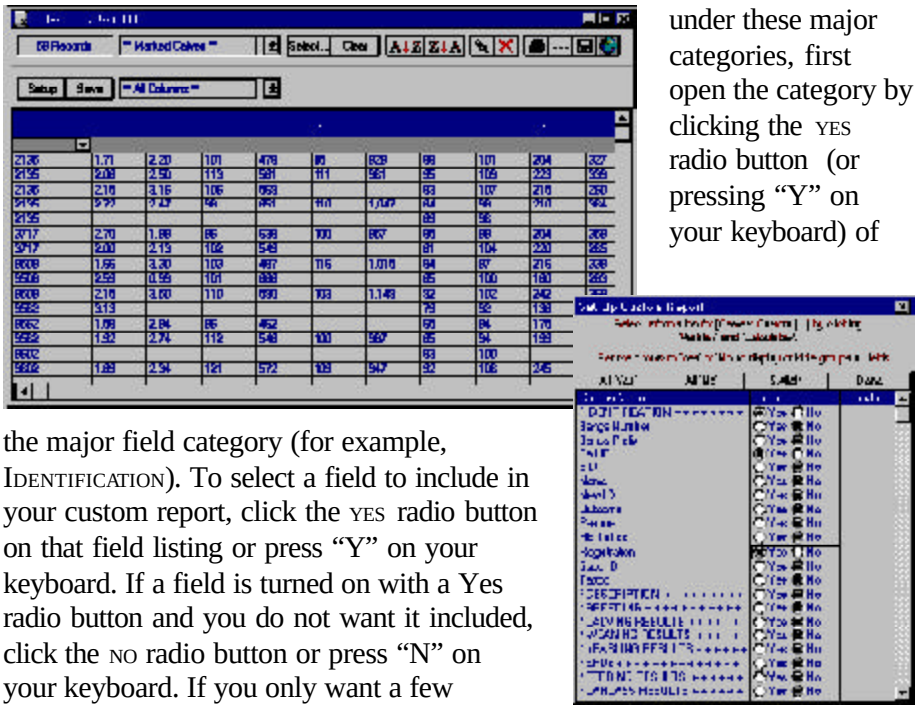


FIGURE 5-44 AND 5-45. THE CALF: CUSTOM REPORT WINDOW AND THE SET UP CUSTOM REPORT WINDOW.

under these major categories, first open the category by clicking the YES radio button (or pressing "Y" on your keyboard) of the major field category (for example, IDENTIFICATION). To select a field to include in your custom report, click the YES radio button on that field listing or press "Y" on your keyboard. If a field is turned on with a Yes radio button and you do not want it included, click the NO radio button or press "N" on your keyboard. If you only want a few columns in your report, click the All 'No' button and then click the YES button for the fields you want. If you want most of the available columns, click the All 'Yes' button and then click the NO button to select the columns you don't want. If you want to reverse your selection, click the Switch button. When you're finished making your selection, click the Done button and Cow Sense will display your Calf: Custom window. If you want to save a custom report, click the Save button in the Calf: Custom Report window. Cow Sense will display a Name Custom Report box (see Figure 5-46). Enter the name of the custom report and click the OK button. To retrieve a custom report that you saved previously, click the Hot button on the Saved Selections box (item A in Figure 5-1) and Cow Sense will display a drop-down list of all the saved custom reports. Scroll through the list to find the report you want.

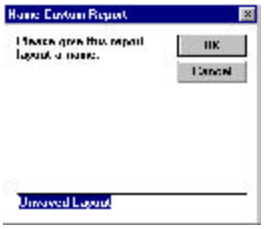


FIGURE 5-46. THE NAME CUSTOM REPORT BOX.

As with the other reports, you can select a certain group of calves (for example, all heifer calves) using the query features available when you click the Select button.

NOTE: THE NUMBER OF COLUMNS THAT WILL PRINT ON A CUSTOM REPORT IS DICTATED BY THE PRINTER AND THE SIZE OF PAPTER YOU ARE USING. IF YOU USE A PRINTER THAT ONLY PRINTS STANDARD 8 ½ BY 11 LETTER, OR 8½ BY 14 LEGAL PAPER, YOU CAN GET MORE COLUMNS ON A REPORT BY PRINTING IN LANDSCAPE FORMAT. SEE THE PRINTER SETUP SECTION IN CHAPTER 3 FOR MORE INFORMATION.

To arrange columns in a different order, place your cursor over the title of the column (for example, Calf ID). Hold down the left mouse button. The cursor will change from the standard Windows arrow to a two-pronged arrow, and the entire column will highlight. Drag the two-pronged arrow cursor right or left to move the column to the desired location. You will see the column move as you drag it. Release the left mouse button to lock in the column's new location. Cow Sense will preserve the column order you specify when you save your custom report.

If you want to see an Individual Calf Summary for any calf in the list, click on that animal's Calf ID and then click the Hot button to the right of the ID. Cow Sense will take you to that calf's Individual Calf Summary. To print the Calf: Custom report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

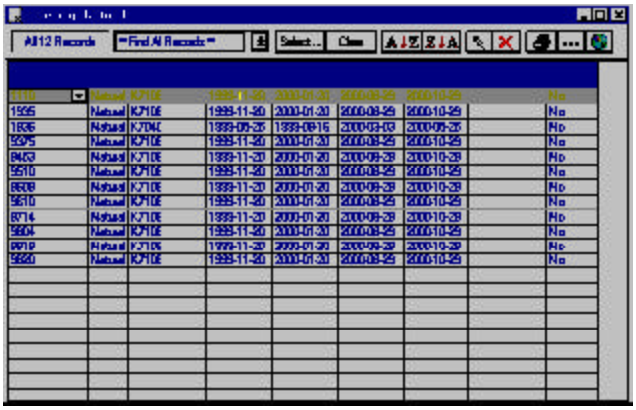
BREEDING

Cow Sense provides two standard breeding reports, Natural Breeding and AI Breeding, as well as allowing you to create custom breeding reports.

To print the Breeding reports, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

NATURAL BREEDING

FIGURE 5-47.
THE NATURAL BREEDING REPORT WINDOW.



The Natural Breeding report (see Figure 5-47) catalogues each cow bred to a herd bull in the open production cycle. It lists the Sire to which she was bred, the bull In and Out dates, Remarks, and estimated Calving Dates based on the bull In and Out dates.

To access the Breeding: Natural report, select **Reports > Breeding > Natural Breeding** from the main menu bar. Cow Sense will display the Natural Breeding report. Use the query functions (available by clicking the Select button) to view/print a report on specific cows. You can access each cow's Individual Cow Summary report by clicking the Hot button next to her Cow ID.

AI BREEDING

The AI Breeding report (see Figure 5-48) catalogues each cow that was artificially inseminated with semen from an AI bull in the open production cycle. It lists the Sire to which she was bred, the AI Date, the number of AI Straws used, the Technician who performed the procedure, the Semen Inventory on the bull, Notes, and the Earliest Calving date based on the AI Date.

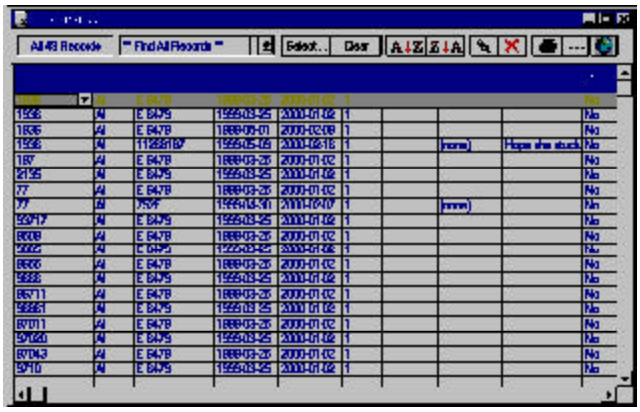


FIGURE 5-48. THE AI BREEDING REPORT WINDOW.

To access the Breeding: AI report, select **Reports > Breeding > AI Breeding** from the menu bar. Cow Sense will display the AI Breeding report. Use the query functions (available by clicking the Select button) to view/print a report on specific cows. You can access each cow's Individual Cow Summary report by clicking the Hot button next to her Cow ID.

CUSTOM

The Breeding: Custom report starts with every available cow breeding event—both natural service and artificial insemination—in Cow Sense. You then decide which fields you want in your report.

To design the Breeding: Custom report, select **Reports > Breeding > Custom** from the main menu bar. Cow Sense will display all cows in the herd and all the data fields available (see Figure 5-49). Click the Setup button to access the Setup Custom Report window (see Figure 5-50) in order to select which fields you want in your report.

The Setup Custom Report window contains all the breeding field names. To select field to include in your custom report, click the YES radio button on that field listing or press “Y” on your keyboard. If a field is turned on with a Yes radio button and you do not want it included, click the NO radio button or press “N” on your keyboard. If you only want a few columns in your report, click the All ‘No’ button and then click the YES button for the fields you want. If you want most of the available columns, click the All ‘Yes’ button and then click the NO button to select the columns you don’t want. If you want to reverse your selection, click the Switch button. When you’re finished making your selection, click the Done button and Cow Sense will display your Breeding: Custom window. If you want to save a custom report, click the Save button in the Breeding: Custom Report window. Cow Sense will display a Name Custom Report box (see Figure 5-51). Enter the name of the custom report and click the OK button. To retrieve a custom report that you saved previously, click the Hot button on the Saved Selections box (box A in Figure 5-1) and Cow Sense will display a drop-down list of all the saved custom reports. Scroll through the list to find the report you want.

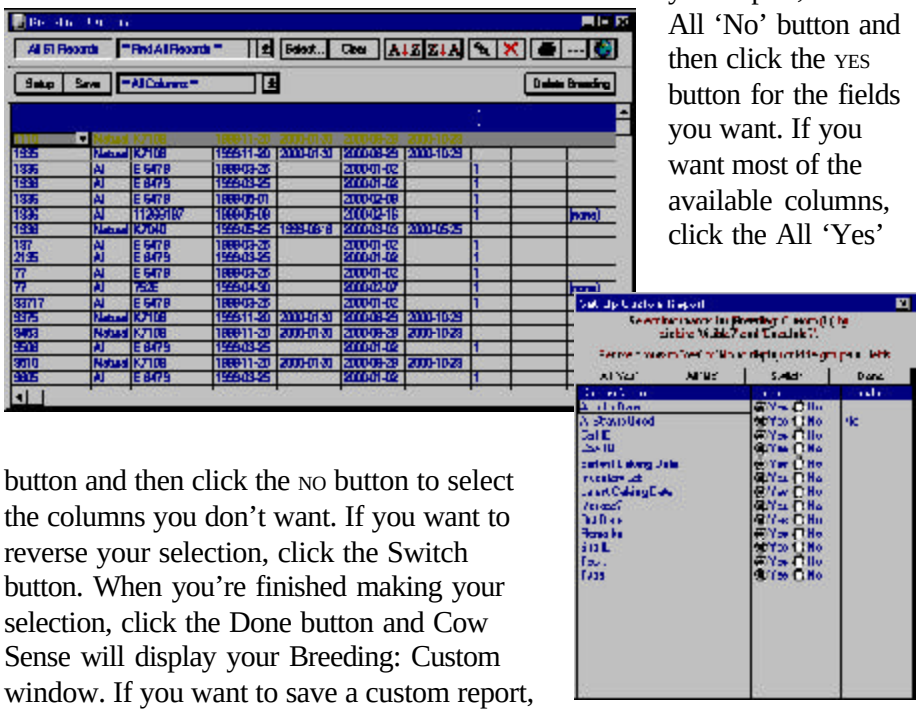


FIGURE 5-49 AND 5-50. THE BREEDING: CUSTOM REPORT WINDOW AND THE SET UP CUSTOM REPORT WINDOW.

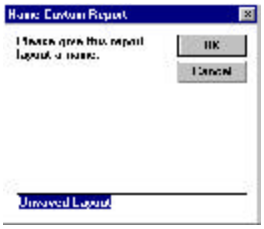


FIGURE 5-51. THE NAME CUSTOM REPORT BOX.

As with the other reports, you can select a certain group of cows (for example, all natural cover cows) using the query features available when you click the Select button.

To arrange columns in a different order, place your cursor over the title of the column (for example,

Cow ID). Hold down the left mouse button. The cursor will change from the standard Windows arrow to a two-pronged arrow, and the entire column will highlight. Drag the two-pronged arrow cursor right or left to move the column to the desired location. You will see the column move as you drag it. Release the left mouse button to lock in the column's new location. Cow Sense will preserve the column order you specify when you save your custom report.

If you want to see an Individual Cow Summary for any cow in the list, click on that individual's Cow ID and then click the Hot button to the right of the ID. Cow Sense will take you to that cow's Individual Calf Summary.

To print the Breeding: Custom report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

NOTE: THE NUMBER OF COLUMNS THAT WILL PRINT ON A CUSTOM REPORT IS DICTATED BY THE PRINTER AND THE SIZE OF PAPTER YOU ARE USING. IF YOU USE A PRINTER THAT ONLY PRINTS STANDARD 8 ½ BY 11 LETTER, OR 8½ BY 14 LEGAL PAPER, YOU CAN GET MORE COLUMNS ON A REPORT BY PRINTING IN LANDSCAPE FORMAT. SEE THE PRINTER SETUP SECTION IN CHAPTER 3 FOR MORE INFORMATION.

HERD HEALTH

Cow Sense provides four options for generating treatment reports. The Treatments report lists all treatments performed for a whole herd, including cows, calves and bulls. The Calf, Cow and Bull Treatments reports list treatments on the three respective groups.

Treatments Report

The Treatments report lists treatments by treatment ID and provides information on the date, veterinarian and notes of each treatment.

To access the Treatments report, which shows treatments for all animals in a herd, select **Reports** > **Health** > **Treatments** from the main menu bar. Cow Sense will display a Treatments window (see Figure 5-52). You can select a certain group of animals using the query features available when you click the Select button.

Treatment product and procedure detail appears on printed reports.

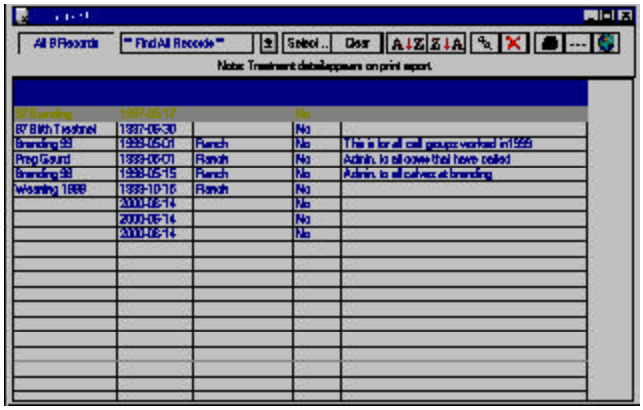
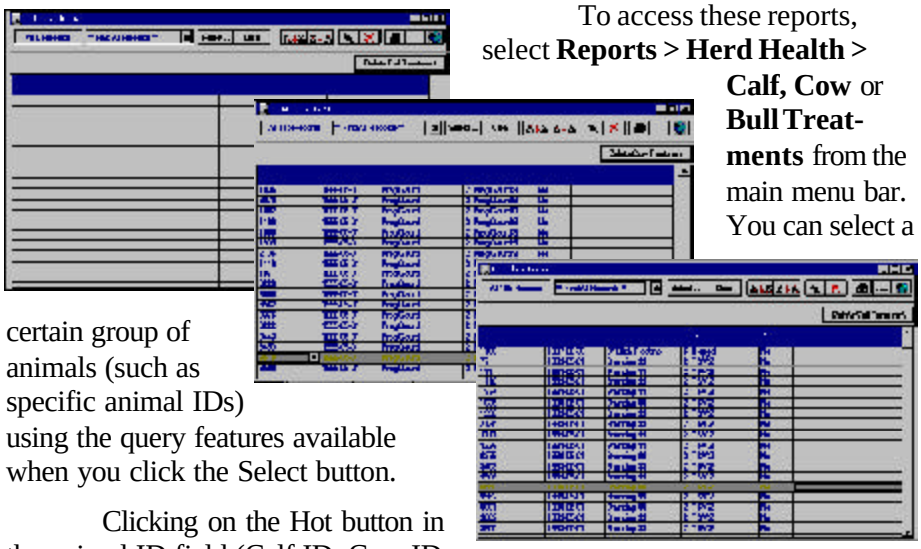


FIGURE 5-52. THE TREATMENTS REPORT WINDOW.

To print the Treatments report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

CALF, COW AND BULL TREATMENTS REPORTS

The Calf, Cow and Bull Treatments reports (see Figures 5-53 to 5-55) list treatments by calf ID, Cow ID or Bull ID respectively (not sorted), and provides information on the date, treatment identifier, and notes of each treatment.



FIGURES 5-58, 5-59 AND 5-60. THE BULL, COW AND CALF TREATMENTS REPORT WINDOWS RESPECTIVELY.

To access these reports, select **Reports > Herd Health > Calf, Cow** or **Bull Treatments** from the main menu bar. You can select a certain group of animals (such as specific animal IDs) using the query features available when you click the Select button.

TIP: TO SEE AN ANIMAL'S INDIVIDUAL SUMMARY, CLICK THE HOT BUTTON IN THE ANIMAL ID FIELD. TO SEE A SPECIFIC TREATMENT REGIMEN FOR AN ANIMAL, CLICK THE HOT BUTTON IN THE IDENTIFIER FIELD.

Clicking on the Hot button in the animal ID field (Calf ID, Cow ID or Bull ID) opens the Individual (Calf, Cow, Bull} Summary window for that record. Clicking on the Hot button in the Identifier window opens up the Treatment Entry window for that record.

The Delete Calf, Cow, Bull Treatment Button

You can permanently delete any or all treatments in the Calf, Cow and Bull Treatments window by clicking on the Delete... Treatment button. To delete one treatment, be sure you highlight it by clicking on that row. Then click the Delete ... Treatment button. Cow Sense will ask you if you want to delete the currently selected treatment, all treatments or cancel. Click the appropriate button to proceed. Remember once you delete a treatment(s), they will be permanently removed from your database.

To print these Treatment reports, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

MATCH

In Cow Sense, each set of records (cows, bulls, calves, breedings, and treatments) is in a table. The Match function allows you to relate information from one table (calf, cow, bull, breeding or treatment) to another table. When you match, Cow Sense lets you select records from one table (say, Calves) based on information that is only available in a different table (say, Cows).

Here are a few instances where you can use the Match function:

- You want to select replacement heifers from cows in your herd that have an average calving interval of less than 365 days.
- You want to establish AI bulls from your herd whose average birth weight ratios are less than 100 and their daughters have produced calves that have graded Choice.
- You want to sell replacement heifers out of cows that have specified EPD values.

When Cow Sense "matches" data, it uses query criteria from one table and *marks* records in another table.

To use the Match function, determine what information you want from what table. Use the Report menu to open the table on which you want to base your selection criteria; you will use the Marking features (push pin, red X and the Marked? column) so you will be able to work best in listings rather than individual animal summaries. In order to get a clean start, select **Find All Records** in the Saved Selection box (item A in Figure 5-1). Then use the red X button (item G in Figure 5-1) to unmark all records. Next narrow the number of records in your table by specifying desired criteria using the query functions that are available when you click the Select button. After you have OKed your query, use the push pin button (item F in Figure 5-1) to mark all records in the queried table. *This will be the "FROM" table when you use the Match command*.

When you're ready to match, select **Reports > Match** from the main menu bar. Select the table *from which* you have established a search criteria (Cows, Bulls, Calves, Breeding, Treatments) and then select the table *to which* those criteria apply (Calves, Treatments, Breeding, Cows, Bulls). Cow Sense will then *mark* all records in the "outcome" table based on the selection criteria you established in the first table.

Open up the outcome table, refine your selection using query tools to achieve a final report.

TIP: SEE THE MATCH EXAMPLE ON THE FOLLOWING PAGE TO DISCOVER HOW COW SENSE RELATES INFORMATION IN ONE TABLE TO ANOTHER TABLE. NOTE THAT MATCH DOES NOT ALLOW YOU TO MIX DATA IN A REPORT FROM TWO DIFFERENT TABLES. SEE THE GLOSSARY FOR A DEFINITION OF A TABLE.

REPORT MATCH EXAMPLE: YOU WANT TO SELECT REPLACEMENT HEIFERS THAT WERE BORN IN 2001 (IN THIS EXAMPLE, THE COHORT START DATE IS 4/1/2001), ARE OUT OF COWS WITH AN MPPA GREATER THAN 100 AND A AVERAGE CALF BIRTH WEIGHT RATIO OF LESS THAN 100.

Open the Cow Table.

1. Select **Reports > Cows > Cow Listing** from the main menu bar.
2. Click on the Hot button in the Saved Selection box and select **Find All Records**.
3. Unmark all records using the red X button.
4. Click the Select button to open up the query box. In the Find Record Where section, click the Hot button on the Field Name box and select "MPPA". Click the Hot button in the Relational Operator box and select "Is Greater Than". Type "100" in the Definition box. Click the Hot button in the Logical Operator box and select "And". In the Field Name box on the second row, select "Avg Ratio BW". In the Relational Operator box select "Is Less Than". In the Definition box type "100". Click the OK button.
5. In the Cow Listing window, Cow Sense will display all cow records meeting your query criteria.
6. Use the Push pin button to mark all of those records.

Use the Match function to sort calves based on cow criteria

1. Select **Reports > Match > From Cows > To Calves**. If some of the outcome table records are marked, Cow Sense will alert you that it needs to unmark those records. Click the Yes button to proceed.
2. Cow Sense will mark all calf records in all production cycles that meet the MPPA = 100 and Average Birth Weight Ratio <100 criteria.

Open the Calf Table

1. Select **Reports > Calves > Calving** from the main menu bar.
2. Find all marked heifer calf records for the specified production cycle. Click the Select button. In the Find Records Where section, click the Hot button on the Field Name box and select "Sex" from the drop-down list. Click the Hot button in the Relational Operator box and select "Begins With". Type "H" in the Definition box to select all heifer calves. In the Logical Operator box, click the Hot button and select "And". In the Field name box on the second row, select "Marked?" In the Relational Operator box confirm that the selection is "Equals". In the Definition box confirm that the selection is "Yes". This will select only marked calves (marked to meet the MPPA/birth weight ratio criteria). In the Logical Operator box, click the Hot button and select "And". In the Field name box on the third row, select "Cohort Start Date" In the Relational Operator box confirm that the selection is "Equals". In the Definition box type 4-1-2001 to select only calves born in 2001. Click the Save button, and then click the OK button. Give your table a name.
3. Cow Sense will provide a new table with all heifer calves born in 2001 whose dams have met the criteria of an MPPA = 100 and Average Calf Birth Weight Ratio of <100 pounds.
4. Print the report to take to the field.

Chapter 6: The Finance Menu

With the Finance option, Cow Sense can help you track cost of production and determine a break-even price for your operation, which will vary from year to year based on your input costs and the pounds weaned per cow exposed. You can also keep track of cattle sales and analyze marketing methods in the Finance option.

SALES

SALE RECORD ENTRY

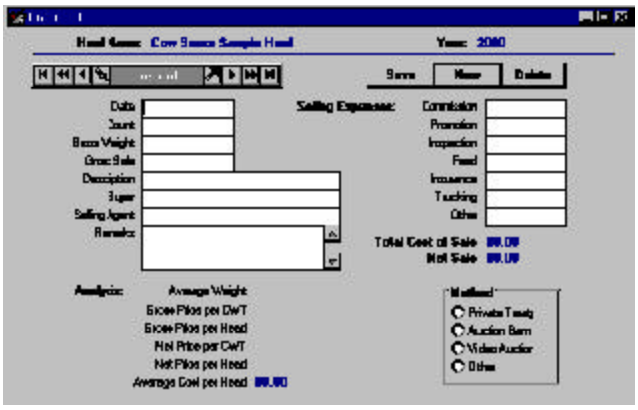


FIGURE 6-1.
THE SALE RECORD ENTRY WINDOW.

The Enter Sales window is primarily for keeping track of group sales to sale barns, feedlots and packing houses (for retained ownership) but you can also use it for individual animals. Cow Sense does not link the Sale Record Entry to individual animal records. You can manually record individual animal sale information in individual animal records by using the Disposal Code fields and sale fields in the Supplemental forms (see Chapter 4).

To access the Enter Sales window, select **Finance > Sales > Sale Record Entry** from the main menu bar. The Enter Sales window will appear (see Figure 6-1). In order to create a new sale record, first you must click the New button (if you fail to click the New button you will only be editing the current open record). Then start by entering a sale date. Use the date on a sale invoice. Cow Sense will calculate average weights, prices and selling costs. If you have different classes of cattle on one invoice, it is best to enter the classes in separate Enter Sales records so that your information is more useful for analysis. If you sell individual animals, you can keep track of individual sales in the Remarks field of each animal's record.

NOTE: THE SALES FUNCTION IN COW SENSE IS NOT THE SAME AS MIDWEST MICRO-SYSTEMS' STAND-ALONE SALE MANAGER PROGRAM. IF YOU WANT TO TRACK INDIVIDUAL ANIMAL SALES AND BUYERS, YOU MAY WANT TO CONSIDER SALE MANAGER AS A COMPANION PROGRAM TO COW SENSE. TO REVIEW A TRIAL COPY OF SALE MANAGER, SELECT **FILE > LAUNCH SALE MANAGER** FROM THE MAIN MENU BAR.

SALE RECORD REPORT

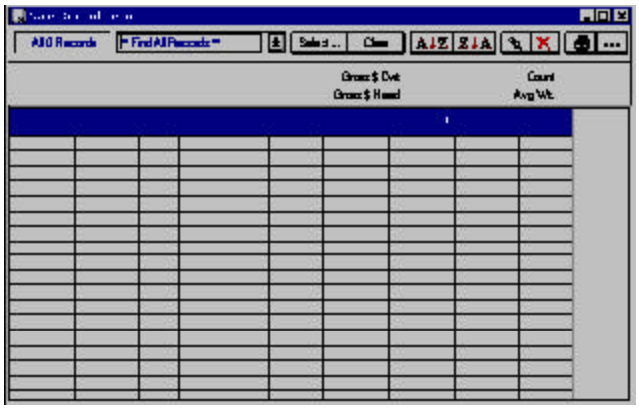


FIGURE 6-2.
THE SALE RECORD REPORT WINDOW.

The Cow Sense Sale Record Report provides sale information across production years for a herd in order for you to analyze marketing methods and price patterns. The information in the report includes the date of all sales (across production years or based on a query), the net price per hundredweight, the number of animals sold at each date (count), a description of each sale, the average weight of each sale, the gross sale, gross price per hundred weight and gross price per head. It also lists an average for average weight, count, gross price per hundred weight and gross price per head for all animals in a herd or query. The information is based on data you enter using the Enter Sales window.

To access the Sale Record Report, select **Finance > Sales > Sale Record Report** from the main menu bar. Cow Sense will display the Sale Record Report window (see Figure 6-2), listing all the sales you've entered into the program.

TIP: FOR MORE DETAILED INSTRUCTIONS ON USING QUERY FUNCTIONS AND FOR AN EXPLANATION OF THE REPORT WINDOW TOOLS, INCLUDING THE PRINTING TOOLS, SEE CHAPTER 5.

You can track sale trends based on different queries. If, for example, you want to look at sales information in a given production year, use a query option by clicking the Select… button in the Sale Record Report window and Cow Sense will display a Select…for: window. If you want to select a specific year, for example, click the Hot button on the Field Name box and scroll through until you click the "Date" column. Cow Sense will then display boxes to enter a relational operator; click the "Is Greater Than" operator. Then enter a date in the Description (such as 12/31/2001) and click the logical operator "And" in the next field. In the Field Name box on the second row, select "Date" again from the list. Select the relational operator "Is Less Than" and enter a date in the next field (such as 01/01/2003). Then click the OK button to start the search. Cow Sense will display all sales between the two dates (January 1 to December 31, 2002, in this example).

Click the Clear Find or Clear Sort button to reset query criteria. Click the Save button to save the query criteria you established. To call up a criteria you've saved, click the Hot button on the right side of the Saved Selection box (box A in Figure 5-1) of the Sales Record Report window and select the saved query you established. To clear the query and find all records, click the Clear button.

For complete instructions on running queries, refer to Chapter 5.

To arrange columns in a different order, place your cursor over the title of the column (for example, Bull ID). Hold down the left mouse button. The cursor will change from the standard Windows arrow to a two-pronged arrow, and the entire column will highlight. Drag the two-pronged arrow cursor right or left to move the column to the desired location. You will see the column move as you drag it. Release the left mouse button to lock in the column's new location. Cow Sense will preserve the column order you specify when you save your custom report.

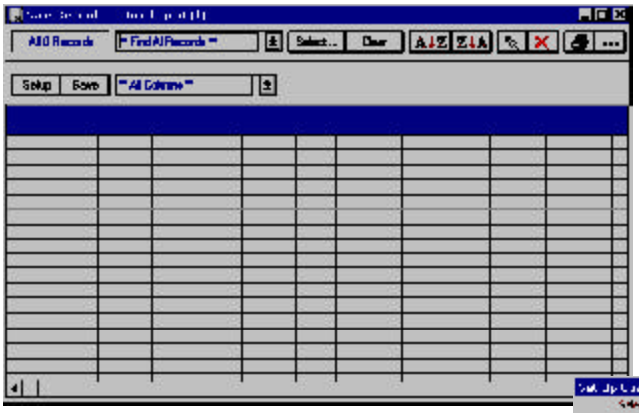
To print the Sale Record Report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

CUSTOM SALE REPORTING

The Sale Record: Custom Report window starts with every available Sale Record data field in Cow Sense. You then decide which fields you want in your report.

To design the Sale Record: Custom Report, select **Finance > Sales > Custom Sale Reporting** from the main menu bar. Cow Sense will display all data fields relating to the Enter Sales window (see Figure 6-3). Click the Setup button to select which fields you want in your report. A Set Up Custom Report window will appear showing a list of all the sale data columns available (see Figure 6-4).

Select which columns you want in your report by clicking the YES radio button on that field listing (or press "Y" on your keyboard) if you want that information or the NO radio button (or "N" on your keyboard) if you don't. If you only want a few columns in your report, click the All 'No' tab and then click the YES button for the fields you want. If you want most of the available columns, click the All 'Yes' tab and then click the NO button to select the columns you don't want. If you want to reverse your selection, click the Switch tab. When you're finished making your selection, click the Done tab and Cow Sense will display a Sale Record Custom Report window. If you want to save a custom report, click the Save button in the Sale Record



FIGURES 6-3 AND 6-4. THE CUSTOM SALE REPORTING WINDOW AND THE SET UP CUSTOM REPORT WINDOW.

Custom Report window. Cow Sense will display a Name Custom Report window (see Figure 6-5). Enter the name of the custom report and click the OK button. To retrieve a custom report that you saved previously, click the Hot button in the Saved Selections box (box A in Figure 5-1) and Cow Sense will display a drop-down list of all the saved custom reports. Scroll through the list to find the report you want.

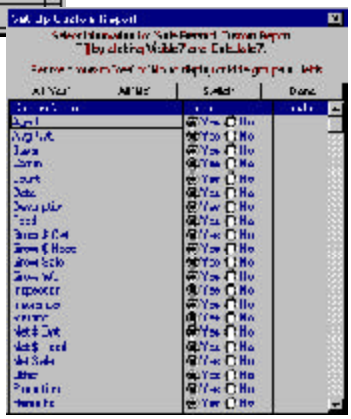


FIGURE 6-5. THE NAME CUSTOM REPORT BOX.

As with the other reports, you can select a certain set of sales events using the query features available when you click the Select button.

To arrange columns in a different order, place your cursor over the title of the column (for example, Bull ID). Hold down the left mouse button. The cursor will change from the standard Windows arrow to a two-pronged arrow, and the entire column will highlight. Drag the two-pronged arrow cursor right or left to move the column to the desired location. You will see the column move as you drag it. Release the left mouse button to lock in the column's new location. Cow Sense will preserve the column order you specify when you save your custom report.

To print the Sale Record: Custom Report, click the Printer icon button. If you want to add a subtitle to the printed report, click the Title […] button.

COSTS

COST OF PRODUCTION

The Cost of Production option is a tool for commercial cattlemen to use in calculating a break-even price estimate for calves, expressed as the cost per pound produced at weaning (averaged for steers and heifers). This option is not available in the Lite mode of Cow Sense.

In order to figure the break-even, Cow Sense relies on the annualized operating cost per cow and the pounds produced at weaning per production cycle, and bases both measures on the number of cows exposed to breeding (both A.I. and natural cover). However, when Cow Sense calculates the cost per exposed cow, it assumes that open cows (based on pregnancy evaluation) were not wintered and do not have hay, winter grazing, supplement or processing charged against them.

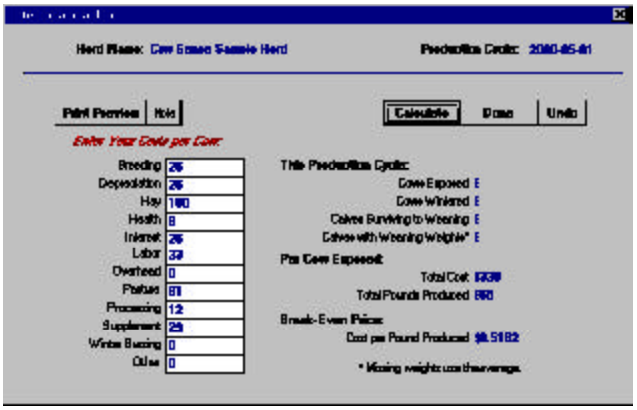


FIGURE 6-6. THE ENTER COST OF PRODUCTION WINDOW. WHEN YOU ENTER VALUES, COW SENSE WILL CALCULATE A BREAK-EVEN PRICE FOR YOU.

To obtain the cost of production, select **Finance > Cost > Cost of Production** from the main menu bar. Cow Sense will display an Enter Financial Data window (see Figure 6-6). The window provides fields for you to enter the costs per cow for breeding, depreciation, hay, health, interest, labor, overhead, pasture, processing, supplement, winter grazing and other. Cow Sense will automatically provide data for the number of cows exposed, the number of cows wintered, the number of calves that survived through weaning and the number of calves with weaning weights. Click the Calculate button for Cow Sense to calculate the Total Cost Per Cow Exposed, the Total Pounds Produced Per Cow Exposed and the Cost Per Pound Produced, (the Break-Even Price). The Total Cost Per Cow Exposed will not equal the sum of the costs you entered because it is adjusted for open cows that you do not winter. The Break-Even Price is an average for all weight classes of both steer and heifer calves.

You can change the production costs at any time. If you make a data entry error at any time before you click the Done button, click the Undo button and Cow Sense will clear the screen for you to re-enter information

To create a printed Herd Financial Summary from the Cost of Production calculations, click the Print Preview button. An on-screen Herd Financial Summary will appear. Click the Printer icon button to print the report to paper.

When you've finished creating or examining the Enter Financial Data window, click the Done button.

Entering Costs Per Cow

The cost-per-cow categories are general and you may have to do some in-depth figuring in a separate spreadsheet or using a calculator to complete this analysis. If you don't have exact figures, use an estimate for a production costs, rather than ignoring them, to approximate a more accurate outcome.

Use the following guidelines for calculating expenses associated with the categories in the Enter Financial Data window.

- *Breeding*. These are costs associated with AI or natural service, averaged over the number of cows exposed. Include labor, semen, synchronization aids, semen testing, bull depreciation, and the annual cost of keeping a bull.
- *Depreciation*. This figure is not what you put on your tax statements, but what it actually costs you to replace a cow and maintain your herd size. The cost is straightforward if you buy replacements. If you raise your own replacements, include the value of the heifer calf you didn't sell, and all the costs of getting her to her first calving.
- *Hay*. This means all harvested roughage used to winter cows. Include both the cost of purchased hay and the value of hay you produce and could otherwise sell.
- *Health*. This refers to any medicines or veterinary expenses for treating diseases or calving problems for cows, calves, or bulls.
- Interest. If you do not owe borrowed money in your operation, you have your own capital invested in it. The banker expects a return on his money, and you should too. Include both of these capital costs, interest you pay and return on your investment in cattle, land, and equipment.

- *Labor*. Like interest, you should include both the direct costs of hired labor and a return for your own work.
- *Overhead*. This figure should include all your fixed costs associated with keeping a place for your cows and taking care of them. Building repairs, fence repairs, supplies, fuel and maintenance on ranch equipment and pickups, and feed and depreciation for horses are some examples. If your operation involves other enterprises besides cows, do your best to allocate only the cows' share of overhead expenses here.
- *Pasture*. Include the value of your own pasture in addition to rented land. Value your own pasture at what you could earn by leasing it out for grazing. This is your "opportunity cost".
- *Processing*. Include all the routine treatments for cows and calves, such as vaccinations, parasite control, ID tags, pregnancy evaluations, and dinner for the branding crew! But do not double enter expenses that you recorded in the Treatments data entry window (see Chapter 4).
- *Supplement*. Supplements are the concentrates you use to provide protein or energy in the winter, and minerals year around.
- *Winter grazing*. Winter grazing is like summer pasture. Enter an opportunity cost for grazing your own land in addition to any rent payments.
- *Other*. This is a catch all for such costs that might include information services (such as internet and DTN™) advertising or other marketing costs and any other costs you didn't include in the previous categories.

Chapter 7: The Maintenance Menu

Cow Sense Maintenance is the option you use to define unique circumstances regarding your operation and to keep your herd files up to date.

CURRENT CYCLE

Cow Sense operates in the same fashion as cow herds—on a cycle. Different events or the conclusion of a phase of a cycle spur you to the next phase. Each time you complete a phase of calf data entry, you must update the files in order for Cow Sense to make calculations and compile information for cow and bull records. You do this in the Current Cycle option of the Maintenance drop-down menu.

NOTE: IF YOU DON'T HAVE A CALF HISTORY CODE IN EVERY CALF RECORD, COW SENSE WILL NOT LET YOU RUN THE CALVING UPDATE.

CALVING UPDATE

After you've finished entering calf data from the calving season using the **Enter Data > Calves > Calving** option, you'll need to run the Calving Update to transfer statistical information to cow and bull records and to prepare calf records for weaning data. When you run the Calving Update, Cow Sense will:

- calculate adjusted birth weights and adjusted birth weight ratios (EZ-75, Commercial and Purebred modes),
- transfer calving data to the parent cow and bull files,
- calculate average performance measures for each cow and bull based on all their progeny.

TIP: IF YOU WANT TO ADD CALF DATA AFTER YOU HAVE RUN THE CALVING UPDATE, YOU CAN USE THE **ENTER DATA > CALVES > CALF TABULAR ENTRY** OPTION AND AVOID HAVING TO RERUN THE CALVING UPDATE.

In the EZ-75, Commercial and Purebred modes, you must have selected the Use Birth Weights option in the Entry Options form under **Maintenance > Administration > Setup** in order to calculate adjusted birth weights and ratios. If you have that option turned off, Cow Sense will warn you when you ask it to proceed with the Calving Update. You can run the Calving Update at any time, but you'll have to rerun the update if you enter data in the **Enter Data > Calves > Calving** option or if you add a calf record using the **Enter Data > Cows > Post Cow** option after you've run the Calving Update. Therefore, it is most efficient to complete all calving data entry before running the Calving Update.

FIGURE 7-1. THE CALVING UPDATE WINDOW.

NOTE: ADJUSTED BIRTH WEIGHT ACCOUNTS FOR DIFFERENCES IN AGE OF DAM AND CALF SEX. DO NOT USE THESE CRITERIA TO SET UP YOUR CALF GROUPS. IF YOU CHOOSE NOT TO TAKE ANY BIRTH WEIGHTS, UNCHECK THE BIRTH WEIGHT OPTION IN **MAINTENANCE > ADMINISTRATION > SETUP** (SEE ADMINISTRATION LATER IN THIS CHAPTER) AND COW SENSE WILL NOT LOOK FOR MISSING BIRTH WEIGHTS.

To run the Calving Update, select **Maintenance > Current Cycle > Calving Update** from the main menu bar. Cow Sense will display a Calving Update window (see Figure 7-1) and ask you if you want to ratio your calves all together or in separate groups. If you ratio them all together, Cow Sense will compare each calf with the average weight of all your calves. Use this option if you have *not* identified Calf Groups for management practices that could affect the calf weight (see Chapter 4, **Enter Data > Define Groups (Calves)**). If you ratio them as separate groups, Cow Sense will compare each calf with the average weight of the calves in its Calf Group. Cow Sense will ratio together all calves not assigned to a Calf Group. Use this option if the Calf Group you defined identifies management practices that affect calf weight. This is not a likely consideration for birth weight, but it should be for weaning weight.

Cow Sense will proceed with the Calving Update after you specify your choice of ratio options. If Cow Sense finds missing weight data for live calves, it will interrupt the procedure and display a list of the calves with missing data. You can either click the Cancel button to abort the operation and enter the weight data or you can click the Continue button and Cow Sense will ignore those calves in its ratio calculations. You can view an error log if you need to go back and update calf weight records. If you save the Error List, you can open it in a text editor such as Microsoft's WordPad or NotePad and print it. Cow Sense will prompt you if it encounters any problems with the Calving Update. If you cancel the Calving Update, Cow Sense will leave your records unchanged.

Once you complete the Calving Update, you can enter weaning information in the EZ-75, Commercial and Purebred modes; the Lite mode does not contain fields for entering weaning and yearling information.

WEANING UPDATE

After you've run the Calving Update and you have entered weaning data using the **Enter Data > Calves > Weaning** option, you'll need to run the Weaning Update to transfer statistical information to cow and bull records for weaning performance analysis and to prepare calf records for yearling data. When you run the Weaning Update, Cow Sense will:

- calculate adjusted weaning weights and adjusted weaning weight ratios,
- transfer weaning data to the parent cow and bull files,
- calculate average performance measures for each cow and bull based on all their calves.

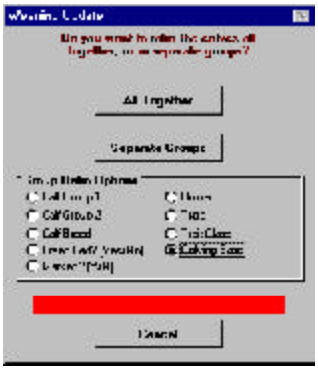


FIGURE 7-2. THE WEANING UPDATE WINDOW.

NOTE: ADJUSTED WEANING WEIGHT ACCOUNTS FOR DIFFERENCES IN AGE OF DAM AND CALF SEX. DO NOT USE THESE CRITERIA TO SET UP YOUR CALF GROUPS.

You can run the Weaning Update at any time after you've run the Calving Update, but you'll have to rerun the update if you enter data in the **Enter Data > Calves > Calving** or **Weaning** options or if you add a calf record using the **Enter Data > Cows > Post Cow** option after you've run the Calving Update or the Weaning Update. Therefore, it is most efficient to complete all calving and weaning data entry before running the Weaning Update.

To run the Weaning Update, select **Maintenance > Current Cycle > Weaning Update** from the main menu bar. Cow Sense will display a Weaning Update window (see Figure 7-2) and ask you if you want to ratio your weanlings all together or in separate groups. If you ratio them all together, Cow Sense will compare each weanling with the average weight of all your weanlings. Use this option if you have *not* identified Calf Groups for management practices, such as creep feeding or pasture assignments, that could affect the weight gain performance (see Chapter 4, **Enter Data > Define Groups (Calves)**) . Cow Sense will ratio together all weanlings not assigned to a Calf Group. If you ratio them as separate groups, Cow Sense will compare each weanling with the average weight of the weanlings in its Calf Group. Use this option if the Calf Group you defined identifies management practices that affect weight gain performance.

Cow Sense will proceed with the Weaning Update after you specify your choice of ratio options. If Cow Sense finds missing weight data for live weanlings, it will interrupt the procedure and display a list of the weanlings with missing data. You can either click the Cancel button to abort the operation and enter the weight data or you can click the Continue button and Cow Sense will ignore those animals in its ratio calculations. You can view an error log if you need to go back and update calf weight records. If you save the Error List, you can open it in a text editor such as Microsoft's WordPad or NotePad and print it. Cow Sense will prompt you if it encounters any problems with the Weaning Update. If you cancel the Weaning Update, Cow Sense will leave your records unchanged.

Once you complete the Weaning Update, you can enter yearling information in the EZ-75, Commercial and Purebred modes; the Lite mode does not contain fields for entering weaning and yearling information.

YEARLING UPDATE

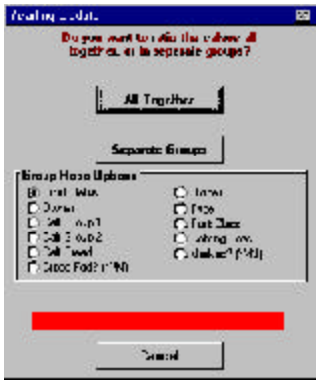


FIGURE 7-3. THE YEARLING UPDATE WINDOW.

After you've run the Weaning Update and you have entered yearling data using the **Enter Data > Calves > Yearling** option, you'll need to run the Yearling Update to transfer statistical information to cow and bull records for yearling performance analysis. When you run the Yearling Update, Cow Sense will:

- calculate adjusted yearling weights and adjusted yearling weight ratios,
- transfer yearling data to the parent cow and bull files,
- calculate average performance measures for each cow and bull based on all their calves.

TIP: COW SENSE WILL NOT ALLOW YOU TO RUN NEW CYCLE (EZ-75, COMMERCIAL AND PUREBRED MODES) FOR A NEW PRODUCTION YEAR UNTIL YOU RUN THE YEARLING UPDATE, UNLESS YOU'VE OPTED NOT TO COLLECT YEARLING WEIGHTS BY UNCHECKING THE YEARLING OPTION IN THE **MAINTENANCE > ADMINISTRATION > SETUP** OPTION (SEE ADMINISTRATION LATER IN THIS CHAPTER).

You must have selected the Use Yearling Weights option in the Entry Options form under **Maintenance > Administration > Setup** in order to collect yearling weights. If you have that option turned off, Cow Sense will warn you when you ask it to proceed with the Yearling Update. You can run the Yearling Update at any time after you've run the Calving and Weaning Updates, but you'll have to rerun the update if you enter data in the **Enter Data > Calves > Calving**, **Weaning** or **Yearling** options or if you add a calf record using the **Enter Data > Cows > Post Cow** option after you've run the Yearling Update. Therefore, it is most efficient to complete all calving, weaning and yearling data entry before running the Yearling Update.

To run the Yearling Update, select **Maintenance > Current Cycle > Yearling Update** from the main menu bar. Cow Sense will display a Yearling Update window (see Figure 7-3) and ask you if you want to ratio your yearlings all together or in separate groups. If you ratio them all together, Cow Sense will compare each yearling with the average weight of all your yearlings. Use this option if you have not identified Yearling Groups for management practices that could affect the yearling weight (see Chapter 4, **Enter Data > Define Groups (Yearlings)**). Cow Sense will ratio together all yearlings not assigned to a Yearling Group. If you ratio them as separate groups, Cow Sense will compare each yearling with the average weight of

the yearlings in its Yearling Group. Use this option if the Yearling Group you defined identifies management practices that affect yearling weight

Cow Sense will proceed with the Yearling Update after you specify your choice of ratio options. If Cow Sense finds missing weight data for live yearlings, it will interrupt the procedure and display a list of the yearlings with missing data. You can either click the Cancel button to abort the operation and enter the weight data or you can click the Continue button and Cow Sense will ignore those yearlings in its ratio calculations. Cow Sense will prompt you if it encounters any problems with the Yearling Update. If you cancel the Yearling Update, Cow Sense will leave your records unchanged.

NOTE: ADJUSTED YEARLING WEIGHT ACCOUNTS FOR DIFFERENCES IN AGE AND CALF SEX. DO NOT USE THESE CRITERIA TO SET UP YOUR YEARLING GROUPS UNLESS YOU GROUP YEARLINGS SEPERATELY BY SEX AND MANAGE THEM DIFFERENTLY. IF YOU CHOSE NOT TO TAKE ANY YEARLING WEIGHTS, UNCHECK THE YEARLING WEIGHT OPTION IN MAINTENANCE > ADMINISTRATION > SETUP (SEE ADMINISTRATION LATER IN THIS CHAPTER) AND COW SENSE WILL NOT LOOK FOR MISSING YEARLING WEIGHTS.

CLOSEOUT UPDATE

In the Commercial and Purebred modes only, the Closeout Update is a powerful tool for evaluating the carcass and feedlot performance of cow and bull offspring. When you run the Closeout Update, Cow Sense will transfer carcass and feedlot statistical information to cow and bull records, and finish closing out the production cycle. You must collect and enter carcass and feeding data into the calf records using the **Enter Data > Calves > Supplemental** option or import these data using the **Utilities > Transfer Data > Import > Import Tools** or the **Utilities > Transfer Data > Premium Interface Component** (see Chapter 8) in order for Cow Sense to transfer data to the parent files. Use custom reports for cows or bulls to analyze or report aggregate carcass or feeding information stored in the parent records (refer to Chapter 5 for more information on using Custom Reports).

You must first run the Calving, Weaning and Yearling Updates in order to run the Closeout Update. You can run the Closeout Update at any time, after you've run the Calving, Weaning and Yearling Updates, but you'll have to rerun the update if you enter data in the **Enter Data > Calves > Calving**, **Weaning**, **Yearling**, or **Supplemental** options. Therefore, it is most efficient to complete all data entry before running the Closeout Update.

FIGURE 7-4. THE CLOSEOUT UPDATE WINDOW.

To run the Closeout Update, select **Maintenance > Current Cycle > Closeout Update** from the main menu bar. Cow Sense will display a warning message if you still need up run the Calving, Weaning, and/or Yearling Updates. If you have run all previous updates,

Cow Sense will display a Closeout Production Cycle window (see Figure 7-4). Click the Closeout Feeding/Carcass button to continue. After Cow Sense has finished running the Closeout Production Cycle routine, click the Exit button.

LOCK CYCLE

FIGURES 7-5 AND 7-6. THE LOCK PRODUCTION CYCLE WINDOW AND LOCKING PRODUCTION CYCLE WARNING BOX.

Use this option to lock the current production cycle (identifiable in the Current Production Cycle Open box on the main menu bar — M in Figure 1-4). Locking the current production cycle prevents you from mistakenly editing calf records or rerunning updates. To lock a production cycle, select **Maintenance > Current Cycle >Lock Cycle** from the main menu bar. Cow Sense will display a Lock Production Cycle window (see Figure 7-5) To proceed, click the Lock Cycle button. Cow Sense will display a Locking Production Cycle warning box defining this option (see Figure 7-6). Click the Yes button to proceed.

TIP: YOU SHOULD KEEP HISTORICAL PRODUCTION CYCLES LOCKED WHEN YOU RUN UPDATES IN THE CURRENT PRODUCTION CYCLE IN ORDER TO AVOID POSSIBLY CHANGING DATA CALCULATIONS IN THE PREVIOUS CYCLES.

You can unlock a locked production cycle on the **Maintenance > Administration > Setup** Production Cycles form.

NEW CYCLE

Cow Sense is built around the natural production cycle of a cow herd. You should enter a production cycle date for a new cycle to coincide with date you expect the first calf birth. The cows that you transfer in to or add to a production cycle remain in Cow Sense for the entire cycle, even if you ship open or problem cows before the cycle is complete. That way your reports accurately reflect the productivity of your whole herd.

Every time you establish a new cycle, the calf records from the previous cycle remain in Cow Sense so that you can refer to them for historical analysis. You can access any production cycle at any time, and essential steps you take in one cycle do not limit your work in another. This feature allows you to run multiple calving seasons while preserving the analytic integrity of contemporary groups.

A new cycle marks the beginning of a new production cycle, which becomes the "current" production cycle.

Cow Sense goes through a series of steps to create a new production cycle and prepare your files for new calf records. The program will make the computations, but you have to bring your herd inventory up to date. First, you must add replacement animals, either from within the herd or from outside sources. Next, you must dispose of "gone" cow and bull records. Finally you need to back up the current production cycle records. Then you will be ready to create a new production cycle.

NOTE: IF YOU HAVE ENTERED BREEDING DATA IN THE PRODUCTION CYCLE PREVIOUS TO THE NEW CYCLE YOU'RE CREATING, COW SENSE WILL CONVERT THE BREEDING DATA INTO THE CALVING RECORD WHEN YOU EXECUTE THE RUN NEW CYCLE COMMAND.

REPLACEMENTS

You have two sources for replacements: those from within your herd and those from outside your herd. Cow Sense handles the two replacement methods differently. Cow Sense initially assumes you will add all your replacements BEFORE you establish a new production cycle with the Run New Cycle command. If you add heifers or cows after you establish a new production cycle, you will need to use the **Enter Data > Cows > Post Cows** option (see Chapter 4) in order to create a calf record for the new cow(s) or heifer(s).

Adding Animals from an Outside Source

If you add replacements from outside your herd, you will create records using the **Enter Data > Bulls > Enter Bulls** option for adding bulls or the **Enter Data > Cows > Enter Cows** option for adding cows or heifers (see Chapter 4).

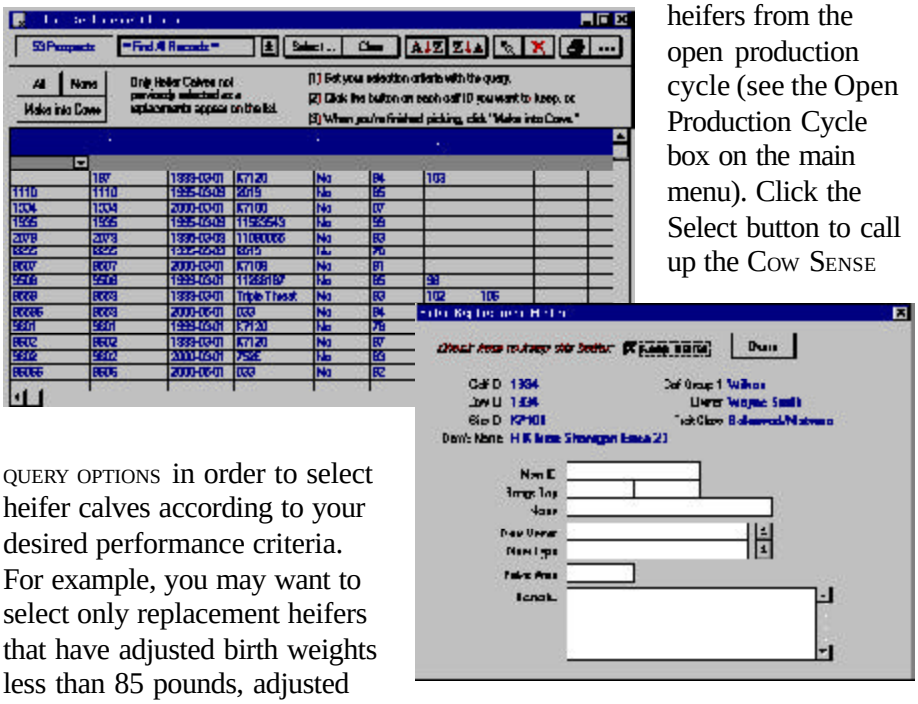
Adding Animals from Within Your Herd

When you promote heifers and bulls from within your herd, you can create breeding stock records in the **Maintenance > New Cycle > Replacements** option, and Cow Sense will automatically establish cow or bull records from calf records you select using a promotion routine. This process does not change each animals calf record; it preserves each calf record and adds cow and bull records for promoted animals.

NOTE: SEE CHAPTER 5 TO LEARN HOW TO SELECT AND SORT ANIMALS USING THE QUERY FUNCTIONS.

Heifer Calves

To promote heifer calf records to cow records, select **Maintenance > New Cycle > Replacements > Heifers** from the main menu bar. Cow Sense will display warning box. Click the Continue button to proceed. Cow Sense will display a Select Replacement Heifers window (see Figure 7-7), which will list all the heifer calves available for promotion. Select **This Production Cycle** from Saved Selection Box (item A in Figure 5-1) to select



FIGURES 7-7 AND 7-8. THE SELECT REPLACEMENT HEIFERS WINDOW AND THE ENTER REPLACEMENT HEIFER WINDOW THAT YOU USE TO PROMOTE HEIFER CALVES WITHIN YOUR HERD TO BREEDING STOCK.

heifers from the open production cycle (see the Open Production Cycle box on the main menu). Click the Select button to call up the COW SENSE QUERY OPTIONS in order to select heifer calves according to your desired performance criteria. For example, you may want to select only replacement heifers that have adjusted birth weights less than 85 pounds, adjusted 205-day weights greater than 550 pounds, and pelvic areas greater than 180 cm^2.

TIP: IF YOU USE COW SENSE LITE AND YOU WANT TO KEEP PELVIC AREA MEASUREMENTS, YOU MUST ENTER THE DATA IN THE SELECT REPLACEMENT HEIFERS WINDOW BECAUSE YOU DON'T HAVE AN ENTER CALVES [YEARLING] DATA ENTRY OPTION.

After you run your query and narrow the list of heifer calves, Cow Sense will display a new Select Replacement Heifers window with only the heifers meeting the query criteria. You can print this list in order to study it before you make your final replacement selections by clicking the Printer Icon button.

To select a heifer to promote, click the Hot button to the right of the her Calf ID. Cow Sense will display an Enter Replacement Heifer window for that heifer (see Figure 7-8). In that window, you can change the heifer's Calf ID to a New (cow) ID, record her Bangs Tag number, give her a Name, put her in your user-defined Cow Group(s) 1 and/or 2, record a Pelvic Area measurement, and add Remarks. If you do not change the Calf ID to a Cow ID, Cow Sense will use the Calf ID for the new cow record.

After you update any information relating to that heifer, click the Keep Heifer selection box and then click the Done button.

After you've individually selected heifer records, click the Make into Cows button in the Select Replacement Heifers window to promote those

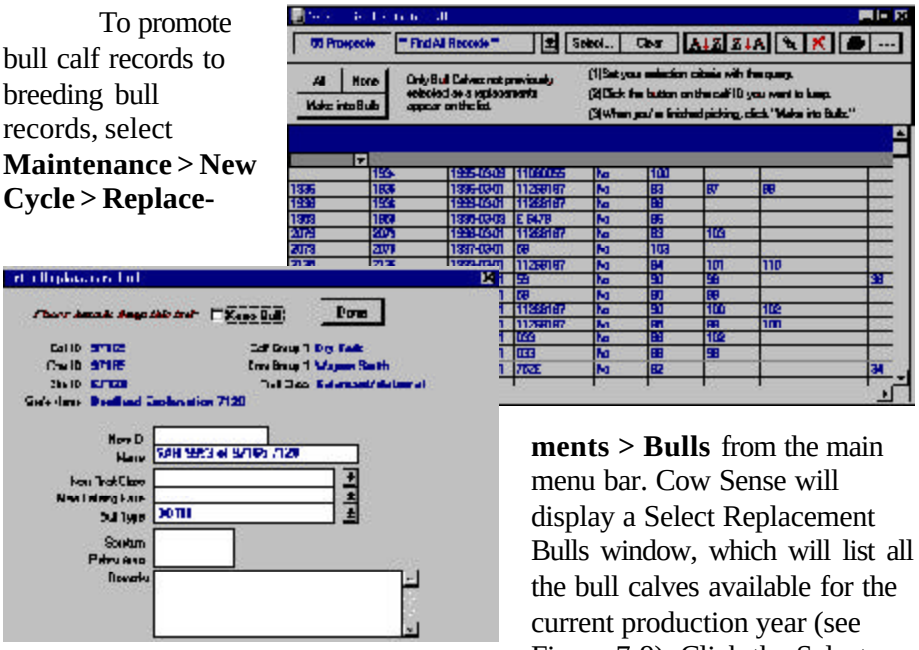
calf records to cow records. You can rerun a query prior to clicking the Make into Cows button if you want to double check your decisions before you promote your selected heifers to cows. If you change your mind on any heifer before you click the Make into Cows button, click the downward arrow to the right of the Calf ID and click on the Keep Heifer selection box to deselect it the heifer. If you change your mind after you've promoted a heifer, you'll have to delete her cow record using the Delete button in her **Enter Data > Cows > Enter Cows** window.

Any records that you don't select will remain in the Select Replacement Heifers window and you will have any opportunity promote those heifers any time. Cow Sense will only let you promote an individual once.

You can edit data in some columns of the Select Replacement Heifers window. Therefore, if you prefer, you may enter pelvic area measurements in the Select Replacement Heifers window, rather than in the Enter Calves [Yearling] window. And, in fact, if you are using Cow Sense Lite and you want to keep pelvic area measurements, you *must* enter the data in the Select Replacement Heifers window because you don't have an Enter Calves [Yearling] data entry option.

Bull Calves

To promote bull calf records to breeding bull records, select **Maintenance > New Cycle > Replacements > Bulls** from the main menu bar. Cow Sense will display a Select Replacement Bulls window, which will list all the bull calves available for the current production year (see Figure 7-9). Click the Select



FIGURES 7-9 AND 7-10. THE SELECT REPLACEMENT BULLS WINDOW AND THE ENTER REPLACEMENT BULL WINDOW THAT YOU USE TO PROMOTE BULL CALVES WITHIN YOUR HERD TO BREEDING STOCK.

NOTE: SEE CHAPTER 5 TO LEARN HOW TO SELECT AND SORT ANIMALS USING THE QUERY FUNCTIONS.

TIP: IF YOU USE COW SENSE LITE AND YOU WANT TO KEEP SCROTAL CIRCUMFERENCE AND PELVIC AREA MEASUREMENTS, YOU MUST ENTER THE DATA IN THE SELECT REPLACEMENT BULLS WINDOW BECAUSE YOU DON'T HAVE AN ENTER CALVES [YEARLING] DATA ENTRY OPTION.

button to call up the COW SENSE QUERY OPTIONS in order to select bull calves according to your desired performance criteria. For example, you may want to select only replacement bulls that have adjusted birth weights less than 90 pounds, adjusted 205-day weights greater than 605 pounds, and scrotal circumferences greater than 34 cm. Cow Sense will display the Select Calves for Replacement Bulls window (see Figure 7-9).

After you run your query and narrow the list of bull calves, Cow Sense will display a new Select Replacement Bulls window with only the bulls meeting the query criteria. You can print this list in order to study it before you make your final replacement selections by clicking the Printer icon button.

To select a bull calf to promote, click the Hot button to the right of his Calf ID. Cow Sense will display an Enter Replacement Bull window for that bull calf (see Figure 7-10). In that window, you can change the bull's Calf ID to a New (bull) ID, , give him a Name, put him in your user-defined Bull Group(s) 1 and/or 2, record Scrotum and Pelvic Area measurements, and add Remarks. If you do not change the Calf ID to a Bull ID, Cow Sense will use the Calf ID for the new bull record.

After you update any information relating to that bull, click the Keep Bull selection box and then click the Done button.

After you've individually selected bull calf records, click the Make into Bulls button in the Select Replacement Bulls window to promote those calf records to bull records. You can rerun a query prior to clicking the Make into Bulls button if you want to double check your decisions before you promote your selected bull calves to bulls. If you change your mind on any bull calf before you click the Make into Bulls button, click the Hot button to the right of the Calf ID and click on the Keep Bull selection box to deselect it the bull. If you change your mind after you've promoted a bull calf, you'll have to delete his bull record using the Delete button in his **Enter Data > Bulls > Enter Bulls** window.

Any records that you don't select will remain in the Select Replacement Bulls window and you will have any opportunity promote those bull calves any time until you create a new production cycle using the **Maintenance > New Cycle > Run New Cycle** option. Cow Sense will only let you promote an individual once.

You can edit the data in some columns of the Select Replacement Bulls window. Therefore, if you prefer, you may enter scrotal circumference

measurements in the Select Replacement Bulls window, rather than in the Enter Calves [Yearling] window. And, in fact, if you are using Cow Sense Lite and you want to keep scrotal circumference measurements, you MUST enter the data in the Select Replacement Bulls window because you don't have an Enter Calves [Yearling] data entry option.

DISPOSALS

The purpose of the **Maintenance > New Cycle > Disposals** option is to eliminate records of animals no longer in your physical herd, to free up disk space on your computer, and to make animal IDs available for reuse. When you eliminate these records, you do forfeit a complete historical perspective, so you must consider whether or not that historical account is important enough to tie up disk space and animal IDs.

NOTE: SIMPLY CHANGING THE STATUS OF THE COW OR BULL RECORD FROM ACTIVE TO GONE PREVENTS THAT ANIMAL FROM APPEARING ON AN ACTIVE ANIMAL LIST, YET PRESERVES THE INTEGRITY OF HISTORICAL INFORMATION. WHEN YOU ELIMINATE RECORDS, YOU FORFEIT A COMPLETE HISTORICAL PERSPECTIVE, SO YOU MUST CONSIDER WHETHER OR NOT THAT HISTORICAL ACCOUNT IS IMPORTANT ENOUGH TO TIE UP DISK SPACE AND ANIMAL IDS.

Considering disk space, it is important to remember that Cow Sense will maintain an unlimited number of records, but the disk space on your computer may not. You should keep at least 15 percent of your hard disk space free. If you do not, your computer will run slowly and you risk crashes and data loss. If your storage space is filling up you can delete records from Cow Sense, delete files from other programs or purchase more storage space.

As for freeing up animal IDs, you should consider that every animal in Cow Sense has a unique ID that Cow Sense won't let you use on another animal until the current animal with the ID is purged from the herd. If you would like to use an old ID on a new animal, you must eliminate the disposed animal from Cow Sense in order to use the ID.

If you are using the Purebred mode and extended pedigrees are important to you, use extreme caution regarding deleting animal records from Cow Sense, because once you delete an animal record, you also delete the pedigree associated with it. That means rekeying extended pedigrees for future progeny still in the herd.

WARNING! IF YOU ARE USING THE PUREBRED MODE AND EXTENDED PEDIGREES ARE IMPORTANT TO YOU, USE EXTREME CAUTION REGARDING DELETING ANIMAL RECORDS FROM COW SENSE, BECAUSE ONCE YOU DELETE AN ANIMAL RECORD, YOU ALSO DELETE THE PEDIGREE ASSOCIATED WITH IT. THAT MEANS REKEYING EXTENDED PEDIGREES FOR FUTURE PROGENY STILL IN THE HERD.

Use the **Maintenance > New Cycle > Disposals** option to permanently remove several cow, bull or orphan calf records from your herd database at one time. If you want to remove individual animals, you can do so each animal's Enter Data window by clicking the Delete button. See Chapter 4 for more information on deleting individuals.

COWS

In order to use this function, you must first mark the Status field in the Cow Enter Data window (**Enter Data > Cows > Enter Cows**) or the

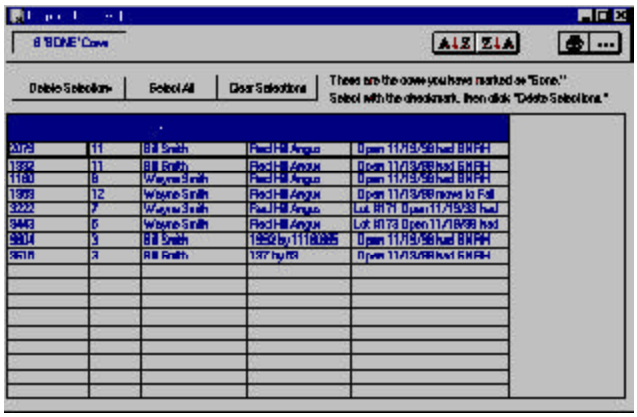
NOTE: COW SENSE WILL NOT ALLOW YOU TO DELETE COW RECORDS THAT HAVE CALF RECORDS IN THE CURRENT PRODUCTION CYCLE, EVEN IF YOU'VE MARKED THEIR STATUS AS "GONE".

Cow Individual Summary window (**Reports > Cows > Individual Summary**) with a "Gone" for all cow records you wish to remove. In the Status field you have three status options for cows.

- The first is ACTIVE. Active cows are just that—active in your herd. They are cows for which you want to maintain an active record.
- The second status option is GOING. "Going" cows are those that you want to remove from your herd in the next production cycle. They are those cows that you exposed to breeding and intended to calve, but ended up open, aborted, or suffered some other calf loss or disease for which you want to cull them from the herd after the current production cycle. By marking these cows as "Going", rather than "Gone", you can collect important breeding, health, and death loss data that will affect, among other records, Standard Production Analysis reports. These cows will appear in field forms and reports for the current production cycle. When you establish the next production cycle (**Maintenance > New Cycle > Run New Cycle**), Cow Sense will automatically mark "Going" records to "Gone" records, which will allow you to remove the animals using the **Maintenance > New Cycle > Disposals** option.
- The third status option is GONE. "Gone" cows are those that you did not expose to breeding in the current production cycle, or bred cows that you sold in the current production cycle.

Cows marked as "Gone" will appear in the Disposals [Cows] report window when you select **Maintenance > New Cycle > Disposals > Cows** from the main menu bar (see Figure 7-11). You can run a query by clicking the Select… button to be sure you have all cows marked appropriately.

FIGURES 7-11. THE DISPOSALS [COWS] WINDOW.



REMEMBER: ONCE YOU DELETE A RECORD FROM COW SENSE IT WILL NO LONGER RESIDE IN THE DATABASE.

You can select individuals from the list of cows by clicking their individual Cow IDs, or you can select all the records in the window by clicking the Select All button. Cow Sense will highlight selected cows in black. To deselect individual records, click the black-highlighted Cow IDs and Cow Sense will turn those records back to gray. To deselect all records, click the Clear Selections button. When you've selected which records to remove from Cow Sense (highlighted in black), click the Delete Selections button. Cow Sense will display two warning boxes. Click the respective OK and Yes buttons to proceed or the No button to cancel. *Once you delete the record, it will no longer be in your database*.

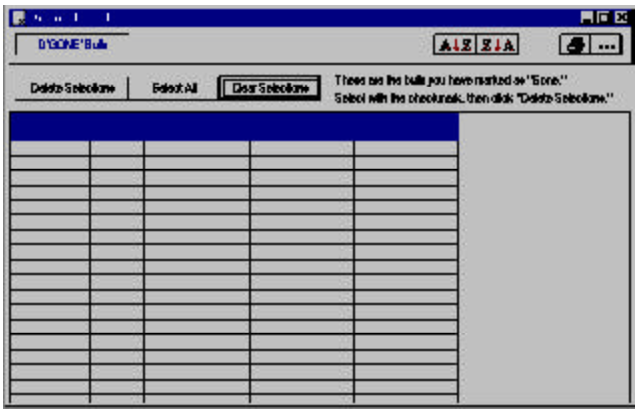
NOTE: COW SENSE WILL NOT ALLOW YOU TO DELETE ANY BULL RECORDS THAT HAVE CALF RECORDS IN THE CURRENT PRODUCTION CYCLE, EVEN IF YOU'VE MARKED THEIR STATUS AS "GONE".

Bulls

In order to use this function, you must first mark the Status field in the Bull Enter Data window (**Enter Data > Bulls > Enter Bulls**) or the Bull Individual Summary window (**Reports > Bulls > Individual Summary**) with a "Gone" for all bull records you wish to remove. In the Status field you have two status options for bulls.

- The first is ACTIVE. Active bulls are just that—active in your herd. They are bulls for which you want to maintain an active record.
- The second status option is GONE. "Gone" bulls are those you've culled from your herd, or artificial insemination bulls you no longer use.

Bulls marked as "Gone" will appear in the Disposals [Bulls] report window when you select **Maintenance > New Cycle > Disposals > Bulls** from the main menu bar (see Figure 7-12). You can run a query by clicking the Select… button to be sure you have all bulls marked appropriately.



FIGURES 7-12.
THE DISPOSALS [BULLS] WINDOW.

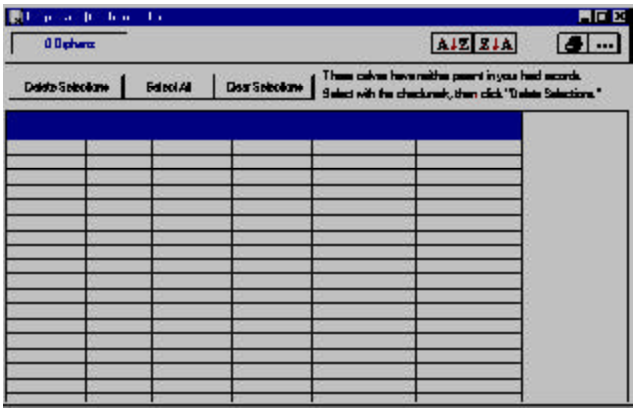
You can select individuals from the list of bulls by clicking their individual Bull IDs, or you can select all the records in the window by clicking the Select All button. Cow Sense will highlight selected bulls in black. To deselect individual records, click the black-highlighted Bull IDs and Cow Sense will turn those records back to gray. To deselect all records, click the Clear Selections button. When you've selected which records to remove from Cow Sense (highlighted in black), click the Delete Selections button. Cow Sense will display two warning boxes. Click the respective OK and Yes buttons to proceed or the No button to cancel. Once you delete the record, it will no longer be in your database.

Orphan Calves

Orphan calf records in Cow Sense are those calf records that do not have corresponding cow or bull records—in other words, neither parent record is in the system. Cow Sense orphan calves tie up both the Cow IDs and Bull IDs that belong to them, even though both parent records are gone. You cannot reassign these IDs unless you delete the corresponding "orphan calf" records.

You should routinely delete orphan calf records. Cow Sense knows which records belong to "orphans" and it will count them in your herd inventory (see **Maintenance > Administration > Inventory** later in this chapter).

To delete orphan calf records, select **Maintenance > New Cycle > Disposals > Orphan Calves** from the main menu bar. Cow Sense will display a Disposals [Orphan Calves] report window (see Figure 7-13).



FIGURES 7-13.
THE DISPOSALS [ORPHAN CALVES] WINDOW.

You can select individuals from the list of orphan calves by clicking their individual Calf IDs, or you can select all the records in the window by clicking the Select All button. Cow Sense will highlight selected calves in black. To deselect individual records, click the black-highlighted Calf IDs and Cow Sense will turn those records back to gray. To deselect all records, click the Clear Selections button. When you've selected which records to remove from Cow Sense (highlighted in black), click the Delete Selections button. Cow Sense will display two warning boxes. Click the respective OK and Yes buttons to proceed or the No button to cancel. Once you delete the record, it will no longer be in your database.

NOTE: YOU MUST RUN THE CALVING (FOR ALL VERSIONS OR MODES), WEANING AND YEARLING (COMMERCIAL AND PUREBRED) UPDATES FROM THE **MAINTENANCE > CURRENT CYCLE** OPTION BEFORE YOU CAN RUN NEW CYCLE (SEE PREVIOUS INSTRUCTIONS IN THIS CHAPTER).

RUN NEW CYCLE

The Run New Cycle command is necessary for establishing a "production cycle" in which to enter calving information. When you issue the Run New Cycle command you close out the current production cycle and prepare Cow Sense for the next production cycle. Before you establish a new production cycle, however, you should put your herd in order by taking the following steps:

1. ADD REPLACEMENTS. Add all new bred cows that you expect to calve in the upcoming production cycle. This includes all new breeding animals from on and off the ranch. To add heifers and bulls from your own stock, use the **Maintenance > New Cycle > Replacements** option (see previous instructions in this chapter). To add animals from outside your herd, use the Enter Data options for entering cows and bulls (see Chapter 4).
2. REMOVE COW AND BULL RECORDS of animals no longer in the herd. Use the **Maintenance > New Cycle > Disposals** option (see previous instructions and cautions in this chapter).
3. Delete orphan records using the **Maintenance > New Cycle > Disposals** option (see previous instructions in this chapter).
4. MAKE A BACKUP. A backup will protect you from disastrous data loss if something goes wrong.

To set up a past, present or future production cycle, first be sure the production cycle displayed in the Current Production Cycle Open box on the main tool bar (see Figure 1-4) is the production cycle you want to use as the *foundation* for the new production cycle. Select **Maintenance > New Cycle** from the main menu bar. Cow Sense will display a New Cycle Reference Date box (see Figure 7-14). Enter a starting date for the production cycle—

TIP: YOU CAN ALSO ESTABLISH PAST PRODUCTION CYCLES ON THE PRODUCTION CYCLES FORM OF THE **MAINTENANCE > ADMINISTRATION > SETUP** OPTION. USING THIS METHOD YOU WILL NOT ESTABLISH ANY CALF RECORDS, SO YOU NEED TO CREATE NEW CALF RECORDS USING THE **ENTER DATA > CALVES > TABULAR ENTRY** WINDOW AND ASSIGN THE NEW RECORDS TO THE APPROPRIATE COHORT START DATE.

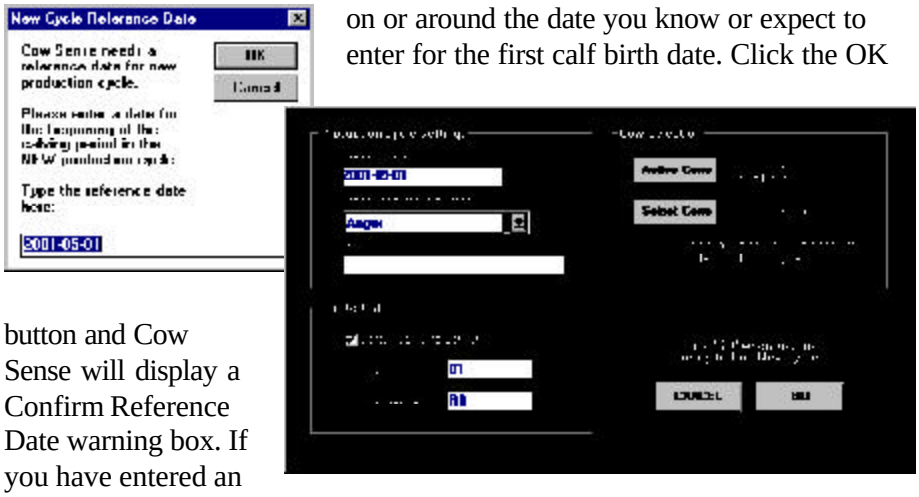


FIGURE 7-14 AND 7-15. THE NEW CYCLE REFERENCE DATE WINDOW AND THE RUN NEW CYCLE SET UP WINDOW.

on or around the date you know or expect to enter for the first calf birth date. Click the OK button and Cow Sense will display a Confirm Reference Date warning box. If you have entered an incorrect date, click the No button. If the date is correct, click the Yes button. Cow Sense will display a window for you to enter production cycle identification information (see Figure 7-15).

The date in the Process Date field is the same date you just entered in the Run New Cycle Reference date box. If you place your cursor inside the Process Date field, Cow Sense will redisplay the Run New Cycle Reference Date box. You can change the date at this point, but if the date is the same as a date in another production cycle in the open herd, Cow Sense will not let you use that date.

NOTE: COW SENSE CREATES A NEW PRODUCTION CYCLE BASED ON THE PRODUCTION CYCLE YOU HAVE OPEN WHEN YOU START THE CREATION PROCESS. THEREFORE, BE SURE THE PRODUCTION CYCLE DISPLAYED IN THE CURRENT PRODUCTION CYCLE OPEN BOX ON THE MAIN MENU TOOL BAR (SEE FIGURE 1-4) IS THE PRODUCTION CYCLE YOU WANT TO USE AS THE **FOUNDATION** FOR THE NEW PRODUCTION CYCLE.

Use the Memo field to identify the production cohort. This identification memo will appear on the drop-down list in the Production Cycle List window on the Cow Sense main tool bar (see Chapter 1).

Click on the Hot button in the Breed Spec. for Calculation field to select a breed. Cow Sense will use the breed you select here to calculate such values as adjusted weights and ratios. If your herd is a commercial herd, you should select BIF Standard or a custom breed specification that you have created.

If you mark the Default Calf ID to Cow ID box, you can enter a Calf ID prefix or suffix (such as a year value or an owner's initials in front of or behind the ID number). You do not have to enter a prefix and/or suffix. If you do not mark the Default Calf ID to Cow ID box, Cow Sense will not copy Cow ID numbers into the Calf ID field of the new cycle records.

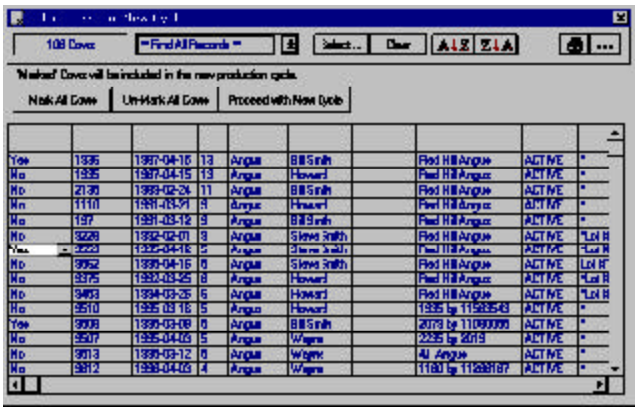


FIGURE 7-16.
THE SELECT COWS FOR NEW CYCLE WINDOW.

To include all active cows (after heifer replacements and cull disposals) for generating calf records, click the All Cows button. Otherwise, click the Select Cows button to chose specific animals for the production cycle cohort you're creating. (For example, a specific collection of cows, such as spring or fall calvers). If you click the Select Cows button, Cow Sense will display a Select Cows for New Cycle window (see Figure 7-16).

You have two methods available for selecting cow records you want to include in the new production cycle. You can use the Include in Prod Cycle? field to manually select animals by clicking on the Hot button and selecting either Yes or No from the drop-down list. You can also use the Select button. When you click the Select button, Cow Sense will display a Select Cows for New Production cycle window (see Figure 7-17) in which you can use field names and operators to define search criteria (see Chapter 5 for more information in using the query function).

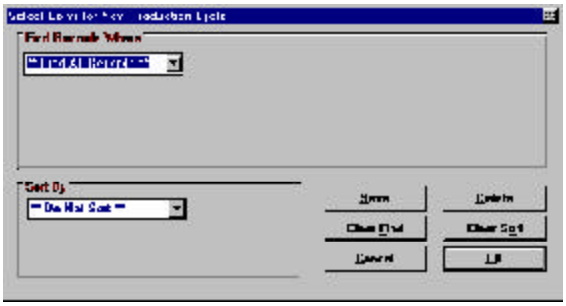


FIGURE 7-17.
THE SELECT COWS FOR NEW PRODUCTION CYCLE QUERY WINDOW.

TIP: FOR MORE DETAILED INSTRUCTIONS ON USING QUERY FUNCTIONS AND FOR AN EXPLANATION OF THE REPORT WINDOW TOOLS, INCLUDING THE PRINTING TOOLS, SEE CHAPTER 5.

Once you have selected the group of cows for which to create calf records using the Select button commands, and you are back in the Select Cows for New Cycle window, click the Mark All Cows button. If you fail to mark the records, Cow Sense will not transfer breeding data from the previous production cycle to the new production cycle you are creating.

After clicking the Mark All Cows button (if you use the Select button) or after using the Hot button to manually select animal records, click the Proceed with New Cycle button to return to the New Cycle data entry form. Cow Sense will display how many cows are selected for the new production cycle in an information box below the Select Cows button.

When you are satisfied that you have entered all pertinent information and selected the correct cows for which to transfer records, click to Go button. To abort the operation, click the Cancel button.

NOTE: SETUP OPTIONS ARE HERD-SPECIFIC. IF YOU SET UP AND MAINTAIN MORE THAN ONE HERD IN COW SENSE, YOU CAN SET THE MAINTENANCE OPTIONS DIFFERENTLY FOR EACH HERD.

ADMINISTRATION

The procedures under the administration menu selection are associated with setting up and accounting for your herd or herds.

SETUP

Use the Setup command whenever you want to initialize settings for a herd that you have just created or to change settings for an existing herd. Functions in the Setup command include:

- Enabling Cow Sense
- Setting processing parameters
- Configuring the sorting options, navigation style, and mode of operation (Lite, Commercial or Purebred)
- Creating historical production cycles

To access the setup window, select **Maintenance > Administration > Setup** from the main menu bar. The Cow Sense Set Up window will display the current version, the administrator and company names, and your unique Serial number—all information you entered when you installed Cow Sense (you cannot alter this information in Setup)—as well as the Key button that you need to click in order to open the Enable Cow Sense (see Figure 7-18). Four tabbed forms reside below this information in the Setup window: Processing, Configuration, Entry Options, and Production Cycles.

FIGURE 7-18. THE TOP PORTION OF THE COW SENSE SET UP WINDOW.

Enabling Cow Sense (the Key button)

The copy of Cow Sense you received is a full, working system, but it has a “lock” on it that identifies it as a Trial Edition and prevents you from entering information on more than five cows. Once you purchase either Lite, Commercial or Purebred, you’ll receive a “key” number from either Midwest MicroSystems or the licensed Midwest MicroSystems reseller from whom you purchased the system. You may receive a key one of two ways:

- If you purchase Cow Sense from a licensed Midwest MicroSystems reseller, he will supply you with a key activation number, which he receives from Midwest MicroSystems. Contact your licensed Midwest MicroSystems reseller after you purchase the program in order to receive the key. Your reseller will ask you for your Cow Sense serial number and registration number.
- If you purchase Cow Sense directly from Midwest MicroSystems, you may receive a key after your payment is processed (credit card orders assure a faster alternative to receiving your key than check orders). Either write to Midwest MicroSystems at 4701 Innovation Drive, Lincoln NE 68521 or at sales@midwestmicro.com, or call Midwest MicroSystems at 800-584-0040. Provide the service representative the serial number and registration number in your program in order to receive the key.

The serial and registration numbers are located in the Cow Sense Set Up window, accessible by selecting **Maintenance > Administration > Setup**.

To unlock the Trial Edition and enable your selected operating mode, select **Maintenance > Administration > Setup** from the main menu bar. In the Cow Sense Set Up window, click the Key button. An Enter Key window will appear (see Figure 7-19). Type the key number provided by Midwest MicroSystems or your licensed Midwest MicroSystems reseller in the data entry box. Click the Save button. Cow Sense will direct you to restart the program. From this point on you’ll have complete access to the operating mode of Cow Sense you purchased.

FIGURE 7-19.
THE ENTER KEY WINDOW.

Processing

The Processing form holds general herd and production cycle information. This is not where you set up cattle processing routines; to do

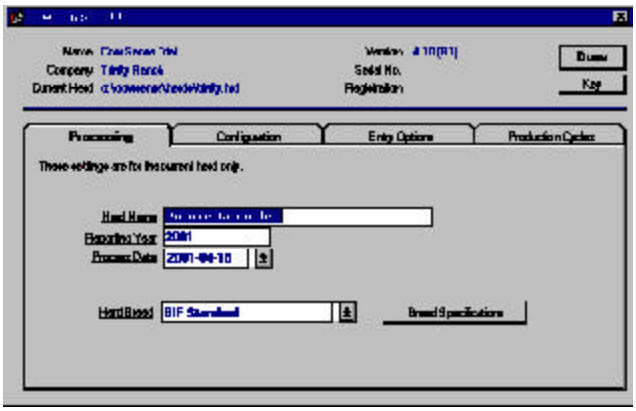


FIGURE 7-20. THE PROCESSING FORM OF THE COW SENSE SET UP WINDOW.

that, use the **Enter Data > Treatments** option (see Chapter 4). In the Processing form, Cow Sense carries over information you entered to start a new herd. You can override that information in this window (see Figure 7-20).

The Herd Name is the title that you want to appear on all printed reports. Each herd you create retains its own title.

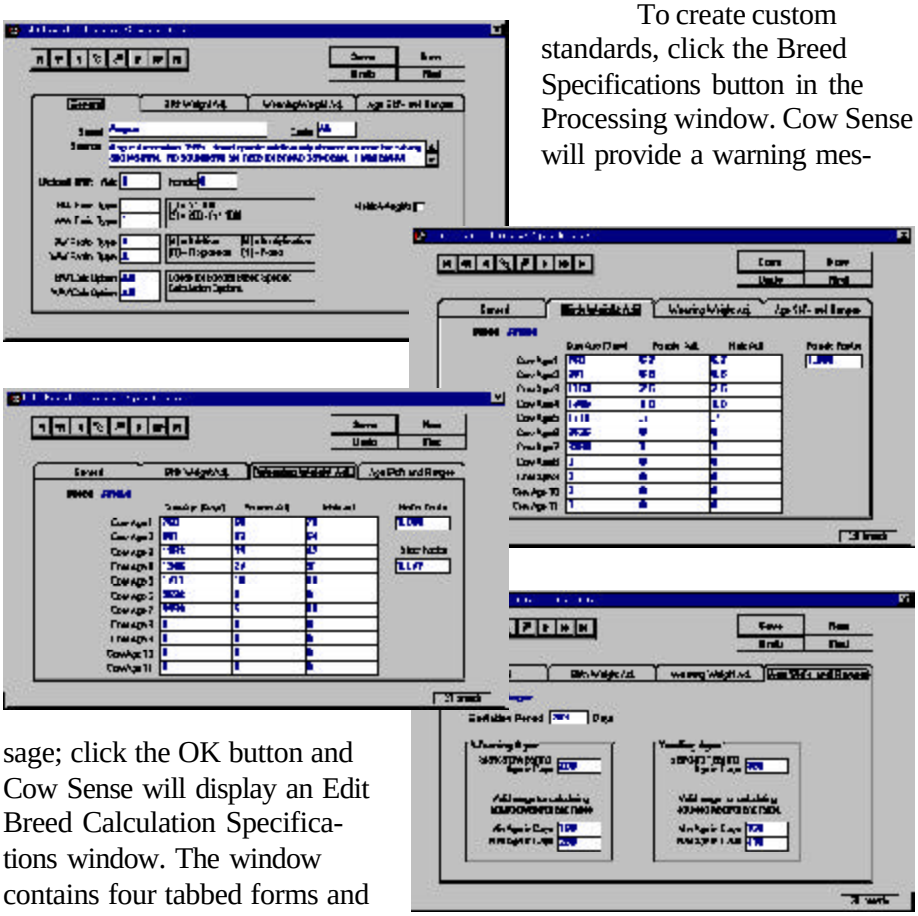
The Reporting Year is the current reporting year. The year will appear along with the report title on all your printed reports. Cow Sense automatically increments the reporting year each time you create a new cycle with the **Maintenance > New Cycle > Run New Cycle** option. You can change this value to reflect a different value.

WARNING! USE CATION WHEN YOU DEVELOP CUSTOM BREED STANDARDS. KEEP IN MIND THAT CHANGING STANDARDS WILL ALTER FUTURE ADJUSTED WEIGHT AND RATIO CALCULATIONS. IF YOU HAVE EXISTING DATA FOR THE HERD, YOU WILL NOT BE ABLE TO VALIDLY COMPARE CALCULATED VALUES AGAINST THE HISTORICAL RECORD.

The Process Date has a Hot button that you can click to retrieve all the production cycles that you have established. You should leave the Process Date blank when you're establishing a herd database because Cow Sense will prompt you for a date when you establish a new production cycle using the **Maintenance > New Cycle > Run New Cycle** option. You have a 270-day window from this date in which you can enter calf data (60 days prior to and 210 after).

Finally, the Herd Breed box allows you to set up performance criteria for herd comparison against Beef Improvement Federation standards or specific breed standards as defined by breed associations. If you are using the Lite, EZ-75 or Commercial mode of Cow Sense, you will only have a BIF standard and the ability to create custom standards from a BIF template. You cannot change the BIF or breed standards, but if you use the Commercial or Purebred mode, you can customize standards based on modifications of those values or you can add completely new standards. For example, say that you are an Angus breeder, but you don't begin calving until mid-April, which means that you want to alter your standard weaning age specifications. You can use the Angus breed specifications as a template and then alter any or all the values to comply with your specific situation.

Before you create custom standards you should define a custom "breed" by selecting **Enter Data > Define Groups > Breeds** (see Chapter 4). That way you can select your breed from the list of available options in the Breed fields of the Enter Bulls and Enter Cows windows and the Calf Breed field of the Enter Calves windows. Use caution when you develop custom breed standards. Changing standards will alter future adjusted weight and ratio calculations. If you have existing data for the herd, you will not be able to compare calculated values against the historical record.



FIGURES 7-21 – 7-24. THE FOUR FORMS OF THE EDIT BREED CALCULATION SPECIFICATIONS WINDOW.

To create custom standards, click the Breed Specifications button in the Processing window. Cow Sense will provide a warning message; click the OK button and Cow Sense will display an Edit Breed Calculation Specifications window. The window contains four tabbed forms and includes specifications for the breed or BIF standard that you are using as a template. The four forms are the General form (see Figure 7-21), The Birth Weight Adj. (adjustment) form (see Figure 7-22), the Weaning Weight Adj. (adjustment) form (see Figure 7-23) and the Age Std's (standards) and Ranges form (see Figure 7-24).

NOTE: TO ESTABLISH YOUR CUSTOMIZED BREED STANDARD, YOU MUST FIRST CLICK ON THE NEW BUTTON IN THE UPPER RIGHT HAND CORNER OF THE WINDOW.

Click the New button. Cow Sense will display a Copy Specifications from... box. Type the name of the breed specifications you wish to use as a template (for example, Angus or Barzona). (If you leave this box blank, Cow Sense will enter zero values for most of the fields). Click the OK button to transfer values from the template breed specifications to the new breed specifications.

Proceed with creating your customized breed specifications by first entering the breed name in the Breed field for the breed that you established in the Breed form of the Define Groups window (**Enter Data > Define Groups**; see Chapter 4). Proceed to the Code field by TABBING or by clicking with the mouse, and specify the breed code for the breed that you established in the Breed form of the Define Groups window (**Enter Data > Define Groups**; see Chapter 4).

Continue to the source field and subsequent data value fields by TABBING or clicking on them with the mouse. If you want to use metric, rather than Imperial values, click on the Metric Weights box. To access the three other tabbed forms, click on their respective tab with your mouse.

When you've finished making custom adjustments, click the Save button in the upper right hand corner of the Edit Breed Calculation Specifications window.

When you're finished in the Processing form, click the Done button or click the Configuration Entry Options or Production Cycles tabs to make or confirm changes in those forms.

Configuration

The options in the Configuration form (see Figure 7-25) allow you to

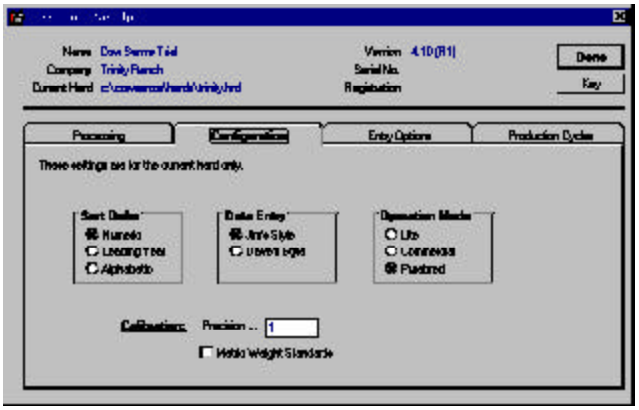


FIGURE 7-25. THE CONFIGURATION FORM OF THE COW SENSE SET UP WINDOW.

adjust the way you sort and enter data, and establish which mode (Lite, EZ-75, Commercial or Purebred) you are operating.

TIP: IF YOU USE ALPHA CHARACTERS AT THE BEGINNING OF AN IDENTIFICATION NUMBER USE LEADING ZEROS IF YOU WANT ANY NUMERIC SORT CAPABILITIES INCLUDED. OTHERWISE A NUMBER SUCH AS A3458 WILL COME AFTER A13458 (BUT A03458 WILL COME BEFORE A13458).

Sort Order

You can sort your herd three different ways in Cow Sense, depending on your identification system.

- Numeric: This option gives you a true numeric sort—you don't have to use leading zeros (for example, 0001). That means you can enter identification numbers as 1, 2, 3…10, 12, 13…100, 120, 130…and it will sort them that way, instead of sorting them as 1, 10, 100, 12, 120, 13, 130, 2, 3.
- Leading Year: This option lets you put a single year digit ahead of the ID that denotes the year of birth. Using Leading Year, Cow Sense sorts first by that digit, then numerically by ID.
- Alphabetic: This option lets you put alpha characters in your identification numbers (for example, 03487RA). You don't have to use alpha characters in your identification numbers if you use this sort. You do have to use leading zeros, however, if you want any numeric sort capabilities included. Otherwise a number such as A3458 will come after A13458 (but A03458 will come before A13458).

To change the sorting option, click on the option that best fits your operation. When you're finished in the Configuration window, click the Done button or click the Processing or Entry Options tabs to make or confirm changes in those windows.

Operation Mode

If you have Cow Sense Lite or EZ-75, you won't have an Operation Mode Box. If you have Cow Sense Commercial, you'll have three choices:

- EZ-75
- Lite
- Commercial

If you have Cow Sense Purebred, you'll have four choices:

- EZ-75
- Lite
- Commercial
- Purebred

These options allow you to set the appropriate operational mode for a given herd if you are using Cow Sense to keep records of more than one herd. To change the kind of herd you're setting up in either Cow Sense Commercial or Cow Sense Purebred, click the option that best describes the herd.

Calibration

You choice in this box lets you define to what decimal place you want to record numeric data. You type the number as an example. Therefore, if you want to carry numerals to two decimal places, you should type 1.00 as an example; if you don't want to carry decimals at all, you should type 1 as your example. This is most useful if you use metric weights and measures.

Metric Weight Standards

Finally, in the Configuration form, you have an option of using Imperial or metric weights and measures. The default selection is imperial. If you wish to use the metric system, click on the Metric Weight Standard box and confirm your choice by typing metric in the proceeding confirmation window.

When you're finished in the Configuration form, click the Done button or click the Processing, Entry Options or Production Cycles tabs to make or confirm changes in those forms.

Entry Options

The Entry Options form (see Figure 7-26) provides choices to establish certain data entry triggers and validations. The options available to you depend on the mode of Cow Sense you have. Cow Sense EZ-75 and Commercial provides all the choices available in Purebred, except the Registration option under Require Unique ID Throughout Herd. Cow Sense Lite

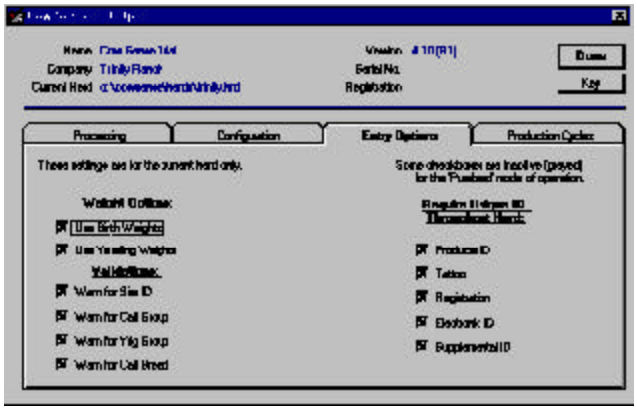


FIGURE 7-26.
THE ENTRY OPTIONS FORM OF THE COW SENSE SET UP WINDOW.

provides all the choices available in Commercial except Commercial Tattoo under Display on Data Entry Forms and Tattoo under Require Unique ID Throughout Herd. Cow Sense Lite does not provide options for using birth or yearling weights. Cow Sense Purebred gives you the following choices:

Weight Options. If you have one or both of boxes checked, Cow Sense will prompt you to enter values for birth and yearling weights. You must check the Use Birth Weights box in order to access the Calf: Birth Weights Report (see Chapter 5). You must check the Use Weaning Weights box in order to access the Enter Calves [Yearling] window (see Chapter 4), and in order to access the Calf: Yearling Weights Report (see Chapter 5).

- Use Birth Weights
- Use Yearling Weights

Validations. If you check any validations, Cow Sense will warn you when you haven't entered data in a field checked for validation.

- Warn for Sire ID
- Warn for Calf Group
- Warn for Yearling Group
- Warn for Calf Breed

Display on Data Entry Forms. The fields you select will appear in the appropriate Enter Data window(s).

- Commercial Tattoo
- Electronic ID
- Supplemental ID (for example, freeze brand)
- Castration Date

Require Unique ID. If you check any of these options you must enter a unique ID or tattoo for each animal (for example, you can't use the same ID or tattoo for a calf that you use for its dam). If you don't check these boxes, a calf can share a dam's ID. Regardless of whether or not a box is checked, however, animals in contemporary groups can never share the same ID. In other words, two cows in the same herd or two bulls in the same herd or two calves in the same production cycle cannot share the same ID.

- Producer ID
- Tattoo

- Registration
- Electronic ID
- Supplemental ID (for example, freeze brand)

When you're finished in the Entry Options form, click the Done button or click the Processing, Configuration or Production Cycles tabs to make or confirm changes in those forms.

Production Cycles

The Production Cycles form (see Figure 7-27) displays a list of production cycles that you have created for the open herd. In the Production Cycles form of the Cow Sense Set Up window, you can establish new production cycles without having to close out the current production cycle, but you will not automatically establish calf records when you use this method, and you will be forced to enter calf data using the **Enter Data > Calves > Tabular Entry** form. This is a useful method for entering historical data, but you must remember to then select each cycle as a current cycle and run all the updates in order to establish comparative historical values.

To establish a new production cycle using this method, click the New button. Cow Sense will place the cursor inside a new row of the grid and you can enter information accordingly.

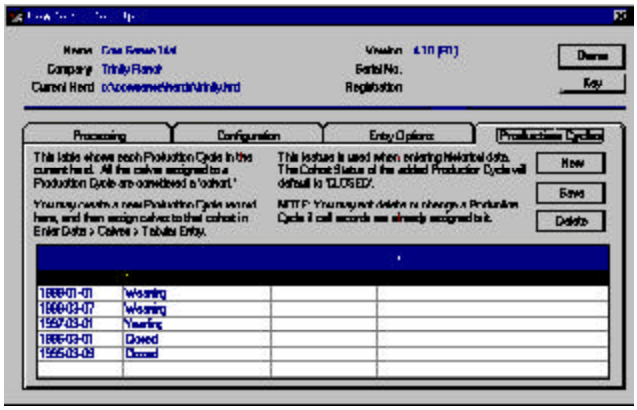


FIGURE 7-27. THE PRODUCTION CYCLES FORM OF THE COW SENSE SET UP WINDOW.

To save entries or edits using this grid, click the Save button.

To delete a production cycle, highlight it and then click the Delete button. Note, however, that you cannot delete a production cycle if you have

assigned calves to it (this happens automatically if you use the **Maintenance > Current Cycle > Run New Cycle** command). You must first assign calves to a different production cycle by using the **Enter Data > Calves > Tabular Entry** window, or remove calf records using the Delete key in the **Enter Data > Calves > Enter Calves** window (see Chapter 4).

Cow Sense contains four fields in the Cow Sense Set Up Production Cycles form data grid.

Process Date

This is the date you enter into the New Cycle Reference Date box when you create the production cycle (**Maintenance > New Cycle > Run New Cycle**). It is the starting date for the production cycle—on or around the date you know or expect to enter the first calf birth date.

Status

The information in this field reflects the level of completion you have reached in the data entry process. You can change the information in this field by clicking on the Hot button and selecting from the drop-down list of options.

- *New*. This is the status of a new set of production cycle records when you first establish the cycle using **Maintenance > New Cycle > Run New Cycle**. Cow Sense will automatically update this to Calving when you run the Calving Update (**Maintenance > Current Cycle > Calving Update**).
- *Calving*. This is the status of a set of production cycle records after you have run the Calving Update. Cow Sense will automatically update this to Weaning when you run the Weaning Update (**Maintenance > Current Cycle > Weaning Update**).
- *Weaning*. This is the status of a set of production cycle records after you have run the Weaning Update. Cow Sense will automatically update this to Yearling when you run the Yearling Update (**Maintenance > Current Cycle > Yearling Update**).
- *Yearling*. This is the status of a set of production cycle records after you have run the Yearling Update. Cow Sense will automatically update this to Closed when you run the Closeout Update (**Maintenance > Current Cycle > Closeout Update**).
- *Closed*. This is the status of a set of production cycle records after you have run the Closeout Update. It does not indicate that the cycle

TIP: BE CAREFUL IF YOU ATTEMPT TO DELETE CALF RECORDS. YOU MAY DELETE ALL CALF RECORDS IN ALL PRODUCTION CYCLES. IF YOU DO ATTEMPT TO DELETE CALF RECORDS, **BACK UP HER HERD FILES FIRST!** IF YOU TRY TO DELETE CALF RECORDS USING **ENTER DATA > CALVES > CALF TABULAR ENTRY**, BE SURE YOU SELECT CALF RECORDS ONLY FOR THE PRODUCTION CYCLE YOU WANT TO DELETE BY USING THE SELECT BUTTON QUERY FUNCTIONS (SEE CHAPTERS 4 AND 5).

TIP: ONCE YOU HAVE COMPLETED ALL PHASES OF PROCESSING A PRODUCTION CYCLE, YOU SHOULD LOCK IT SO YOU DON'T AFFECT IT WHEN YOU EXECUTE OTHER PRODUCTION CYCLE PROCESSES.

is locked.

- *Locked*. This is the status of a set of production cycle records after you have Locked the cycle (**Maintenance > Current Cycle > Lock Cycle**). If you lock a cycle, you must use the Hot button on this field to unlock it by selecting New, Calving, Weaning, Yearling, or Closed from the drop-down list.

Breed Spec.

When you click inside a Breed Spec field, Cow Sense will call up a list of all the breed specifications that came with Cow Sense or that you established in the Processing form of the Cow Sense Set Up window (see Processing earlier in this chapter). You can enter or change the breed specifications by clicking inside a Breed Spec field and selecting from the pop-up list. If you change the breed specifications for an existing production cycle cohort and then click the Save button, Cow Sense will warn you that doing so may affect calculated weights and ratios.

Memo

You can Record any free form memo string in the field.

INVENTORY

The Cow Sense Inventory window (see Figure 7-28) gives general statistics about the status of the herd. It tells you which Herd you have open and the Year for which you're collecting and reviewing data. It also lists the number of COWS you have as "Active", "Going", or "Gone" and the total number of cows in the herd. Similarly, it lists the number of "Active" and "Gone" BULLS and the total number of bulls in the herd. As for CALVES, it lists the total number of calf Records in (the) Current Cycle, the number of calf Records in Archives (which includes all current and historic calf records in the database) and the number of Orphan calf records you've deleted. You cannot change any information in this window. To access the window, select **Maintenance > Administration > Inventory** from the main menu bar. To exit, click the OK button at the bottom of the box.

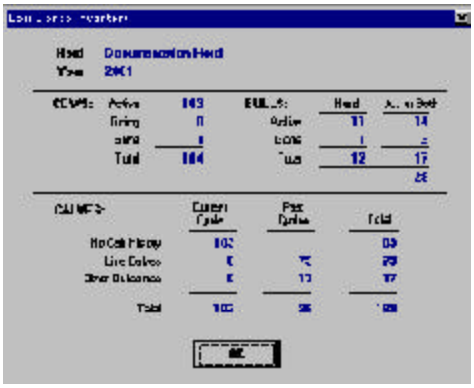


FIGURE 7-28. THE COW SENSE INVENTORY WINDOW.

LOG

The Cow Sense Log window (see Figure 7- 29) documents which updates you've run. The information in the box depends on which mode of Cow Sense you are using. If you have Cow Sense Lite, it will only tell you whether or not you've run the Calving Update. If you have EZ-75, Commercial or Purebred, it will tell you whether or not you've run the Calving Update, Weaning Update and Yearling Update. Like the Cow Sense Inventory window, you cannot change information in the Cow Sense Log window. To access the Log, select **Maintenance > Administration > Log** from the main menu bar. To exit the box, click the OK button at the bottom of the box.

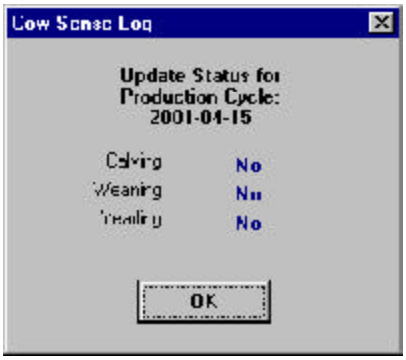


FIGURE 7-29. THE COW SENSE UPDATE LOG WINDOW.

CUSTOMIZE DATA FIELDS

The Customize Data Fields option is one of the most powerful tools in Cow Sense. In this application you add and edit field names and characteristics to customize Cow Sense to your operation and management needs. Depending on the mode of Cow Sense you're using, you have an opportunity to affect data collection fields in the Main, EPD, Supplemental, Carcass and Feedlot forms of the Cow Sense Enter Data windows. Further, if you don't want to use an established or user-defined field, you can hide that field from view using the Customize Data Fields utility.

The procedure and data entry grids for customizing data fields are the same for cows, bulls, and calves, but by selecting a cow/bull/calf category, you tell Cow Sense which Enter Data window will contain the added or edited custom data field(s). Customization options are limited in the Main, Pedigree, and Preg Check forms of the Enter Bull and Enter Cow tables, or in the Enter Calves table. *The fields you can customize are those within data entry grid forms*.

TIP: KEEP IN MIND THAT IF YOU EDIT A FIELD FOR WHICH YOU'VE COLLECTED DATA, YOU RUN THE RISK OF CORRUPTING THAT DATA.

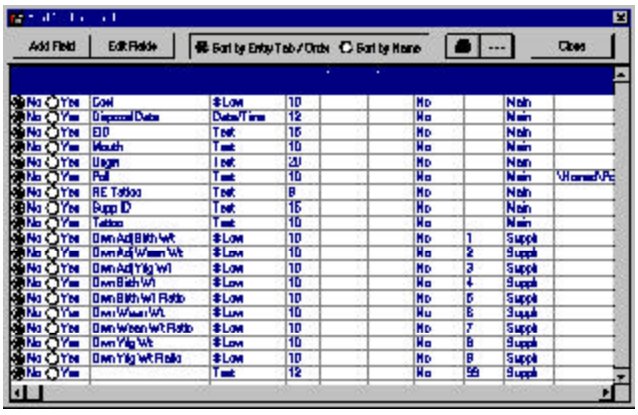
Once you create a new data field (by clicking the Add Field button), you can edit that field as you need, but once you add a field, you cannot delete it. Keep in mind that if you edit a field for which you've collected data, you run the risk of corrupting historical data.

To add or edit custom cow data fields, select **Maintenance > Administration > Custom Data Fields > Cow** from the main menu bar. To add or edit custom bull data fields, select **Maintenance > Administration > Custom Data Fields > Bull** from the main menu bar. To add or edit custom calf data fields, select M**aintenance > Administration > Custom Data Fields > Calf** from the main menu bar.

The Add/Select Fields for (Cows/Bulls/Calves) grid form consists of 10 columns to which you can add or edit criteria to suit your individual needs (see Figure 7-30).

- Select? By using the Select? function, you can determine what fields

FIGURE 7-30. THE ADD/SELECT FIELDS FOR... WINDOW FOR CUSTOMIZING DATA FIELDS.



you want to appear in your Enter Data windows. This option consist of two radio buttons, Yes and No. This is the same column that appears when you select the All Rows view of the EPD, Supplemental, Feedlot (calves) and Carcass (calves) forms of Enter Data windows for cows bulls or calves. If you select the Yes radio button, the field will show up when you're in the Selected Only view of the respective forms. If you select the No radio button, you will not see these fields when you are in the Selected only view of the respective forms. You can change these buttons to suit your view needs in this form, or you can change them in the forms of the Enter Data screens. In order to change the radio buttons in this form, however, *you must click the Edit Field button first*.

TIP: EVEN IF YOU USE COW SENSE AT A VERY BASIC LEVEL, YOU WILL FIND THE SELECT? FEATURE VALUABLE FOR STRUCTURING COW SENSE TO FIT YOUR OPERATION.

- Field Name. This is the name you give to the field. It can be up to as many characters in length as you wish, but you should really keep

the Field Name on one line and base the length of the name on the width of the field, which you define in the Width column.

- Field Type. This is a validation field to limit the type of value you enter (see Figure . For example, this validation control will keep you from incorrectly entering a alpha (text) character in a Currency field. You cannot change the field type of existing fields.
- Width. This is the width of the column in the data entry grid. If you enter a value with more characters, Cow Sense will truncate the value.

FIGURE 7-31. FIELD TYPE DEFINITION TABLE.

Field Type	***Use***
# (0 - 255)	*Limits data entry to whole numbers equal to or less than 255.*
Currency	*Limits data entry to currency values.*
High Precision	*Limits numerical precision to 10 digits.*
# Interger	*Limits data entry to whole numbrs-- positive, negative, zero--between -32,768 and 32,767.*
# Large Interger	*Limits data entry to whole numbers-- positive, negative, zero--between -2,147,483,648 and 2,147,483,647.*
# Low Precision	*Limits numerical precision to 6 digits.*
Date/Time	*Limits data entry to date and time stamp values.*
Text	*Limits data entry to alpha, numeric or alphanumeric characters, and does not allow for numerical computation.*
True/False	*Limits data entry to the logical operators "Yes" (for true) and "No" (for false).*

- Min Value. This is a validation control to alert you if you enter a data value less than the one you specify here. Cow Sense will not let you enter a value lower than the one you define.

- Max Value. This is a validation control to alert you if you enter a data value more than the one you specify here. Cow Sense will not let you enter a value higher than the one you define.
- User Created? Because Cow Sense comes with some preset user-defined fields, you can mark here whether you have created the field or whether it came as a part of Cow Sense. You have limited flexibility in customizing fields that are standard in Cow Sense.
- Enter Order. This value determines the order in which you see and enter/edit data in the Selected Only view of the forms of the Enter Data screens. If you don't supply an order, Cow Sense will order fields in the Selected Only view by the order that they're listed in the Field Name column, which is determined by the order in which they reside in the Customize Data Fields form. You can use decimals, in which case an order of 2.4 will come after 2.2 and 2.3.
- Entry Tab. By clicking Hot button for this value, you select on which Data Entry form the field will appear. The choices are EPD, Feedlot, Carcass, Supplemental, Main, Pedigree, and Breed. For example, if create a data entry field in the Calf table and you select "Carcass", the data entry field will appear on the Carcass form. You are limited to the forms you can customize—namely those that are in grid format, which become available by selecting the EPD, Feedlot (for calves), Carcass (for calves), and Supplemental tabs in the Enter Data windows.
- Specify Options \x\y\z. This is where Cow Sense records specific options for recording data. Drop-down lists work off of this type of field. For example, in the General tab of the Enter Bull and Enter Cow screens you have a field called "Poll". The choices from the drop-down list in that field are Horned, Polled, Scurred, and Dehorned. You cannot create additional *drop-down lists* (in other words, when you set values in Specify Options \x\y\z, you do not create a Hot button on that field), but you can specify options or validations of values that restrict data entry to only those values listed.

  For example, say you want to add a field for cow disposition, and you want to use specific scores. Select **Maintenance > Administration > Customize Data Fields > Cow** from the main menu bar. Cow Sense will display an Add/Select Fields for Cows window (see

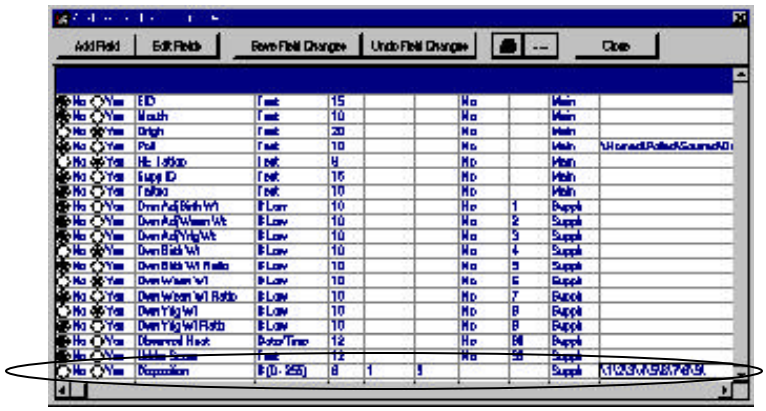


FIGURE 7-32.
THE ADD/SELECT FIELDS FOR COWS WINDOW HIGHLIGHTING THE ADDITION OF A NEW "DISPOSITION" FIELD.

Figure 7-31). Click the Add Field button. Cow Sense will display an OK to Add New Field window. Click the OK button. Cow Sense will create a new blank row at the bottom of the grid. In the Field Name field, type "Disposition". TAB to the Field Type field, and select # (0-255) from the drop-down list. TAB to the Width field and type "8". TAB to the Min. field and type 1. TAB to the Max field and type 9. TAB to the Entry Tab field and select Supplemental (this will be the form that contains the new Disposition field. TAB to the Specify Options \x\y\z field and type in the numbers that will be used for these scores, such as \1\2\3\4\5\6\7\8\9\.

When you add options in the Specify Options entry field, you must precede the values and follow them with a "\" (slash) because that is the separator between the options; you cannot use a slash as an actual character value.

Chapter 8: The Utilities Menu

The Utilities menu contains tools for maintaining and restoring the quality or integrity of data, for importing and exporting information from other programs, and for moving data files to and from different directories on your computer and other computers.

BACK UP HERD

Backing up your data files is very important. Therefore, in addition to Cow Sense offering this utility every time you exit the program or prior to major events such as Run New Cycle, Cow Sense makes the task easy to do from the Utilities menu. Get in the habit of backing up your files often. Data files become corrupted, hard disks crash, lightning strikes—disasters happen without warning. Backing up is like crop insurance for your database, but it costs only a couple minutes of your time.

TIP: BACK UP TO A MEDIA THAT YOU CAN TAKE "OFF SITE" TO PROTECT YOUR FILES FROM SUCH DISASTERS AS FIRE. COW SENSE COMPRESSES DATA ON BACKUP AND IT WILL SPAN DISKETTES AUTOMATICALLY.

You can back up any of your cow sense herd databases at any time. When you run the backup utility, Cow Sense looks for the sequence number of the last backup of the current herd, increments it, and copies the current herd database to the herdsbak directory with the new sequence number as the extension. This way, Cow Sense keeps track of your backups and you can see what the backup history is for any given herd. Further, you can back up to another media (floppy or Zip drive, for example) or to another hard drive. You may also rename your backup file.

To create a back up of your database(s), select **Utilities > Back Up Herd** from the main menu bar. Cow Sense will display a Back Up Herd window (see Figure 8-1). Cow Sense will offer you a name for the backup using a consecutive sequence number as an extension, and default to the c:\cowsense\herdsbak directory. Navigate in this window the same way you would navigate in any Windows directory tree environment if you want to change the name or the folder to which you want to store the backup. Click the OK button to proceed.

FIGURE 8-1. THE BACK UP HERD WINDOW.

NOTE: RESTORING WILL OVERWRITE THE EXISTING SAME-NAME HERD FILE WITH THE BACKUP YOU CHOOSE TO RESTORE. YOU CANNOT UNDO THIS OPERATION. IF YOU MADE CHANGES TO THE HERD FILE SINCE THE LAST BACKUP, RESTORING THAT BACKUP WILL OVERRIDE THOSE CHANGES. BACK UP THE CURRENT HERD BEFORE RESTORING IT.

Remember, when you back up to another directory or folder on your hard disk you will be protecting against user file error or data file corruption, but you will not be protecting against equipment failure or other disasters; that is why it is important to frequently back up to an off-source media such as floppies, Zip disks or tapes.

RESTORE FROM BACKUP

The Restore Herd from Backup utility essentially works like the Backup utility, only in reverse. When you use this utility, Cow Sense restores the selected backup file to the c:\cowsense\herds directory and it gives the file a .hrd extension. When you restore a herd, it automatically becomes the default herd. Also when you execute this utility, you will *overwrite* the current herd file with the herd file from which you are restoring, so use caution.

The file names in the source and destination directories must match. If a destination herd already exists, the Restore Herd function will restore to that herd. If a destination herd does not exist, the Restore Herd function will create a herd with that file name and restore to that herd.

FIGURE 8-2.
THE RESTORE HERD WINDOW.

To restore a file, select **Utilities > Restore** from the main menu bar. Cow Sense first warn you that you will overwrite the current herd file. Click the OK button to continue. Cow Sense will display a Restore Herd window (see Figure 8-2). The default folder for backups is c:\cowsense\herdsbak. Navigate in this window the same way you would navigate in any Windows directory tree environment if you want to change the name or the folder from which you want to restore a backup. Highlight the file you want to restore and click the OK button to proceed. Then click the Yes button in the subsequent warning boxes to verify the Restore command.

FIGURE 8-3.
THE REPAIR HERD WINDOW.

REPAIR HERD

Over time, your database will collect unnecessary information, which takes up disk space. The Repair Herd option can help you recover unused disk space. Also, sometimes, power outages, or other unknown interruptions can corrupt data files. While *the best insurance against data file corruption is to frequently back up your herd*, you may also be able to recover damaged files with the Repair Herd command.

To use this utility, select **Utilities > Repair Herd** from the main menu bar. Cow Sense will display a Repair Herd window.

The File Name box will display data files (those with a .hrd extension). The Directory box will display the Cow Sense default directory (c:\cowsense\herds). If you have data files in a different directory, you can navigate to that directory using standard Windows directory-tree protocol. Select the data file you want to restore in the File Name box. Click the Repair Herd button to proceed. Cow Sense will display a success message after it is finished with the utility.

TRANSFER DATA

Cow Sense adds an extra level of control by allowing you to export and import data to and from other software programs.

EXPORT

Cow Sense lets you export data to other programs, such as databases, spreadsheets, charting and statistics packages to give you virtually limitless analytical and reporting potential. Cow Sense exports all fields and field titles from calf records, cow records, bull records and treatment records to tab-delimited text files in the c:\cowsense\export directory. Also, Cow Sense has a Save-to-Export button (see item J in Figure 5-1) on all report forms that sends data from the report directly to a tab-delimited text file (where the TAB key stroke is the separator that sequesters data into individual parts). Refer to the Save to Export section of Chapter 5 for more information in using this button. Most software products that have import capabilities can handle tab-delimited text files.

THE SAVE-TO-EXPORT BUTTON. LOOK FOR THIS BUTTON ON MOST COW SENSE REPORTS TO EXPORT THAT REPORT DATA DIRECTLY TO A TAB-DELIMITED FILE.

This Production Cycle

Use this utility to export only calf records in the open production cycle. To access the current Production Cycle export utility, select **Utilities > Transfer Data > Export > This Production Cycle** from the main menu bar.

FIGURE 8-4. THE EXPORT FILE NAME BOX.

Cow Sense will display an Export File Name window (see Figure 8-4).

It will give a default name of THISPROD.TXT. You can overwrite that file name if you wish. After you've established a file name, click the OK button and Cow Sense will begin exporting calf data to the c:\cowsense\export directory. If you already have a text file with the same name as the file you're exporting, Cow Sense will give you a warning and allow you to either replace the existing file, append the new record to the existing file, or change the file name. When Cow Sense is finished exporting, it will display an Export Finished window telling you the number of records it exported, the name of the export file, and where to find it.

All Calves

The All Calves export utility exports all calf records in all production cycles for the open herd. To access the All Calves calf data exporting utility, select **Utilities > Transfer Data > Export > All Calves** from the main menu bar. Cow Sense will display an Export File Name window (see Figure 8-4).

It will give a default name of ALLCALVES.TXT. You can overwrite that file name if you wish. After you've established a file name, click the OK button and Cow Sense will begin exporting calf data to the c:\cowsense\export directory. If you already have a text file with the same name as the file you're exporting, Cow Sense will give you a warning and allow you to either replace the existing file, append the new record to the existing file, or change the file name. When Cow Sense is finished exporting, it will display an Export Finished window telling you the number of records it exported, the name of the export file, and where to find it.

Cows

The Cows export utility exports all cow records in the open herd. To access the cow data exporting utility, select **Utilities > Transfer Data > Export > Cows** from the main menu bar. Cow Sense will display an Export File Name window (see Chapter 8-4).

It will give a default name of COWS.TXT. You can overwrite that file name if you wish. After you've established a file name, click the OK button and Cow Sense will begin exporting cow data to the c:\cowsense\export

directory. If you already have a text file with the same name as the file you're exporting, Cow Sense will give you a warning and allow you to either replace the existing file, append new records to the existing file, or change the file name. When Cow Sense is finished exporting, it will display an Export Finished window telling you the number of records it exported, the name of the export file and where to find it.

Bulls

The Bulls export utility exports all bull records in the open herd. To access the bull data exporting utility, select **Utilities > Transfer Data > Export > Bulls** from the main menu bar. Cow Sense will display an Export File Name window (see Figure 8-4).

It will give a default name of BULLS.TXT. You can overwrite that file name if you wish. After you've established a file name, click the OK button and Cow Sense will begin exporting bull data to the c:\cowsense\export directory. If you already have a text file with the same name as the file you're exporting, Cow Sense will give you a warning and allow you to either replace the existing file, append new records to the existing file, or change the file name. When Cow Sense is finished exporting, it will display an Export Finished window telling you the number of records it exported, the name of the export file and where to find it.

Treatment Headers

The Treatment Headers export utility exports a list of treatments—products and procedures). Select **Utilities > Transfer Data > Export > Treatment Headers** from the main menu bar. Cow Sense will display an Export File Name window (see Figure 8-4).

It will give a default name of TREAT_HE.TXT. You can overwrite that file name if you wish. After you've established a file name, click the OK button and Cow Sense will begin exporting bull data to the c:\cowsense\export directory. If you already have a text file with the same name as the file you're exporting, Cow Sense will give you a warning and allow you to either replace the existing file, append new records to the existing file, or change the file name. When Cow Sense is finished exporting, it will display an Export Finished window telling you the number of records it exported, the name of the export file and where to find it.

Treatment Details

The Treatment Details utility exports individual and herd treatments for calves, cows and bulls as long as you specify that information in the

respective Calf, Cow, and Bull tabs of the **Enter Data > Treatments > Treat Cattle** option (see Chapter 4). To access the herd treatments data exporting utility, select **Utilities > Transfer Data > Export > Treatment Details > Calves**, **Cows** or **Bulls** from the main menu bar.

Calves

Cow Sense will display an Export File Name window (see Figure 8-4). It will give a default name of TREATCAF.TXT. You can overwrite that file name if you wish. After you've established a file name, click the OK button and Cow Sense will begin exporting calf treatment data to the c:\cowsense\export directory. If you already have a text file with the same name as the file you're exporting, Cow Sense will give you a warning and allow you to either replace the existing file, append new records to the existing file, or change the file name. When Cow Sense is finished exporting, it will display an Export Finished window telling you the number of records it exported, the name of the export file and where to find it.

Cows

Cow Sense will display an Export File Name window (see Figure 8-4). It will give a default name of TREATCOW.TXT. You can overwrite that file name if you wish. After you've established a file name, click the OK button and Cow Sense will begin exporting cow treatment data to the c:\cowsense\export directory. If you already have a text file with the same name as the file you're exporting, Cow Sense will give you a warning and allow you to either replace the existing file, append new records to the existing file, or change the file name. When Cow Sense is finished exporting, it will display an Export Finished window telling you the number of records it exported, the name of the export file and where to find it.

Bulls

Cow Sense will display an Export File Name window (see Figure 8-4). It will give a default name of TREATBUL.TXT. You can overwrite that file name if you wish. After you've established a file name, click the OK button and Cow Sense will begin exporting bull treatment data to the c:\cowsense\export directory. If you already have a text file with the same name as the file you're exporting, Cow Sense will give you a warning and allow you to either replace the existing file, append new records to the existing file, or change the file name. When Cow Sense is finished exporting, it will display an Export Finished window telling you the number of records it exported, the name of the export file and where to find it.

IMPORT

You can import data into Cow Sense to add information such as existing cow, bull or calf records from a number of sources including database files, spreadsheet files and electronic scales. This is a powerful tool to link ranches to other chains in the beef production industry. You can import *any* tab-delimited text file that contains matchable fields, which allows you to import not only weight values, but also feedlot and carcass data as well as EPD updates and electronic IDs (EIDs) that are cross-referenced to an existing animal ID in Cow Sense.

TIP: AS A PRECAUTION YOU SHOULD MANUALLY RECORD WEIGHTS FORM YOUR ELECTRONIC SCALES, EVEN IF YOU INTEND TO ELECTRONICALLY IMPORT THE WEIGHT DATA. THE HARD COPY CAN BE GOOD INSURANCE AGAINST LOST DATA AND IT GIVES YOU ADDITIONAL INFORMATION THAT WILL HELP YOU MATCH UP RECORDS WHEN YOU HAVE INVALID IDS IN THE SCALE FILE.

Importing Weight Data Directly Using Cow COMM™

You have two options for downloading electronic weight data into Cow Sense: directly using Midwest MicroSystems's Cow COMM, and indirectly.

Cow Sense Cow COMM product facilitates direct import from certain scale models and makes into Cow Sense by linking the scale head to your Cow Sense computer. You can find additional information on how Cow COMM works in the Cow COMM Users Guide (an Adobe Acrobat version of this document is available at c:/cowsense/cowcomm.pdf). You can launch the Trial Edition of Cow COMM from Windows by clicking the Start button and selecting **Programs > Cow Sense > Cow COMM**.

NOTE: COW COMM™ IS A COMMUNICATIONS COMPONENT THAT ALSO LETS YOU USE YOUR COW SENSE DATABASE AT THE CHUTE TO PROVIDE INSTANT ACCESS TO ALL RECORDED INFORMATION ON ANIMAL RECORD. COW COMM INTERFACES WITH ELECTRONIC SCALES AS WELL AS ELECTRONIC ID SCANNERS AND ELECTRONIC HIP HEIGHT MEASURING DEVICES THROUGH YOUR COMPUTER'S COMMUNICATIONS PORT. IF YOU HAVE ADDITIONAL QUESTIONS ON HOW YOU CAN USE COW COMM CALL (800) 584-0040.

Importing Weight Data Indirectly

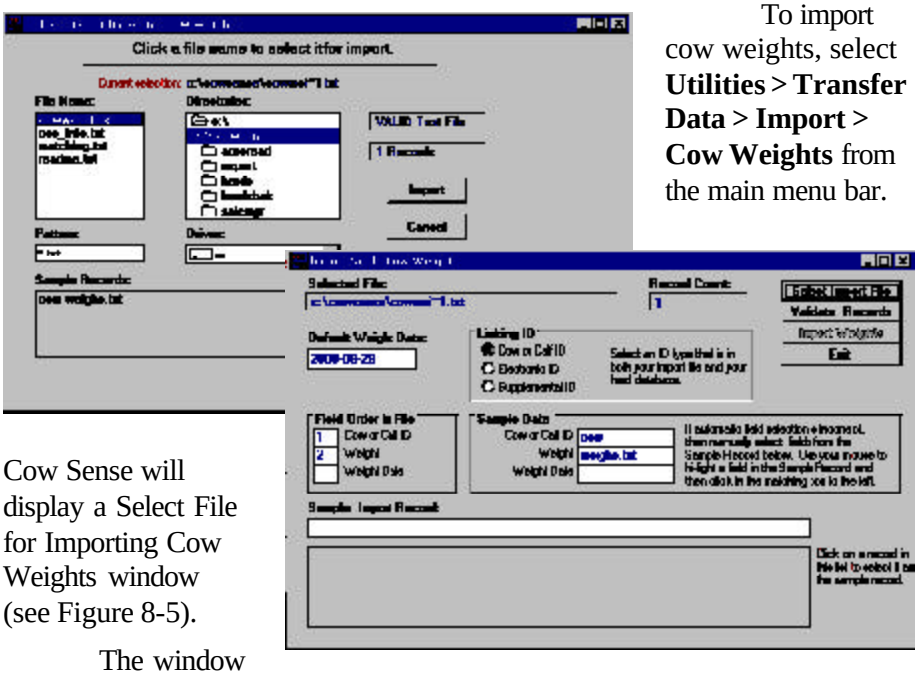
To import weight data indirectly into Cow Sense, follow the instructions that came with your scale to save the weight data to a file on your hard disk. You may have to copy the data from a floppy drive or use a computer linking utility to get the data on to the same computer that houses your Cow Sense program. Cow Sense will generally automatically identify import settings, if the data file from the scale is delimited. If your scale gives you a choice of saving data as delimited or limited, chose *delimited*. If your file is not delimited, Cow Sense may ask you to enter data manually after verifying IDs. Save all files with a .txt extension to make data import easier.

It is a good idea to store your data files in the c:\cowsense directory to make data retrieval easier. You may also want to make a "weight" folder or an "import" folder to store weight data files from your scale. Refer to your Windows documentation if you need help learning how to create folders or directories.

Always back up herd files prior to importing.

Cow Weights

FIGURES 8-5 AND 8-6. THE SELECT FILE FOR IMPORTING COW WEIGHTS WINDOW AND THE IMPORT SCALE COW WEIGHTS WINDOW.



To import cow weights, select **Utilities > Transfer Data > Import > Cow Weights** from the main menu bar.

Cow Sense will display a Select File for Importing Cow Weights window (see Figure 8-5).

The window includes instructions for you to click on the file you want to select for importing weights. The Directories box will default to c:\cowsense folder. If your weight data file is there (listed in the File Name box), click on the name of the file. If not, use standard Windows directory-tree protocol for finding the folder that contains your data file.

Once you click on a file (for example, Cows00.txt), Cow Sense will tell you if the file is valid or invalid in blue letters. If the file is valid, it will list the number of records in blue letters just below the VALID Text File box. Click the Import button to proceed.

Cow Sense will display an Import Scale Cow Weights window (see Figure 8-6). It will list the file you're trying to import in the Selected File box and give the number of records in the Record Count box. In the Field Order in File box, Cow Sense will attempt to place the order of the data. It will, as a default, assume that the animal IDs are in the first data column and that the weights are in the second column. If your data is in a different order, you can override the column numbers in the boxes. If you have one date for all the weights in the data set, enter the weight date in the Default Weight Date box (Cow Sense will automatically put the current date in the box).

TIP: COW SENSE USES ANIMAL IDS AS THE LINK FIELD BETWEEN COW SENSE DATA AND ELECTRONIC SCALE DATA. TO AVOID CONFLICTS BE SURE THAT THE IDS IN THE SCALE CORRESPOND TO THE IDS IN COW SENSE. FOR EXAMPLE, IF YOU ENTER A CALF ID INTO THE SCALE AS 123, AND THE CALF ID IN COW SENSE IS 123J, COW SENSE WILL NOT IMPORT THE WEIGHT DATA ON THAT ANIMAL; ID 123 WILL APPEAR IN AN ERROR LOG.

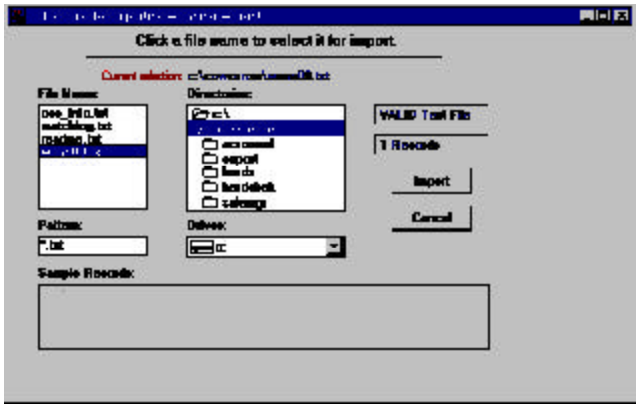
Click on a row of data in the data box at the bottom of the window to establish a data pattern. Cow Sense will display the order of the data based on the sample you clicked and the order you established in the Field Order in File box in the Sample Data box. If everything looks correct, click the Validate Records button and Cow Sense will display a box showing any validation errors. Click the OK button and Cow Sense will display any errors in the data box at the bottom of the Import Scale Cow Weights window. If any records are invalid, you can scroll through the list to observe the invalid records (for example, if a record has a missing weight). If a record is invalid, Cow Sense will not import it. Therefore, if you have 200 weight records, but Cow Sense finds that 15 are invalid (have missing weights or ID irregularities), Cow Sense will only import the 185 records that are sound.

When you're satisfied that the data is accurate and as complete as possible, click the Import Weights button. Cow Sense will display a Proceed with Import window, making sure it is all right to import all valid records. Click the Yes button to continue or the No button to return to the Import Scale Cow Weights window.

When the weight import is complete, Cow Sense will display a Data Transfer Completed window listing the number of records it imported into the current herd.

Weaning Weights

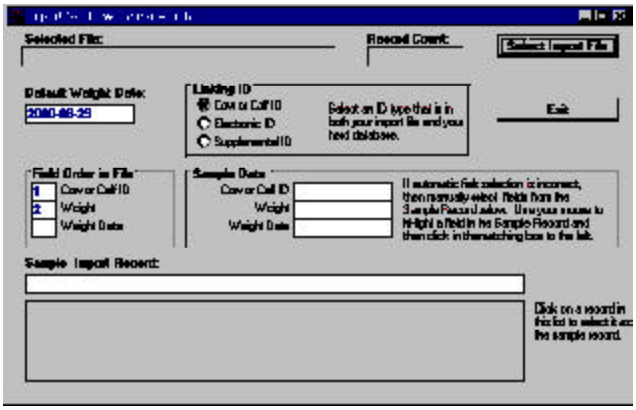
To import weaning weights, select **Utilities > Transfer Data > Import > Weaning Weights** from main menu bar. Cow Sense will display a Select File for Importing Weaning Weights window (see Figure 8-7).



FIGURES 8-7.
THE SELECT FILE FOR IMPORTING WEANING WEIGHTS WINDOW.

The window will provide instructions for you to click on the file you want to select for importing weights. The Directories box will default to c:\cowsense folder. If your weight data file is there (listed in the File Name box), click on the name of the file. If not, use standard Windows methods for finding the folder that contains your data file.

Once you click on a file (for example, Wean00.txt), Cow Sense will tell you if the file is valid or invalid in blue letters. If the file is valid, it will list the number of records in blue letters just below the VALID Text File box. Click the Import button to proceed.



FIGURES 8-8. THE IMPORT SCALE WEANING WEIGHTS WINDOW.

Cow Sense will display an Import Scale Weaning Weights window (see Figure 8-8). It will list the file you're trying to import in the Selected File box and give the number of records in the Record Count box. In the Field Order in File box, Cow Sense will attempt to place the order of the data. It will, as a default, assume that the animal IDs are in the first data column and that the weights are in the second column. If your data is in a different order, you can override the column numbers in the boxes. If you have one date for all the weights in the data set, enter the weight date in the Default Weight Date box (Cow Sense will automatically put the current date in the box).

Click on a row of data in the data box at the bottom of the window to establish a data pattern. Cow Sense will display the order of the data based on the sample you clicked and the order you established in the Field Order in File box in the Sample Data box. If everything looks correct, click the Validate Records button and Cow Sense will display a box showing any validation errors. Click the OK button and Cow Sense will display any errors in the data box at the bottom of the Import Scale Weaning Weights window. If any records are invalid, you can scroll through the list to observe the invalid records (for example, if a record has a missing weight). If a record is invalid, Cow Sense will not import it. Therefore, if you have 200 weight

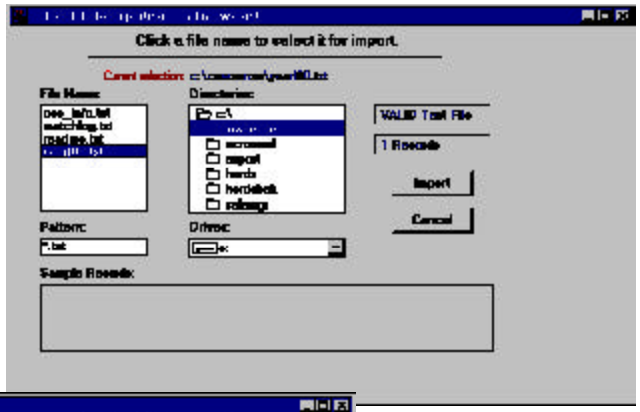
records, but Cow Sense finds that 15 are invalid (have missing weights or ID irregularities), Cow Sense will only import the 185 records that are sound.

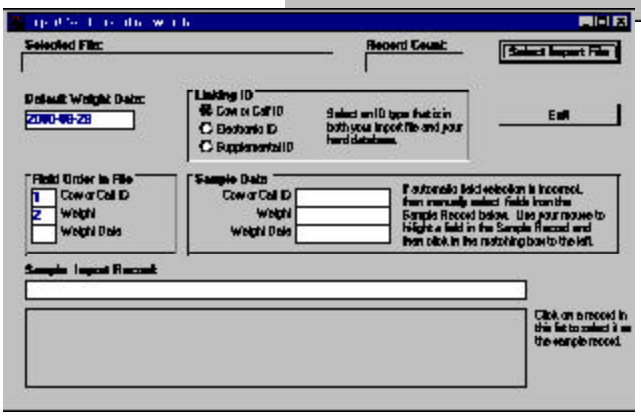
When you're satisfied that the data is accurate and as complete as possible, click the Import Weights button. Cow Sense will display a Proceed with Import window, making sure it is all right to import all valid records. Click the Yes button to continue or the No button to return to the Import Scale Weaning Weights window..

When the weight import is complete, Cow Sense will display a Data Transfer Completed window listing the number of records it imported into the current herd.

Yearling Weights

To import yearling weights, select **Utilities > Transfer Data > Import > Yearling Weights** from the main menu bar. Cow Sense will display a Select File for Importing Yearling Weights window (see Figure 8-9).





FIGURES 8-9 AND 8-10. THE SELECT FILE FOR IMPORTING YEARLING WEIGHTS WINDOW AND THE IMPORT SCALE YEARLING WEIGHTS WINDOW.

The box will give instructions for you to click on the file you want to select for importing weights. The Directories box will default to c:\cowsense folder. If your weight data file is there (listed in the File Name box), click on the name of the file. If not, use standard Windows methods for finding the folder that contains your data file.

Once you click on a file (for

example, Yrlg00.txt), Cow Sense will tell you if the file is valid or invalid in blue letters. If the file is valid, it will list the number of records in blue letters just below the VALID Text File box. Click the Import button to proceed.

Cow Sense will display an Import Scale Yearling Weights window (see Figure 8-10). It will list the file you're trying to import in the Selected File box and give the number of records in the Record Count box. In the Field Order in File box, Cow Sense will attempt to place the order of the data. It will, as a default, assume that the animal IDs are in the first data column and that the weights are in the second column. If your data is in a different order, you can override the column numbers in the boxes. If you have one date for all the weights in the data set, enter the weight date in the Default Weight Date box (Cow Sense will automatically put the current date in the box).

Click on a row of data in the data box at the bottom of the window to establish a data pattern. Cow Sense will display the order of the data based on the sample you clicked and the order you established in the Field Order in File box in the Sample Data box. If everything looks correct, click the Validate Records button and Cow Sense will display a box showing any validation errors. Click the OK button and Cow Sense will display any errors in the data box at the bottom of the Import Scale Yearling Weights window. If any records are invalid, you can scroll through the list to observe the invalid records (for example, if a record has a missing weight). If a record is invalid, Cow Sense will not import it. Therefore, if you have 200 weight records, but Cow Sense finds that 15 are invalid (have missing weights or ID irregularities), Cow Sense will only import the 185 records that are sound.

When you're satisfied that the data is accurate and as complete as possible, click the Import Weights button. Cow Sense will display a Proceed with Import window, making sure it is all right to import all valid records. Click the Yes button to continue or the No button to return to the Import Scale Yearling Weights window..

Cow Sense will display a Data Transfer Completed window after the transfer is finished, listing the number of records it imported.

TIP: IF YOU RECEIVE DATA FROM AN OUTSIDE SOURCE, DO NOT LOAD DATA ON TO YOUR HARD DRIVE WITHOUT A VIRUS SCANNING SYSTEM (SUCH AS NORTON ANTIVIRUS OR MCAFFEE VIRUS SCAN).

IMPORT TOOL

In addition to importing weight data, you can import a variety of off-ranch information, including feedlot, carcass and EPD data, that relates to your herd records. The Cow Sense Import Tool window to guide you through the process. You can also use the Import Tool to import weight data.

Back up your Cow Sense data prior to using this tool. Do not accept data from an outside source without a virus scanning device.

Before you open up the Import tool, be sure to save your data in a tab-delimited format. Generally you will do this by selecting the **File > Save As** or the **File > Export** option from the database or spreadsheet where the data originates. If you are receiving the file from an outside source, be sure the source personnel save it as a tab-delimited text file (it should have a .txt extension following the file name).

To access the Import Tool, select **Utilities > Transfer Data > Import > Import Tool** from the main menu bar. Cow Sense will display an Import Tool V.x.x window (see Figure 8-11).

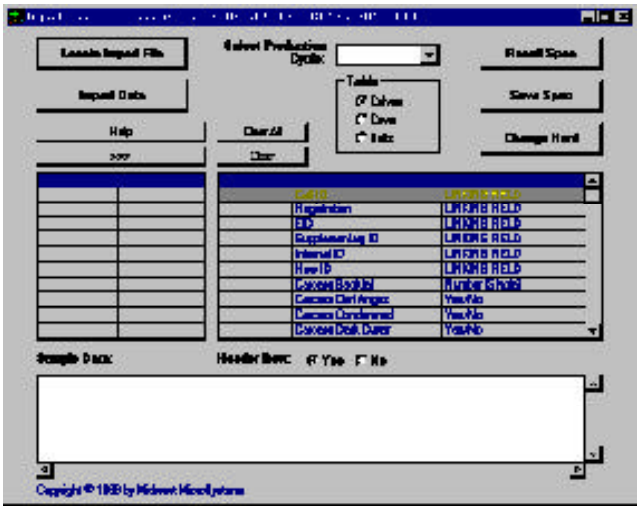


FIGURE 8-11.
THE IMPORT TOOL WINDOW.

When you import records, Cow Sense targets a specific production cycle. You can choose the production cycle by clicking the Hot button in the Select Production Cycle box. If the file you're importing has records for more than one production cycle, first separate the records in a spreadsheet or database into separate production cycles. Then import records for each production cycle.

Also, be sure you have the correct Herd file open. If you have the wrong herd file open, you can select a different herd by clicking the Change Herd button in the Import Tool window; Cow Sense will display the familiar Locate Herd file window, which is the same window that appears when you select **File > Open Herd** from the main menu bar (see Chapter 3).

After you are sure you have the correct herd and production cycle established for importing data, select the *table* to which you want to import data—Calves, Cows or Bulls—by clicking the appropriate radio button in the

Table box. Also, make sure the fields to which you want to import data are available. Do this by using the **Maintenance > Administration > Customize Data Field** command (see Chapter 7).

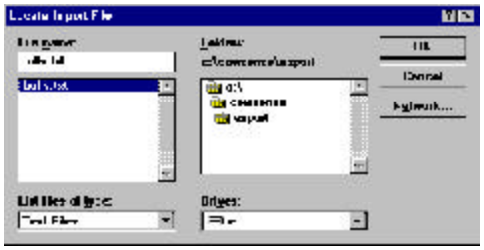


FIGURE 8-12.
THE LOCATE IMPORT FILE WINDOW.

Next, select the file you wish to import by clicking on the Locate Import File Button. Cow Sense will display a Locate File Import box (see Figure 8-12). The default directory in this box is c:\cowsense. Use standard Windows directory tree protocol to find the import file. When you have located the file you want to import, select it and click the OK button to continue.

Cow Sense will show Sample Data in the free-form text box at the bottom of the Import Tool window (see Figure 8-13). Most tab-delimited data files have a header row, which contains field names. Information in this row is displayed in the Source Field column (the far left column above the free-form text box). If your data file does not have a header row (if data starts in the first row) then data will appear in the Source Field column. If you do have field names in the first row, be sure the "Yes" radio button is selected for the Header Row. If your first row is actual data, select the "No" Header Row radio button. Cow Sense will "strip" the first row if the Header Row radio button is set on "Yes".

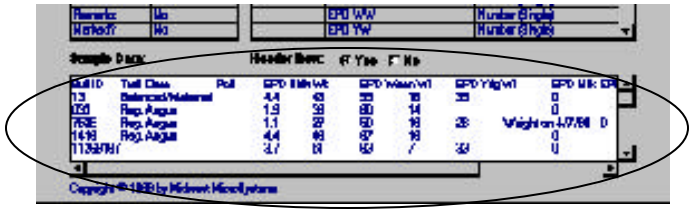


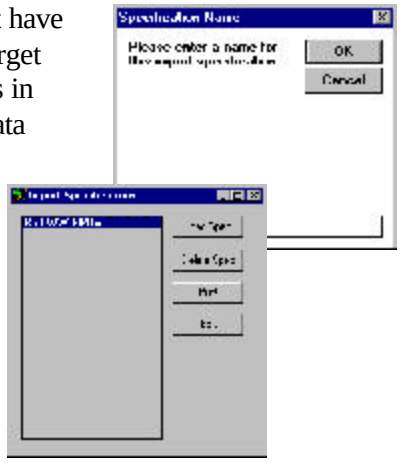
FIGURE 8-13.
THE FREE FORM TEXT DATA BOX IN THE IMPORT TOOL WINDOW.

FIGURE 8-14.
THE LINKING FIELDS OF THE SOURCE AND TARGET FILES IN THE IMPORT TOOL WINDOW.

Next, select the Linking Field (see Figure 8-14). The Linking Field is the anchor field between the two data sets. It is the field by which records are appended into an existing Cow Sense table. You link only to one field, so use the most reliable

field available for linking. Generally that will be an animal ID field. Highlight the linking field of choice in the Source Field column, and then highlight the linking field of choice in the Import Field column. Click the >>> button to link the two databases by that common field (the field *names* don't have to be the same, but the data that you want to transfer should be in the same format). Once the source and target fields are associated, Cow Sense will display the *source* file name (or data value if you do not have headers) in the ImportField column of the target grid. This process is called "mapping".

After you establish the Linking field, select the source fields you want to transfer, one at a time. To do this, first highlight a source field, and then highlight the corresponding target field; click the >>> button. For instance, if you have a source field called Milk EPD, select the corresponding Cow Sense EPD field (EPD Milk in the Sample herd). Once the source and target fields are associated, Cow Sense will display the *source* file name (or data value if you do not have headers) in the ImportField column of the target grid. Once again, if you do not have headings in your source field, highlight the appropriate data value that associates with the target field and be sure the Header Row "No" radio button is selected.



Once you have mapped all the data fields to import, click the Save Spec button to save the import specifications (see Figure 8-15). Then next time you want to run the same import routine, you do not have to match the source and target fields before import; you only need to use the Recall Spec button (see Figure 8-16) to recall an import specification routine before you click the Import Data button.

After you have saved the import specification, click the Import Data button. Cow Sense will display an Import Complete window telling you how many records it successfully appended.

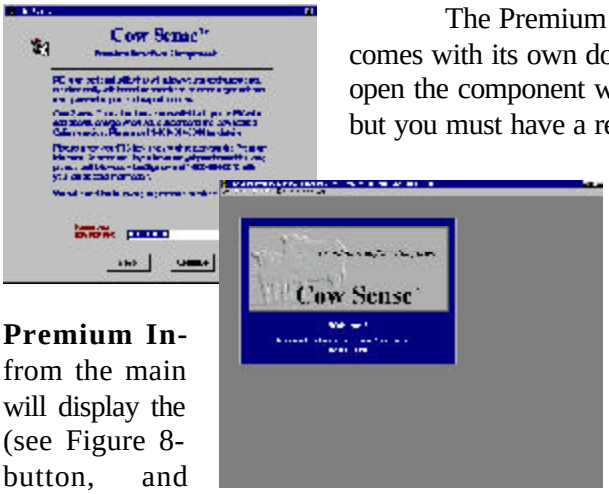
PREMIUM INTERFACE COMPONENT

The Premium Interface Component (PIC) is an optional Cow Sense utility that you purchase separately. This utility allows you to exchange data electronically with breed associations and other organizations using preset import and export routines.

TIP: IF YOU ARE IMPORTING DATA SUCH AS WEIGHTS OR PELVIC MEASUREMENTS THAT WILL REQUIRE A DATE FOR ADJUSTMENTS, MAKE SURE A MEASUREMENT DATE EXISTS IN THE DATA YOU ARE IMPORTING. IF NOT, CREATE A MEASUREMENT DATE FIELD IN THE SOURCE FILE PRIOR TO IMPORTING THE DATA INTO COW SENSE.

FIGURE 8-15 AND 8-16. THE SPECIFICATIONS NAME WINDOW AND THE RECALL SPECIFICATIONS WINDOW.

TIP: IF YOU IMPORT DATA SEVERAL TIMES IN THE SAME HERD, YOU DO NOT HAVE TO SET UP THE IMPORT ROUTINE EVERY TIME IF YOU HAVE SAVED THE ROUTINE IN THE SAVE SPECIFICATIONS WINDOW. JUST CLICK THE RECALL SPEC BUTTON TO RETRIEVE A LIST OF SAVED IMPORT ROUTINES. SELECT THE ROUTINE YOU WANT TO USE FOR IMPORTING DATA; REVIEW THE IMPORT SPECIFICATIONS FOR ANY CHANGES, AND CLICK THE OK BUTTON.



FIGURES 8-17 AND 8-18. THE COW SENSE PREMIUM INTERFACE COMPONENT ACTIVATION BOX AND COW SENSE PIC SHELL.

The Premium Interface component comes with its own documentation. You can open the component without an activation key, but you must have a registered activation key in order to use the program. To find out more information about this utility select **Utilities > Transfer Data > Premium Interface Component** from the main menu bar. Cow Sense will launch PIC Activation window (see Figure 8-17). Click the Continue button, and Cow Sense will launch the Cow Sense Premium Interface Component shell (see Figure 8-18). Select **Help > More > Breed Associations** and **Production Systems** from the main menu bar.

For the latest information about the PIC, call the Midwest MicroSystems sales desk at 800-584-0050.

COW MOOVER

FIGURE 8-19. THE COW MOOVER SHELL.

Cow Moover is an independent utility program within Cow Sense that lets you move whole-herd cow and bull tables into other herd data sets. Essentially you append one herd's cow and bull tables into another when you use Cow Moover. You also have the option of transferring a parent's current calf and past progeny records along with his or her records when you use this utility.

Because Cow Moover is an independent program accessible through Cow Sense, the documentation for it is in a separate publication. You can access—view and print—this documentation by using Adobe Acrobat reader. For more information on installing Adobe Acrobat Reader, see Chapter 9.

Chapter 9: The Window & Help Menus

WINDOW

In the Cow Sense Windows environment, you may have several windows open at once. For instance, you may have an Enter Cows data entry window and an Enter Bulls data entry window open at the same time. Or you may have some report windows open for reference as you enter animal data. The Window menu contains a listing of all open windows in Cow Sense. The active window on your desktop will have a check mark (✍) by it in the Windows menu. You can highlight the window in which you want to work by selecting it in the Window menu.

The Window menu also contains options for closing all open windows and for cascading windows.

CLOSE ALL WINDOWS

The Close All Windows command will shut all the open windows in your Cow Sense desktop shell at the same time. To close all windows and be left with a blank Cow Sense shell, select **Window > Close All Windows** from the main menu bar. You can also press the icon to close all open windows on your Cow Sense desktop shell.

CASCADE WINDOWS

The Cascade Windows option cascades all the open windows in the Cow Sense shell. To cascade windows, select **Window > Cascade Windows** from the main menu bar. You can also press the icon to cascade all open windows on your Cow Sense desktop shell.

DATA ENTRY MODE

Data Entry Mode changes the behavior of the Hot button in the ID field on bull and cow list reports. Normally, this Hot button launches the Individual Summary for the animal you have selected. In Data Entry Mode, the Hot button launches a data entry form for the animal instead (see Figure 9-1). This feature is very useful for editing animal records when working from a list, allowing you to fix errors you see in on-screen reports without having to open the Enter Data window and find the animal record associated with the error.

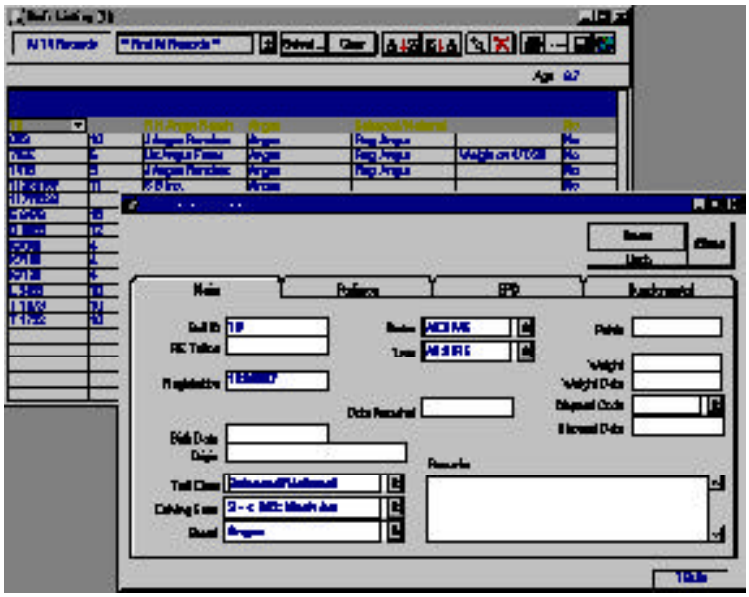


FIGURE 9-1.
AN ENTER INDIVIDUAL ANIMAL WINDOW ACCESSED FROM AN ANIMAL LISTING WINDOW.

To use Data Entry Mode, open any cow or bull report—excluding the Individual Listing reports. If you see an error in a record of the on-screen report, go to the main menu bar and select **Window > Data Entry Mode**. A check mark will appear by the words. Then simply click the Hot button on the animal's ID field, and Cow Sense will automatically pull up an Edit Individual [Animal #] window. When you've finished editing that animal's record, click the Close button and you will return to the open report window.

To return to the normal reporting mode, select **Window > Data Entry Mode** again from the main menu bar; this will remove the check mark and trigger the Hot button in the ID field on cow and bull list reports to once again access an animals Individual Summary report window.

HELP

COW SENSE HELP

Cow Sense provides full documentation on-line when you select **Help > Cow Sense Help** from the main menu bar. Cow Sense will display the Cow Sense Help screen, starting at the Cow Sense Help Contents. This screen is similar to other Windows Help screens in other programs. You can also press the ? icon to access the Cow Sense Help screen.

Contents Button

The underlined sans serif text in the Cow Sense Help Contents screen is in hypertext, so when you click on any hyperlinked text, Cow Sense Help will take you to a page regarding that topic. You can jump to more detailed information about a topic with each click on the hyperlink text. Use the Back button at the top of the screen if you want to return to a previous help page. If an explanation doesn't fit on one page, use the scroll bar on the right side of the screen to page down.

Search Button

When you click on the Search button, Cow Sense will display a Help Topics box. You can search for information two ways: using Index and using Find.

Index Tab

In the Index option, you can type in a word for which you want help in the top box or you can scroll through an index of Cow Sense words in the lower box. Once you've selected a word for which you want more information, click the Display button at the bottom of the box. Use this option if you only want to look up one word.

Find Tab

The Find option builds a database of every word in the Cow Sense help file and lets you search for information based on more than one word.

The first time you use this option, you'll have to build the database of words using the Find Setup Wizard.

After you've built the database, you can select the word or words for which you want more information either by typing it/them in the first box, or by selecting it/them from the second box (if you want to select more than one word from the box, hold down the CTRL key while you click on the words). Once you've selected a word or words, the program will display in the third box all the areas of the help file where those words occur. Click the general area for which you're searching for information and then click the Display button.

Back and << >> Buttons

The Back button and the << button perform the same role. They take you to the previous page of the Cow Sense on-line help document. The >> button (forward button) takes you to the next page of the Cow Sense on-line help document.

Print Button

Click the Print button to send a Help page to your printer. If you have more than one printer option, select the desired printer from the Name list. When you have the right printer and the proper settings (established by clicking the Properties button), click the OK button to proceed.

Glossary Button

Click the Glossary button to access a glossary of common Cow Sense terms. This glossary is also available in this *User's Guide*.

USER'S GUIDE

Cow Sense comes with a complete User's Guide in an Adobe Acrobat Reader format (called guide.pdf). This file format allows you to both view on-line and print the Cow Sense User's Guide (either sections or the whole document).

If you already have Adobe Acrobat Reader version 2.1 installed on your hard drive at c:\acroread, you can open the file by clicking User's Guide from the Help drop-down menu. If you don't have Adobe Acrobat Reader installed at c:\acroread, first install it using the following instructions and then you can read and print the User's Guide. If you have Adobe Acrobat Reader installed in another directory and you don't want to install a second version in c:\acroread, you can open the files by first opening Adobe Acrobat Reader and then using the **File > Open** command, or by using Windows Explorer.

Installing Acrobat Reader During Initial Cow Sense Installation

Be sure Cow Sense is closed before you begin installation.

Adobe Acrobat Reader comes on the Cow Sense installation disks. When you start the Cow Sense installation CD, select "Install Cow Sense" from the list of options. You will proceed through five installation windows, and then Insallshield will display an Install Adobe Acrobat Reader? window (see Figure 9-2). It will ask if you would like to install Adobe Acrobat Reader. Click the Yes button to install.

FIGURE 9-2. THE INSTALL ADOBE ACROBAT READER? WINDOW.

Installing Acrobat Reader After Cow Sense Installation

To install Adobe Acrobat Reader in Windows 95 or higher, from the Start button, choose Run and type c:\cowsense\acroread\acroread.exe

(this command assumes the default directory for Cow Sense) to launch the Adobe Acrobat Reader installation utility. Or using Windows Explorer (and assuming you installed Cow Sense in the c:\cowsense directory), click open the c:\drive ((C:)) and then click open the Cow Sense folder (CowSense). Double click the Acroread folder (Acroread), and then double click on Acroread.exe. This will launch the Adobe Acrobat Reader installation utility.

Follow the instructions on your screen. Installation requires approximately 3 MB of free hard disk space.

NOTE: UNLESS YOU HAVE ADOBE ACROBAT READER INSTALLED AT C:\ACROREAD, YOU MAY NOT BE ABLE TO DIRECTLY OPEN THE USER'S GUIDE AND OTHER COW SENSE PDF FILES FROM COW SENSE. IF YOU HAVE ADOBE ACROBAT READER 2.1 OR HIGHER INSTALLED IN ANOTHER DIRECTORY, YOU CAN USE THE FILE > OPEN COMMAND IN ACROBAT READER TO OPEN THE COW SENSE PDF FILES (ASSUMING THEY ARE IN THE DEFAULT DIRECTORY THAT WOULD BE C:\COWSENSE). OR YOU CAN USE WINDOWS EXPLORER TO OPEN THE FILES.

SPA GUIDELINES

Cow Sense has adopted and incorporated Standardized Performance Analysis (SPA) guidelines for reproduction and production, and has been certified by the NCBA Integrated Resources Management Subcommittee. Cow Sense is designed so that SPA production computations can be carried out with minimal additional data entry.

Cow Sense comes with an Adobe Acrobat document that explains some of the common SPA terms and concepts, and how to apply specific SPA concepts within Cow Sense. It guides you in data entry so that reports accurately reflect SPA guidelines. To read on-line and / or print these guidelines, you must have Adobe Acrobat Reader installed. Please refer to the previous section on installing Adobe Acrobat Reader.

COW SENSE SUPPORT

The Cow Sense Support option in the Help menu is designed to allow you to communicate electronically with Cow Sense support personnel at Midwest MicroSystems. You have three options in this menu: You can send your Cow Sense herd database file to a support representative; you can receive your Cow Sense herd file from a support provider; you can update your Cow Sense program directly from Midwest MicroSystems internet customer service center.

You must have an internet connection to use these options.

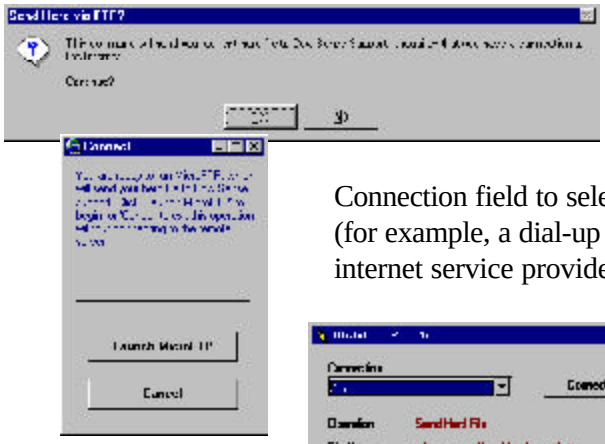
SEND HERD FILE

Sometimes Cow Sense support representatives run into support questions that are best handled when they can see your actual herd file. The Send Herd File command allows you to upload your herd file database to

Midwest MicroSystems by way of the internet so that a support representative can correctly diagnose your problem and provide a solution. You must have an active dial-up connection in order to use this support tool.

Generally you will have been in contact with a support representative by telephone or e-mail prior to transmitting your herd file over the internet.

To send a herd file to Midwest MicroSystems, first be sure that the herd file you want to send is the current herd you have open (the file you selected with the **File > Open Herd** command if you have more than one herd file established in Cow Sense). Then select **Help > Cow Sense Support > Send Herd File** from the main menu bar. Cow Sense will display a Send Herd via FTP window (see Figure 9-3). Click the Yes button to continue. Cow Sense will display a Connect window (see Figure 9-4). Click the Launch MicroFTP button to continue. When you click the Launch MicroFTP button, Cow Sense will create a special herd backup file with a .trx extension (for example, "mycows.trx"). Cow Sense will then display a MicroFTP window (see Figure 9-5). Click on the Hot button in the Connection field to select a connection device (for example, a dial-up connection from a local internet service provider (ISP)). Once you have the appropriate connection device, click the Connect button to launch MicroFTP and send your herd file to Midwest MicroSystems (see Figure 9-6). MicroFTP will compress the file and give it a .zip extension. It will also establish a connection with the Midwest MicroSystems customer service FTP



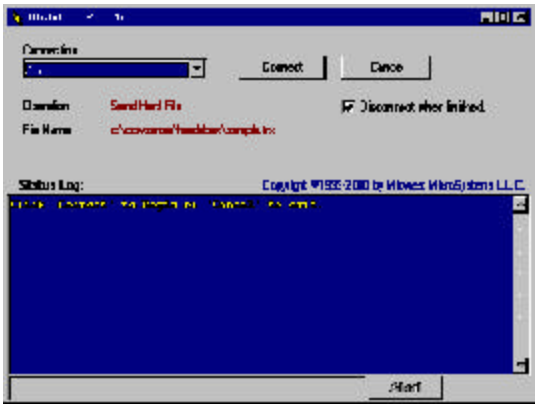
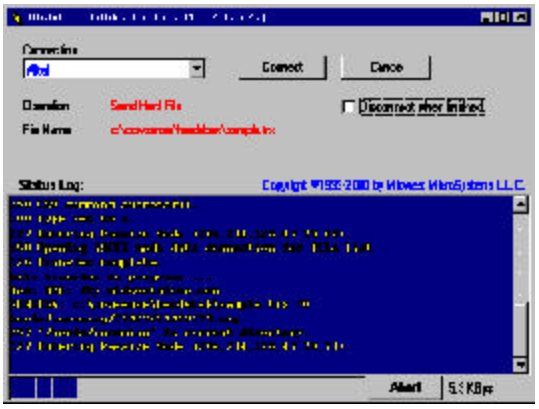


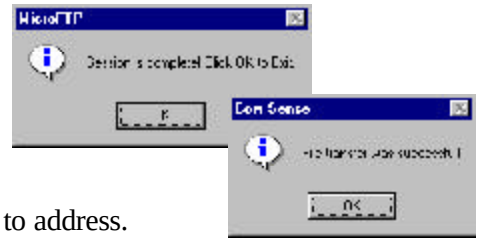
FIGURE 9-3 TO 9-5. THE SEND HERD VIA FTP WINDOW, THE CONNECT WINDOW AND THE MICROFTP WINDOW.



site. When the file transfer is complete, Cow Sense will display a window indicating that the transfer is complete (see Figure 9-7). Click the Exit button in the Connect window when you've finished uploading your file to Midwest MicroSystems. Cow Sense will display a window indicating that the file transfer was successful.

FIGURE 9-6. THE MICRO FTP CONNECTED WINDOW DISPLAYING THE DOWNLOAD TO THE MICROFTP SITE FROM A RANCH-BASED COMPUTER.

Click the OK button. Then, send an e-mail message to Midwest MicroSystems customer support at support@midwestmicro.com to alert support representatives that you sent your file and to notify them of the problems you need them to address.



FIGURES 9-7 AND 9-8. THE MICROFTP SESSION COMPLETE WINDOW AND COW SENSE FILE TRANSFER SUCCESSFUL WINDOW.

RETRIEVE HERD FILE

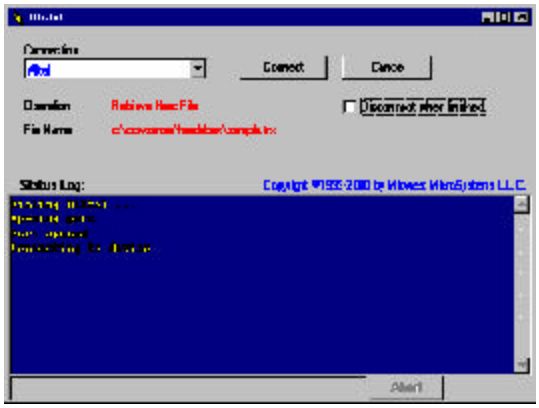
After a Midwest MicroSystems support representative has retrieved and reviewed the herd file that you uploaded for support, has diagnosed a problem, and provided a solution, he will notify you that you can download the herd file back into Cow Sense using the Retrieve Herd File command. If the support representative furnishes a solution without altering your database file, you will not need to download the file back into your system. If the support representative fixes a problem directly inside your file, however, you must download it back into your own Cow Sense system in order for the fix to take affect.

Before you begin downloading a repaired Cow Sense file from Midwest MicroSystems support, *be sure you have made a backup of your current herd file*.

To download a file from Midwest MicroSystems support, select **Help > Cow Sense Support > Retrieve Herd File** from the main menu bar. A Retrieve Herd File via FTP window will appear (see Figure 9-9). If you are sure you have a backup of (all) your herd file(s), click the Yes button to continue. Cow Sense will display a Connect window (see Figure 9-10). Click

FIGURES 9-9 TO 9-11. THE RETRIEVE HERD VIA FTP WINDOW, THE CONNECT WINDOW AND THE MICROFTP WINDOW.

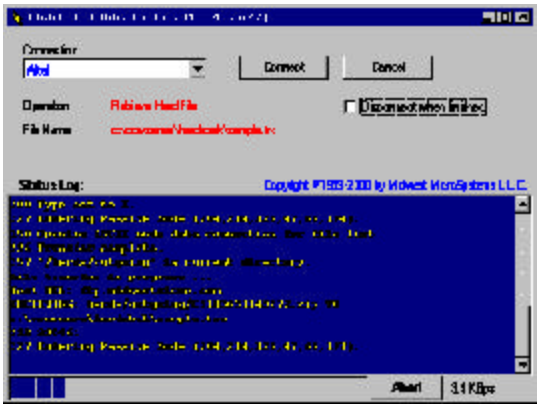
the Launch MicroFTP button to continue. Cow Sense will then display a MicroFTP window (see Figure 9-11). Click on the



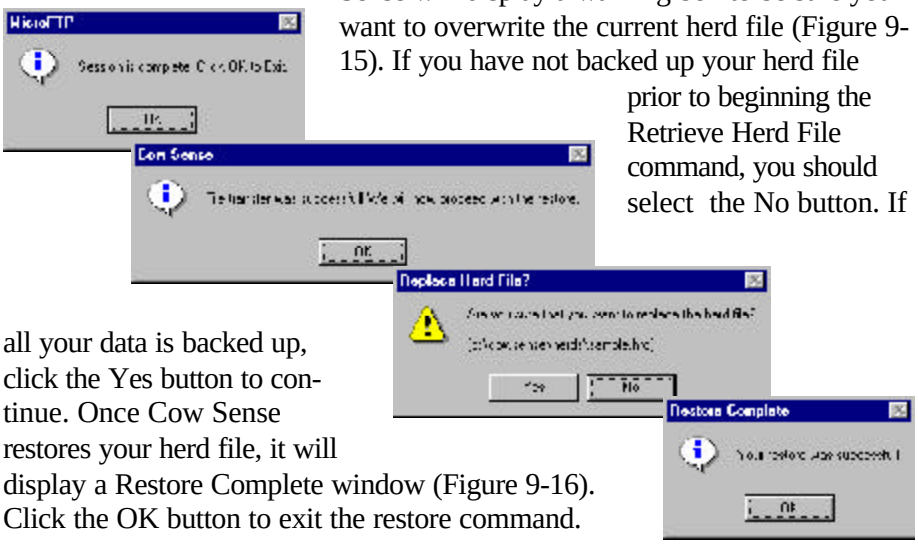
Hot button in the Connection field to select a connection device (for example, a dial-up connection from a local internet service provider (ISP)). Once you have the appropriate connection device, click the Connect button to launch MicroFTP and retrieve your herd file from Midwest MicroSystems (see Figure 9-12). MicroFTP will establish a connection with the Midwest MicroSystems customer service FTP site. When the file transfer is complete, Cow Sense will display a window indicating that the session is complete. (see Figure 9-13). Click the OK button. Cow Sense will redisplay the Connect window. Click the Exit button, and Cow Sense will display a

FIGURE 9-12.

THE MICRO FTP CONNECTED WINDOW DISPLAYING THE FILE UPLOAD FROM THE MICROFTP SITE TO A RANCH-BASED COMPUTER.



window explaining that upon clicking the OK button, the program will decompress the downloaded file and restore the herd file directly into your c:/cowsense/herds folder (see Figure 9-14). After you click the OK button, Cow Sense will display a warning box to be sure you want to overwrite the current herd file (Figure 9-15). If you have not backed up your herd file prior to beginning the Retrieve Herd File command, you should select the No button. If all your data is backed up, click the Yes button to continue. Once Cow Sense restores your herd file, it will display a Restore Complete window (Figure 9-16). Click the OK button to exit the restore command.



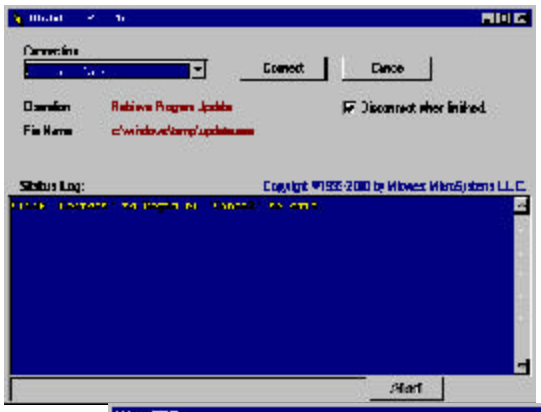
FIGURES 9-13 TO 9-16. THE FILE TRANSFER SUCCESSFUL WINDOW, THE PROCEED WITH RESTORE WINDOW, THE REPLACE HERD FILE WINDOW, AND THE RESTORE COMPLETE WINDOW.

UPDATE COW SENSE

While as a registered Cow Sense user, Midwest MicroSystems will notify you regarding future *upgrades* as they become available, you can download periodic maintenance *updates* and intermediate version releases any time. Midwest MicroSystems releases these updates frequently, so it's a good idea to run the Update Cow Sense utility routinely. In an effort to make updating hassle-free, you can use the MicroFTP tool to retrieve updates as often as necessary.

To receive an update easily, select **Help > Cow Sense Support > Update Cow Sense** from the main menu bar. Cow Sense will display a Receive Update via FTP window (see Figure 9-17). When you click the Yes button to continue, Cow Sense will display a Connect window (see Figure 9-18). Click the Launch MicroFTP button to continue. Cow Sense will then display a MicroFTP window (see Figure 9-19). Click on the Hot button in the Connection field to select a connection device (for example, a dial-up connection from a local internet service provider (ISP)). Once you have the appropriate connection device, click the Connect button to launch MicroFTP and update Cow Sense from Midwest MicroSystems. MicroFTP will establish a connection with the Midwest MicroSystems customer service FTP site. If an

FIGURES 9-17 TO 9-19. THE RECEIVE UPDATE VIA FTP WINDOW, THE CONNECT WINDOW, THE MICROFTP SESSION WINDOW, AND THE MICROFTP SESSION COMPLETE WINDOW .



update is available, Cow Sense will retrieve it into its system. When the update transfer is complete, Cow Sense will display a window indicating that the update was successful, or it will tell you that you have the most current version and that Midwest MicroSystems has not released an update since your last update (see Figure 9-20).

FIGURE 9-20.

ABOUT COW SENSE

When you select this option from the Help menu, Cow Sense will display a window with information about your current version of Cow Sense, including the version number you're using. You can find both your registration number and serial number in this window as well as avenues for obtaining support (see Figure 9-21).

FIGURE 9-21. THE ABOUT COW SENSE WINDOW.

Glossary

Active/Inactive

You have three choices for the status of a cow or bull in the Cow Sense cow and bull tables. An “active” cow or bull is one that Cow Sense considers a potential breeder. An inactive cow or bull is one that you intend to or have removed from the herd; you designate their status as “going” (cows only) or “gone” in the status field of cow and bull tables. Cow Sense will change the “going” record in the cow table to a “gone” record after you run a new cycle. You can show or suppress “gone” records with a query.

Adjusted Weight

To be comparable, weights must be adjusted for factors known to influence them. *Adjusted Weight* allows you to compare weights because it takes into account factors that influence actual birth, weaning and yearling weights in a predictable way: cow age, calf age and calf sex. Adjusted Weight thus allows you to make comparisons among your calves and use the calf weights to measure the performance of their parents.

By default, Cow Sense uses the Beef Improvement Federation standards for adjusted weights. You can choose specific breed standards in Purebred mode or create custom standards in the **Maintenance > Administration > Setup** option.

Backup

A backup is a copy of your herd file that you make for protection against any mishap that damages your active file. The copy might be on your hard disk, but it should also be on removable media for greater security. Backups stored on your computer's hard disk are placed in the c:\cowsense\herdsbak subdirectory and given a numeric extension that indicates the sequence in which they were made. Backups that Cow Sense creates automatically when you do an upgrade are given an extension that indicates the previous version of Cow Sense.

BIF

BIF stands for Beef Improvement Federation, a national organization responsible for setting standards and guidelines for beef cattle performance records.

Break-even Price

Break-even price is the amount, per pound, you need to receive for your calves in order to cover all of your costs to produce those calves. It is important to include *hidden costs*, such as depreciation and open cows, and *opportunity costs*, such as the value of owned pasture or feed produced, as well as out-of-pocket expenses.

Calf History

Calf History is the ultimate outcome of a cow's exposure to the bull. The Calf History is specified with a code that you chose from a list of codes you access when you click on a hot button. If a cow does not give birth, you record the reason in the Calf History field. If a calf dies, you record the date in the Calf History field.

Cell

A Cell is the intersection of a row and a column on a grid or table.

Cohort

A Cohort is a group of individuals that have a common statistically characteristic (for example, a single season's calves from first-calf heifers).

Contemporary group

This is a group of cattle of the same sex, of similar age, and that have been handled in substantially the same way. You should account for management practices that affect performance by defining appropriate contemporary groups.

Data

Data is a collection of information that you obtain and then enter, store, manipulate, and analyze in Cow Sense.

Database

A Database is a special type of file that contains information organized as fields and records. Your herd data is stored as a database that is independent of all other Cow Sense program files. Each herd is stored in a separate database. Each database contains several data tables. Herd database files are designated with an .HRD extension and stored in the c:\cowsense\herds subdirectory. Cow Sense creates another reference file for each herd with a .LDB extension, but these files are not essential to your data and are recreated each time the herd is opened.

Default

A Default is a value that Cow Sense supplies for you on an entry form. Cow Sense uses defaults for repetitive or commonly-occurring values, thereby saving you considerable time entering data, providing consistency, and reducing errors.

Data Entry Mode

When you have **Window > Data Entry Mode** selected, you can access an Edit Individual Cow or Edit Individual Bull window from the Hot button on Cow and Bull ID fields.

Delete

When you delete a record, you permanently remove it from the database. Cow Sense will ask you to confirm the action before proceeding.

Drop-down List

A Drop-down List is a data entry field where you pick the entry off a predefined list. The drop-down list saves you time and prevents typographical errors. Cow Sense uses drop-down lists extensively for data entry

Edit Mode

Edit Mode occurs when you are changing information in, or appending information to a record in an Enter Data window in Cow Sense.

EPD

EPD stands for Expected Progeny Difference. EPDs indicate how an animal will perform relative to other members of its breed. An EPD does not tell you what the outcome of a given mating will be, but rather represents average performance over a large number of matings. To be meaningful, you must also know the average EPDs for the breed. For example, a bull with +10 for weaning weight is below average if the breed as a whole is at +15.

Field

A Field is an entity that contains information. In your data entry windows, fields are represented by the white rectangles into which you type or fill in with drop-down selections. In report windows, fields are represented by a column in the grid that lists your animals or by blocks of labeled numbers and text.

Field Form

A Field Form is a report with blanks for you to record data in the pasture or at the working chute. The field form has preprinted IDs and/or other information that will be useful for you. Cow Sense provides field forms for calves and for cows.

File

A file is a group or collection of related information (such as a software program or database) that computers treat as a unit.

Find

When you click the Find button, Cow Sense displays a window in which you enter an animal ID for Cow Sense to retrieve a record. If the ID is on file, Cow Sense will go to that record.

Form

A form represents a screen document that you use to enter, display, modify, or delete data. Cow Sense has two types of forms:

- entry forms, which display one record at a time, and
- listing forms, which are reports.

Format

Format is a way of describing data fields that determines how you can enter data into the fields. Cow Sense contains text, number, and date formats.

Herd Name (Report Title)

The Herd Name is the title you give the herd that will appear on reports.

Index

An index determines the order in which records appear on a report. It may use one field or several fields in combination. The term is sometimes also used in place of "ratio," indicating the order of performance of a set of animals.

Menu

This is a list of related items that you may pull down with your mouse from the main menu bar at the top of the main Cow Sense shell.

MPPA

MPPA stands for Most Probable Producing Ability. This is a performance ratio that allows you to compare a cow's historical production reliably.

It is based on a cow's cumulative average adjusted 205 day ratio, but it also takes into consideration the *number* of calves she has had. For example, if a cow has only had one or two calves, the MPPA is adjusted toward the mean for your herd. This reduces the likelihood of making incorrect decisions based on limited observations. If a cow has had many calves, the MPPA is very close to her cumulative average adjusted 205 day ratio.

New

When you click the New button in an Enter Data window, Cow Sense displays a new entry form so you can enter a new record.

Operator

An operator establishes a relationship between and among records in a query (see Query). It determines what records a query returns. When establishing queries, you use operators to tell Cow Sense how to use a field for sorting records. Cow Sense uses both relational operators (such as "Begins With", "Equals", or "Contains") and logical operators ("And" or "or"). When you click in an Operator rectangle, Cow Sense activates a query Hot button, which provides a pop-up list of available operators.

Production Cycle

A Production Cycle begins when you expose a group of cows to breeding, either by AI or by natural service. It ends when you take yearling weights on the calves (or weaning weights, if you do not use yearling weights). A cow that is nursing a calf and running with a bull is actually in two different production cycles at the same time. This frame of reference takes losses prior to calving into account when measuring your herd's overall performance.

Cow Sense works in conjunction with the natural production cycle(s) of your herd. You begin each production cycle with a set of cows exposed to breeding. Records for those cows should remain in Cow Sense for the entire production cycle, even if you cull open or problem cows before you close the cycle. This way your reports will accurately reflect the productivity of the herd as a whole.

Query

Querying is a method of selecting a subset of records. You can use a query for analysis. (For example, to look at the performance of two-year-old cows, or to select cows with an MPPA that indicates culling.) Also you can use the query for herd management chores, such as specifying the criteria you want for selecting replacement heifers.

A query consists of a field, a relational operator (see Operator), and usually a value. Some operators, such as "Is Empty" do not require a value. Queries may be strung together with logical operators such as "And" or "Or" (also see Operator).

Ratio

A Ratio is a value that compares the performance of each calf to the average of the whole herd (or the calf's group, if you ratio by groups). Cow Sense calculates ratios from adjusted weights. A ratio of 100 represents the average. 110 is 10% above average, 90 is 10% below average.

Record

A Record is all the information associated with a given animal in Cow Sense. Visualize a record as one line on a Custom Report with all fields selected for display.

Remarks

The Remarks field stores free-form, unlimited text. Use the Remarks field to record information that you are unable to record in any other field.

Save

When you save, you write, or store, information on disk. You work is vulnerable to loss until you save it from your computer's memory to disk. In Cow Sense, your work is saved automatically each time you leave a record by moving to a different record, or by closing the entry form. This is so regardless of whether or not you use the Save button. If you have a problem during data entry, you will at most lose only the most current information you were editing in the last record.

Sort

Sort is the process of systematically ordering records—usually in ascending or descending alphabetical or numerical order.

SPA

Standardized Performance Analysis (SPA) is a means of consistently measuring performance in beef cow operations so that producers can make comparison within an operation or between operations. The *Guidelines for Production and financial Performance Analysis for the Cow-Calf Producers: Cow-Calf SPA* were cooperatively developed and published in 1993 by the Integrated Resources Management Subcommittee of the National

Cattlemen's Beef Association (NCBA), the United States Department of Agriculture Extension Service, and university professionals from several states. You can get more information about these guidelines from the NCBA or your local extension service.

- *Exposed Females*. SPA is based on a production cycle that begins when females are exposed to breeding and ends with weaning. Reproductive performance measures are all relative to the number of females exposed. Cow Sense accommodates this frame of reference with the calf history codes, which account for all outcomes of breeding. Although you are not required to enter breeding data, you must enter a calf history code for each cow exposed to breeding. If a cow is disposed of because of a reproductive failure (or other problem that prevents calving), use the temporary status, "Going," to let Cow Sense make a record for her in the following production cycle, so that the appropriate calf history may be entered. If a cow is exposed to breeding but is culled bred for performance reasons, then mark her "Gone" so that Cow Sense does not create a record for her in the following production cycle.
- *Replacements*. Cow Sense detects replacements automatically by looking for cows that did not calve in any of the previous production cycles. Therefore, the first production cycle in Cow Sense will consider all cows to be replacements. For the purposes of SPA, you may run an artificial production cycle to initialize Cow Sense so that replacements to the first true production cycle can be properly identified. To avoid having to enter false calf data, assign each of the records in the artificial cycle a calf history of "8."
- *Purchased Calves*. SPA Guidelines exclude purchased calves (typically grafted to a foster dam who has lost her own calf) from reproductive performance measures, but not from calving distribution and total weaning weights. In Cow Sense, create a second calf record for the dam (as you would for twins) to accommodate the purchased calf. To exclude the calf from SPA reproduction calculations, enter in the calf remarks "SPA Exclude," typed exactly that way.
- *Calving Distribution Start Date*. SPA Guidelines offer two methods of identifying the start date for calving distribution. One is based on the date the bull was turned in with mature cows (285 days after), the other is based on the third calf born from mature cows (3 or older). Cow Sense uses the latter method, since breeding data entry is not required.

- *Pregnancy Loss Percentage*. SPA Guidelines offer two methods of computing pregnancy loss percentage. Cow Sense adopts the first method (Pregnant Females that Fail to Calve/Females Diagnosed Pregnant).

Tab

Use the TAB key to move the cursor between fields on entry forms. A blinking cursor indicates where your computer will receive information. If a value already exists in a field, the value will appear highlighted. You can also locate an insertion point in a field by clicking on it with your mouse.

Table

A table is a grouping of values representing distinct items (data) that are related to one common entity. Each row in a table represents a collection of data values that relate to the common entity and these values are generally categorized into columns. Cow Sense is built on the following tables: Calf, Cow, Bull, Breeding, Treatment.

Undo

When you click the Undo button in an Enter Data window, Cow Sense removes the information you typed into a record before you click the Save button.

Update

When you run Calving, Weaning and Yearling Updates, Cow Sense makes all the calculations necessary to make useful performance measures out of your raw weight data. Cow Sense first calculates adjusted weights and ratios. Cow Sense then transfers calf data to the parent cow and bull, and compiles this data with all their other calves to calculate average performance measures.

Validation

Validation is a method of comparing an entry with a set standards and requiring that the entry meet those standards before the program will accept the entry. Validation occurs behind the scenes, but if your entry does not meet requirements, Cow Sense will present a "Validation Error" message explaining why it won't accept a value. Some validations are options. See **Maintenance > Administration > Setup**.

Appendices

APPENDIX 1: A COMPARISON OF KEY FEATURES BY MODE

	EZ-75	Lite	Commercial	Purebred
Ease of Use				
Easily navigate from one area to another	✍	✍	✍	✍
Complete searchable help section	✍	✍	✍	✍
Electronic User's Guide in PDF format	✍	✍	✍	✍
Backup, restore and repair herd file utilities	✍	✍	✍	✍
Included technical suport (time allowed differs by product. See the Customer Support Policy)	✍	✍	✍	✍
Complete Inventory by:				
Class (bull, calf, cow)	✍	✍	✍	✍
Group (location or other user-defined groups)	✍	✍	✍	✍
Subgroup (user defined; e.g., pasture)	✍	✍	✍	✍
Age, origin and purchase price	✍	✍	✍	✍
Any other distinctions, single or combined	✍	✍	✍	✍
Convert raised replacements from calf records to cow or herd bull records	✍	✍	✍	✍
Death and disposal records for bulls, calves and cows	✍	✍	✍	✍
Calving data entry fields				
Date, dam ID, sire ID, calving ease, etc...	✍	✍	✍	✍
Flexibility for year-round calving (multiple seasons)	✍	✍	✍	✍
Tabular calf data entry option for historical data entry	--	✍	✍	✍
Reproductive Performance Measures				
Average calving interval	✍	✍	✍	✍
Calving distribution	✍	✍	✍	✍
Pregnancy examination results	✍	✍	✍	✍
Pounds weaned per exposed female	✍	--	✍	✍
Individual and group health data				
Preloaded pharmacy of BQA vaccines and antibiotics	✍	✍	✍	✍
Tracks critical routes of adminisration and withdrawal	✍	✍	✍	✍
Record individual or group health treatments	✍	✍	✍	✍
Powerful reports				
Print field forms for data collection	✍	✍	✍	✍
Standard reports for bulls, cows and calves	✍	✍	✍	✍
Generates a NCBA-certified SPA production report	✍	--	✍	✍
Generates a cost of production report	✍	--	✍	✍
Ability to edit animal records from report screens	✍	✍	✍	✍
Includes custom eport library (preloaded sample reports for user-defined reporting)	--	✍	✍	✍
Easily build or edit custom reports to individual specifications	--	✍	✍	✍
Match function accomodates queries between bull, calf, cow and treatment tables	--	✍	✍	✍
Record Sale Data				
Group	✍	✍	✍	✍
Individual	--	✍	✍	✍

	EZ-75	Lite	Commercial	Purebred
Breeding data entry and reporting				
Tracks AI and pasture exposed breeding data	✍	✍	✍	✍
Interactive semen inventory	--	✍	✍	✍
Planned mating tool	--	--	--	✍
Complete ET tracking for donors, recipients and embryos	--	--	--	✍
Customization flexibility for individual operations				
User-defined fields for bull, calf and cow groups and subgroups	✍	✍	✍	✍
Create and save custom queries and sorts	✍	✍	✍	✍
Track multiple breeds, add breeds or composites and breed percentages	✍	✍	✍	✍
Turn off some fields irrelevant to an operation	--	--	✍	✍
Rename non-required fields or add new ones	--	--	✍	✍
Complete calf performance indicators				
Calving, weaning, yearling weight data (actual, adjusted and within herd ratios)	✍	--	✍	✍
Individual carcass performance data	--	--	✍	✍
Individual feedlot performance data	--	--	✍	✍
Individual ultrasound data	--	--	✍	✍
Lifetime progeny performance indicators for sire and dam				
Average calving ease scores	✍	✍	✍	✍
Birth, weaning ,and yearling weight data (actual, adjusted and within herd ratios	✍	--	✍	✍
Calculates within herd ratios for cows (MPPA) and bulls	✍	--	✍	✍
Extensive feedlot and carcass data (individual and averages)	--	--	✍	✍
Ultrasound data (individual and averages)	--	--	✍	✍
Pedigree Information				
First generation pedigrees (sire and dam)	✍	✍	✍	✍
Multiple generation pedigrees	--	--	--	✍
Track complete performance pedigrees	--	--	--	✍
Record registration information (#, name, tattoo, blood, etc.)	--	--	--	✍
Bull EPDs	✍	✍	✍	✍
Cow and calf EPDs	--	--	--	✍
Advanced data entry or exchange functionality			✍	
Global data entry and search/replace	--	✍	✍	✍
Export data	✍	✍	✍	✍
Import data	--	✍	✍	✍
Interface with Cow Moover				
Move cow and bull and their historical progeny records between herds	--	✍	✍	✍
Interface with Sale Manager				
Manage customers and complete sale data	--	--	✍	✍
Interface with Cow COMM				
Use for chute-side data entry or retrieval from the Cow Sense database	--	--	✍	✍
Compatability with electronic scale and ID readers	--	--	✍	✍
Seamless download directly from the scalehead	--	--	✍	✍
Real-time animal sorting based on your criteria	--	--	✍	✍
Interface with Premium Interface Component				
Interface with hand-held computers	--	--	✍	✍
Seamless data exchange with feedlots	--	--	✍	✍
Seamless data exchange with breed associations	--	--	--	✍
Interface with Cow Sense Online				
Instant comparisons of your herd against average of all subscribers	✍	--	✍	✍
Size Considerations				
Unlimited number of herds	1	✍	✍	✍
Unlimited number of cows	75	✍	✍	✍
Unlimited number of bulls	15	✍	✍	✍

APPENDIX 2: DEFINITION OF CARCASS QUALITY AND FEEDLOT PERFORMANCE MEASURES

Column Title	Definition or Use
Carcass Fields	
Carcass Backfat	Measurement of fat deposition between the 12 and 13th rib of the carcass at harvest
Carcass Cert Angus	Carcass that meets the criteria of the Certified Angus Beef Program
Carcass Condemned	Carcass that has been condemned
Carcass Dark Cutter	Carcass that has been identified as a dark cutter
Carcass Dressing Pct	Reported as a percentage of hot carcass weight to (shrunk) live animal weight
Carcass Fat Color	Color of carcass fat
Carcass Final YG	Industry standard reflecting the final carcass yield grade after the chilling process (Fat thickness, REA, HCW, KPH)
Carcass Hot Weight	Carcass weight taken after evisceration and prior to the chilling process
Carcass Kill Date	Date the animals were harvested
Carcass KPH	Amount of kidney, pelvic and heart fat as a percentage of hot carcass weight
Carcass Lot Num	Number assigned to the group (or lot) and or the individual carcass ID number assigned at harvest by the packing plant
Carcass Marbling Num	Industry standard number that indicates the degree of marbling in the rib eye
Carcass Marbling	Industry standard classification indicating the degree of marbling in the rib eye
Carcass Maturity	Industry standard age identification system, expressed as a score
Carcass Meat Color	Color of carcass lean
Carcass Muscling Score	Industry standard muscling classification at harvest expressed as a score
Carcass Net Return/Head	Net amount of money returned on a per head basis
Carcass Other Defect	Any additional defect of the carcass
Carcass Other Program	Name(s) of other value based marketing programs for which the carcass qualifies
Carcass Packer ID	Name of packing plant where animal was harvested
Carcass Pct Retail	Percentage of retail cuts from the carcass in relation to hot carcass weight
Carcass Prelim YG	Industry standard preliminary analysis of carcass yield grade taken after chilling (Fat thickness only)
Carcass Price	Carcass price or value of a carcass expressed on a cwt basis
Carcass Quality Grade	Industry standard system based on quality measures for marbling and maturity
Carcass REA	Rib Eye Area measured at the 12th rib and reported in square inches
Carcass REA/CWT	Ratio of rib eye area to hot carcass weight of animal expressed on a cwt basis
Carcass Remark	Any additional remarks for that animal's carcass can be reported here
Carcass Return/CWT	Total amount of money returned on a live cwt basis of the animal
Carcass Return/Head	Total amount of money returned on a individual animal
Carcass Tenderness	Recorded as Warner-Bratzler Shear (WBS) values
Feeding Fields	
Feeding ADG	Average Daily Gain
Feeding Adj Net Return	Carcass value adjusted to a market constant price for comparison between marketing periods
Feeding Conversion	Ratio reflecting the pounds of feed fed to obtain a pound of gain in live weight (dry matter basis)
Feeding Cost Feeding	Total cost of feed per head
Feeding Cost Gain	Total of all costs incurred to add 1 lb of gain, expressed on a per lb live weight basis
Feeding Cost Other	Additional expenses incurred during the feeding phase, expressed on a per head basis
Feeding Cost Processing	Processing expenses charged on a per head basis
Feeding Cost Treatment	Additional veterinarian or sick treatment expenses charged, expressed on a per head basis
Feeding Days	Total number of days in the feedlot
Feeding Feed Yard ID	Name of feed yard where animal was fed
Feeding Final Weight	Total individual animal weight at slaughter
Feeding In Date	Starting date of feeding period
Feeding In Value	Cost of individual animal at the beginning of the feeding period, expressed as a total $ value
Feeding In Weight	Received weight of individual animals prorated back to truck pay weight
Feeding Lot Num	Number assigned to the group (or lot) and or an individual animal ID number assigned at the feed yard by the feeder
Ultrasound Fields	
Ultrasound Backfat	Backfat detected at the 12th rib by ultrasound
Ultrasound Date	Date the ultrasound was performed
Ultrasound Rib Eye	Size of rib eye detected by ultrasound and reported in square inches
Ultrasound Marbling	The percentage of intramuscular fat in the rib eye detected by ultrasound

APPENDIX 3: DEFINITION OF CARCASS QUALITY AND FEEDLOT FIELD CHARACTERISTICS

Column Title	Cell Format	Character Spaces	Appearance	Appearance after Editing
Carcass Fields				
Carcass Backfat	Number		0.35	.35
Carcass Cert Angus	Yes/No		yes	Yes
Carcass Condemned	Yes/No		no	No
Carcass Dark Cutter	Yes/No		no	No
Carcass Dressing Pct	Number		0.6325	63.25%
Carcass Fat Color	Text	8	White	White
Carcass Final YG	Number		2.35	2.35
Carcass Hot Weight	Number		755	755
Carcass Kill Date	Date/Time		5/21/99	5/21/99
Carcass KPH	Number		2.8	2.8%
Carcass Lot Num	Text	50	123-95678	123-95678
Carcass Marbling Num	Number		55	55
Carcass Marbling	Text	8	Moderate	Moderate
Carcass Maturity	Text	2	A+	A+
Carcass Meat Color	Text	8	Red	Red
Carcass Muscling Score	Number		2	2
Carcass Net Return/Head	Currency		23.5	$23.50
Carcass Other Defect	Text	20	Injection Defect	Injection Defect
Carcass Other Program	Text	20	C.H.B.	C.H.B.
Carcass Packer ID	Text	30	XYZ Pack CO	XYZ Pack CO
Carcass Pct Retail	Number		.628	62.80%
Carcass Prelim YG	Number		2.50	2.0
Carcass Price	Currency		1.10	$1.10
Carcass Quality Grade	Text	20	Choice -	Choice
Carcass REA	Number		14.6	14.6
Carcass REA/CWT	Number		1.76	1.76
Carcass Remark	Text	100	Miscellaneous	Miscellaneous
Carcass Return/CWT	Currency		75.12	$75.12
Carcass Return/Head	Currency		882.76	$882.76
Carcass Tenderness	Number		2.87	2.87
Feeding Fields				
Feeding ADG	Number		3.5	3.5
Feeding Adj Net Return	Currency		30.53	$30.53
Feeding Conversion	Number		6.1	6.1
Feeding Cost Feeding	Currency		205.67	$205.67
Feeding Cost Gain	Currency		0.4975	$0.50
Feeding Cost Other	Currency		4.08	$4.98
Feeding Cost Processing	Currency		16.01	$16.01
Feeding Cost Treatment	Currency		8.45	$8.45
Feeding Days	Number		220	220
Feeding Yard ID	Text	20	XYZ Feeders	XYZ Feeders
Feeding Final Weight	Number		1240	1240
Feeding In Date	Date/Time		10/1/00	10/1/100
Feeding In Value	Currency		550	$550
Feeding In Weight	Number		627	627
Feeding Lot Num	Text	50	338-0123	338-0123
Ultrasound Fields				
Ultrasound Backfat	Number		0.2	0.2
Ultrasound Date	Date/Time		3/21/01	3/21/101
Ultrasound Rib Eye	Number		12	12
Ultrasound Marbling	Number		4.2	4.2

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Cow Moover

Cow Moover is a utility program within Cow Sense that lets you move whole-herd cow and bull tables into other herd data sets. Essentially you append one herd's cow and bull tables unto another when you use Cow Moover. You also have the option of transferring a cow's current calf and past progeny records along with her records when you use this utility.

To use Cow Moover, click **Utilities > Cow Moover** from the main menu bar. Cow Sense will open the Cow Moover program (see Figure 1). You must purchase an enablement key to fully operate Cow Moover, but you can see how it work by using the Cow Moover trial edition first. Call Midwest MicroSystems at 800-584-0040, or contact your Midwest MicroSystems Reseller if you wish to acquire an enablement key.

FIGURE 1.
THE COW MOOVER SHELL AND IDENTIFY HERDS WINDOW.

To move cow or bull records (with or without past progeny records) from one herd into another herd, select **Transfer Cattle > Identify Herds** from the Cow Moover main menu bar. Cow Moover will display an Identify Herds window (see Figure 2). Using standard Windows protocol, select the folder and file for your Source Herd. The Source Herd contains the tables

FIGURE 2.
THE COW MOOVER IDENTIFY HERDS WINDOW.

that you want to append into the Destination Herd. The default directory for the Source Herd is c:\cowsense\herds. After you have selected the Source Herd, use standard Windows protocol to select the folder and file for your Destination Herd. The Destination Herd is the data file that will receive records from the Source Herd. Click the Continue button.

"MOOVING" COWS

Transferring cow records from one herd file to another involves a three-step process. First you set up the files, then you select the records you want to "moove" and then you process the files, which is the actual transfer process.

SET UP

To set up cow records to move, select **Transfer Cattle > Moove Cows > Set Up Cows** from the Cow Moover main menu bar to open the Set Up Cows window (see Figure 3). After you have finished setting up the way you want data to transfer from the source to the destination file, click the Continue button. Cow Moover will automatically open the Select Cows window for you to complete the next step.

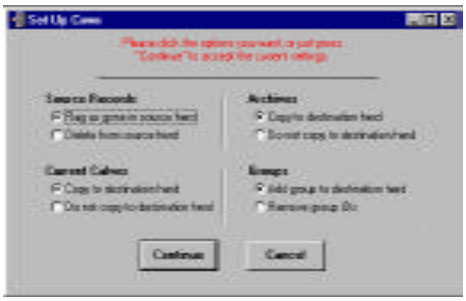


FIGURE 3.
THE COW MOOVER SET UP COWS WINDOW.

Source Records

You have two options in the Source Records box of the Set Up Cows window. If you select the Flag as Gone radio button, the Status field in all records that you transfer from the source herd will change to “Gone”. If you select the Delete From Source Herd radio button, Cow Moover will delete all the records that you transfer from the source herd; you cannot undo the deletions if you chose this option.

Archives

If you select the Copy to Destination Herd radio button, Cow Moover will transfer all the cow herd’s past progeny records with the cow records from the source herd into the destination herd, or leave them out. These records do not include the cow herd’s current calf crop records. If you select the Do Not Copy to Destination Herd radio button, Cow Moover will not transfer past progeny records.

Current Calves

If you select the Copy to Destination Herd radio button, Cow Moover will transfer the cow herd’s current calf crop records with the cow records from the source herd to the destination herd. If you select the Do Not Copy to Destination Herd radio button, Cow Moover will not transfer current calf crop records. You must have calf records established in both the source and the destination herds in order for this transfer process to work.

Groups

If you select the Add Group to Destination Herd radio button, Cow Moover will transfer Cow Group 1 and Cow Group 2 headings from the source herd to the destination herd. If you select the Remove Group IDs radio button, Cow Sense will not transfer Cow Group 1 and Cow Group 2 headings from the source herd to the destination herd. See the **Enter Data > Define Groups** section in Chapter 4 of the *Cow Sense User’s Guide* for more information on Cow Groups.

SELECT COWS

To select which cow records you want to move, select **Transfer Cattle > Moove Cows > Select Cows** from the Cow Moover main menu bar to open the Select Cows window (see Figure 4).

Use the Select button in this window to use the query functions in order to obtain the cow records in the source file that you want to transfer. See Chapter 5 of the *Cow Sense User’s Guide* for more information on using the query functions.

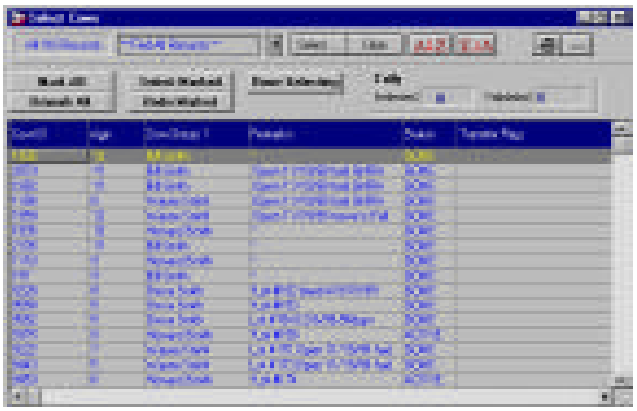


FIGURE 4.
THE COW MOOVER SELECT COWS WINDOW.

You can mark or unmark all the records present in the open grid by clicking the appropriate button. If you want to mark animals individually in the open grid, place your mouse cursor to the left of the Cow ID field. The cursor will change to an arrow. Click the mouse. Marked records will be black.

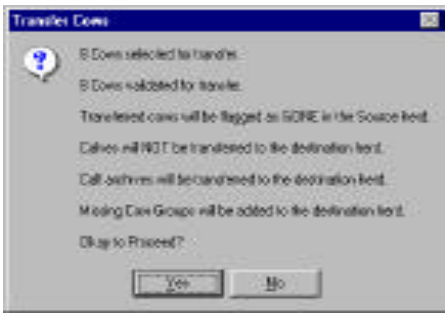
Once you have marked the cow records you want to transfer, click the Select Marked button. Cow Moover will count the records that you have selected and give you value in the Tally box. When you are satisfied that you have all the records selected that you want to transfer click the Done Selecting button. Cow Moover will automatically launch the Process Cows window.

PROCESS COWS

FIGURE 5.
THE COW MOOVER PROCESS COWS WINDOW.

To complete the transfer process, select **Transfer Cattle > Moove Cows > Process Cows** from the Cow Moover main menu bar. Cow Moover will display a Process Cows window (see Figure 5). This window will list the source and destination herds, and show a Tally of records selected and validated to transfer. Once the transfer is complete, the Tally window will display the number of records successfully transferred. Click the Process Cows button to proceed. A Back Up Destination Herd window will appear. Click the Yes or No button to proceed.

Cow Moover will display a Transfer Cows window (see Figure 6) as one last check point to be sure you have selected the right number of records



to transfer, and have set the right parameters. Click the Yes button if it is OK to proceed. Then in the Tally box of the Process Cows window, Cow Moover will display the number of records successfully transferred. Click the OK button in the Cow Transfer window to finish the process.

FIGURE 6.
THE COW MOOVER TRANSFER COWS WINDOW.

"MOOVING" BULLS

Transferring bull records from one herd file to another involves a three-step process. First you set up the files, then you select the records you want to "moove" and then you process the files, which is the actual transfer process.

SET UP

To set up bull records to move, select **Transfer Cattle > Moove Bulls > Set Up Bulls** from the Cow Moover main menu bar. Cow Moover will display a Set Up Bulls window (see Figure 7). After you have finished setting up the way you want data to transfer from the source to the destination file, click the Continue button. Cow Moover will automatically open the Select Cows window for you to complete the next step.

FIGURE 7.
THE COW MOOVER SET UP BULLS WINDOW.

Source Records

You have three options in the Source Records box of the Set Up Bulls window. If you select the Leave in Source Herd radio button, Cow Moover will not change the status nor delete transferred bull records from the source herd. If you select the Flag as Gone radio button, the Status field in all the records you transfer from the source herd will change to "Gone". If you select the Delete From Source Herd radio button, Cow Moover will delete all the records that you transfer from the source herd; you cannot undo the deletions if you chose this option.

Groups

If you select the Add Group to Destination Herd radio button, Cow Moover will transfer Bull Group 1 and Bull Group 2 headings from the source herd to the destination herd. If you select the Remove Group IDs radio button, Cow Sense will not transfer Bull Group 1 and Bull Group 2 headings from the source herd to the destination herd. See the **Enter Data > Define Groups** section in Chapter 4 of the *Cow Sense User's Guide* for more information on Bull Groups.

SELECT BULLS

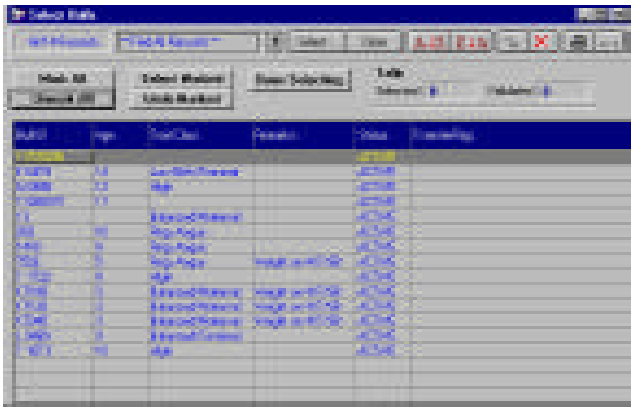


FIGURE 8.
THE COW MOOVER SELECT BULLSWINDOW.

To select which bull records you want to move, select **Transfer Cattle > Moove Bulls > Select Bulls** from the Cow Moover main menu bar. Cow Sense will open a Select Bulls window (see Figure 8).

Use the Select button in this window to use the query functions in order to obtain the bull records in the source file that you want to transfer. See Chapter 5 for more information on using the query functions.

You can mark or unmark all the records present in the open grid by clicking the appropriate button. If you want to mark animals individually in the open grid, place your mouse cursor to the left of the Bull ID field. The cursor will change to an arrow. Click the mouse. Marked records will be black.

Once you have marked the bull records you want to transfer, click the Select Marked button. Cow Moover will count the records that you have selected and give you value in the Tally box. When you are satisfied that you have all the records selected that you want to transfer click the Done Selecting button. Cow Moover will automatically launch the Process Bulls window.

PROCESS BULLS

FIGURE 9.
THE COW MOOVER PROCESS BULLS WINDOW.

To complete the transfer process, select **Transfer Cattle > Moove Bulls > Process Bulls** from the Cow Moover main menu bar. Cow Moover will display a Process Bulls window (see Figure 9). This window will list the source and destination herds, and show a Tally of records selected and validated to transfer. Once the transfer is complete, the Tally window will display the number of records successfully transferred. Click the Process Bulls button to proceed. A Back Up Destination Herd window will appear. Click the Yes or No button to proceed.

FIGURE 10.
THE COW MOOVER TRANSFER BULLS WINDOW.

Cow Moover will display a Transfer Bulls window (see Figure 10) as one last check point to be sure you have selected the right number of records to transfer, and have set the right parameters. Click the Yes button if it is OK to proceed. Then in the Tally box of the Process Bulls window, Cow Moover will display the number of records successfully transferred. Click the OK button in the Bull Transfer window to finish the process.