

CowCalf5

Computerized Herd Record and Analysis System

...taking ranchers
into the next
century



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Chapter 1: Introduction to CowCalf5

About CowCalf5

The CowCalf5 Record System evolved from the ideas of producers, animal scientists, and veterinarians. Use CowCalf5 to make management decisions based on linked selection, reproduction, nutrition, health, and economic data. The CowCalf5 performance programs involve adjustment factors that conform to the most recent Beef Improvement Federation (BIF) recommendations. The BIF is a cooperative effort among more than 60 state and national beef cattle improvement programs for purebred and commercial producers. Through BIF recommendations, these groups standardize programs and methodology to improve and extend the use of performance testing. The BIF intends to show no preference for or discrimination against any individual breed of cattle or organization.

Computerized Herd Records

Management is a dynamic process requiring timely, accurate, and comprehensive information. Although many herd record systems are effective, computerized records allow fast access to large data sets and easily retrievable, summarized reports.

The cow-calf production phase works best as a yearly production cycle, beginning and ending with the calving season. The purpose of keeping production records is to provide an accessible, accurate herd inventory and to store information related to reproduction, culling, selection, nutrition, health and other herd management data. The success of any cow-calf enterprise depends on manipulating many factors. Initiating, maintaining and using a good record-keeping system is an essential ingredient of success. Effective records give direction and measure improvement. The purpose of the CowCalf5 record system is to furnish electronic or printed work sheets for collecting data, and to provide summary information from that data for evaluation.

CowCalf5 incorporates the benefits of a powerful SQL database, features of the Windows environment, and functional data analysis that users expect. CowCalf5 has incorporated many of the suggestions of previous users, plus additional features which make record-keeping more valuable. By utilizing new data entry techniques, data entry will be a breeze.

Chapter 2: Installation and Setup

Installing CowCalf5

To install CowCalf5, place the CowCalf5 CD in your CD-ROM drive. CowCalf5 has auto-run setup, which means after you put the CD in your computer, CowCalf5 will automatically run.

However, if the CD does not start automatically, click on **Run** from the **Start** menu, then type **d** followed by a colon (:), and a backslash (\), and the word **setup**. The phrase should look like the following. **d:\setup**. If your CD-ROM has a different drive letter, replace **d** with your CD drive letter and then click **OK**.

CowCalf5 Setup Screen and a Welcome screen will then appear on your desktop. Follow the instructions on the screen. Click **Next** to continue through the Setup process.

System Requirements

To run CowCalf5, your system has to meet these requirements or CowCalf5 will not function properly.

Minimum:

Windows 95
16 Meg RAM
50 Meg HD
Pentium
SVGA Monitor (800 X 600 Display)

Recommended:

64 Meg RAM
Pentium II
Internet Connection
Windows Printer

Creating an Icon

Icons make it easy to open a program quickly. To make a CowCalf5 icon on your desktop, follow the instructions below.

1. Open Windows Explorer by clicking on the **Start** menu, then clicking on **Programs**, then clicking on **Windows Explorer**. Once Windows Explorer is running, open the **CowCalf5** folder.
2. Highlight the file **cowcalf.exe** and click the right mouse button. A pop-up menu will appear. Select **Create Shortcut** from the menu.
3. A file named **Shortcut to CowCalf5** should now be in your CowCalf5 subdirectory. Using your mouse, drag this file to your desktop.
4. Exit Windows Explorer.
5. Click on the **Shortcut to CowCalf5** with the right mouse button, select **Properties** from the pop-up menu. Click on the **Screen** tab. Under **Usage**, click on **Full-Screen**.
6. Make sure that the **Start in** box is set to **C:\COWCALF5** and click **OK**.

What You Need to Get Started

Certain information is required for CowCalf5 to function properly. The essential and recommended fields are listed below.

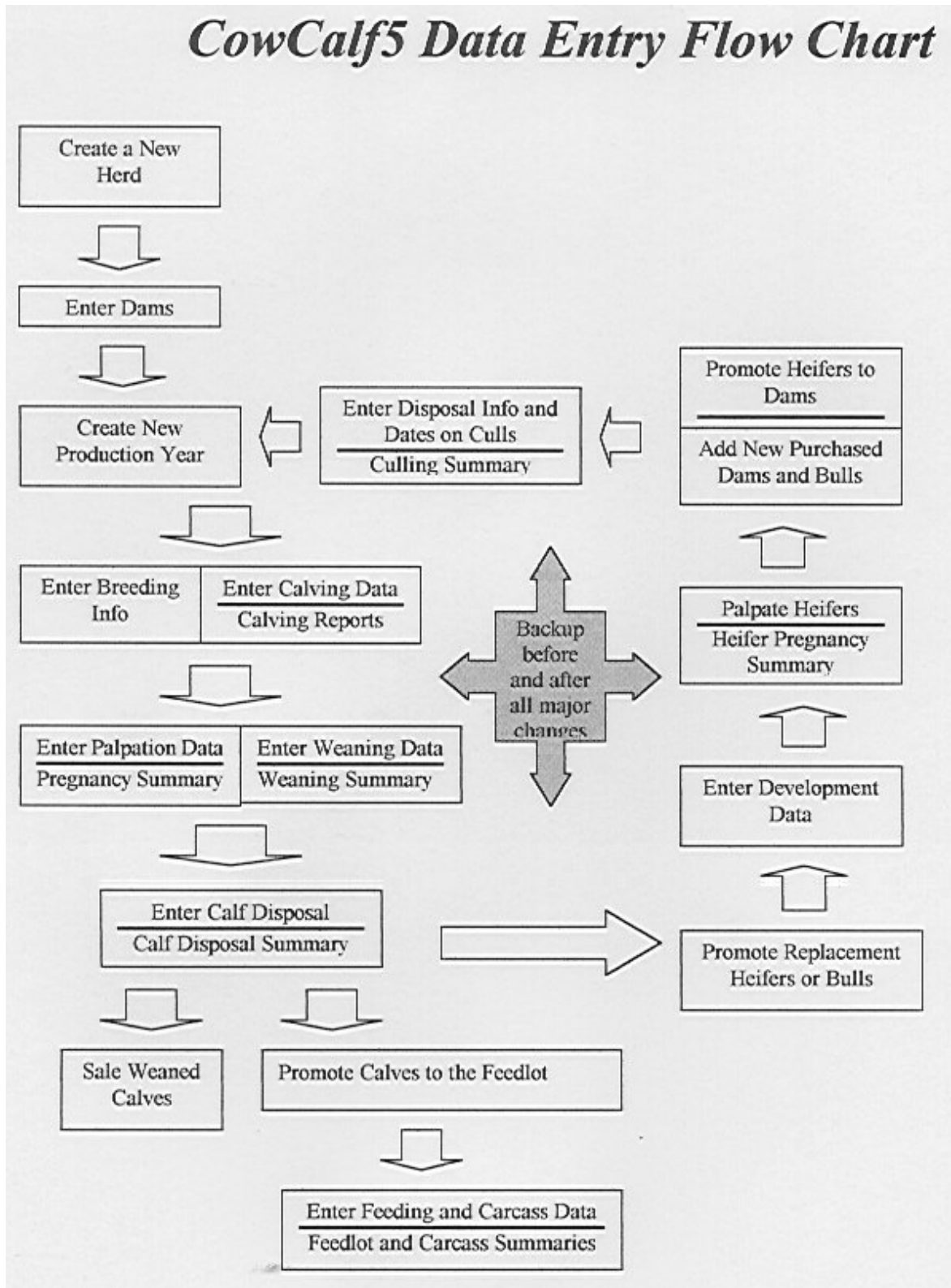
- Unique IDs
- Animal Birth Dates
- Weaning Information (recommended)
- Pregnancy Data (recommended)
- Weights (recommended)

(See also "Getting Started" Real player Presentation on your installation CD or on our website by clicking on **Support**, and then clicking on **View Tutorials**.)

Updating Your CowCalf5 Program

To update your CowCalf5 program with the latest changes to CowCalf5, access the CowCalf5 home page on the Internet at: <http://www.cowcalf.com>. From this page, select the **Downloads** option. You should then be able to choose the **CowCalf5 Updates** option (located just below the word **Downloads**). After entering your email address for verification, you can download any updates to your CowCalf5 Program.

Chapter 3: The Record Management Cycle

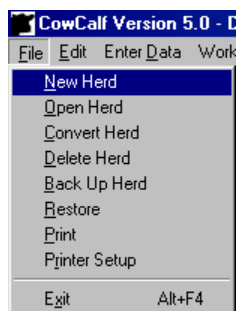


The Record Management Cycle

The CowCalf5 Data Flow Chart will help you go step-by-step through the record management cycle. This chapter is devoted to explaining the rationale behind keeping records and helping you understand which information is tracked and why. Following the steps in this chapter will help you keep complete records on your cattle and will definitely help in making management decisions. This chapter will take you completely through the data flow chart from creating a production year to the start of the next year, when you will create another production year.

Create a New Herd

After installing CowCalf5, the next step is to create a new herd to store your information in. To create a new herd in CowCalf5, select **New Herd** from the **File** drop down menu.



Fill out the **New Herd Information** and click **OK**. Your new herd will then be displayed. Your new herd will not have any information in it yet, so do not be alarmed when the fields on your screen are empty.

Enter Dams and Bulls

In order to enter information about your herd, your foundation females and bulls must first be entered. The dam records can be created in two different ways as you begin to enter your herd data, including the following two methods.

1. Under the **Enter Data** menu, select **New Dams**. After entering the Dam's ID number in the ID box at the top of the form, you will be prompted whether you want to add that dam. After adding that dam you can enter her data or enter other Dam ID numbers before entering additional information on each dam.
2. Under the **Enter Data** menu, choose **Select Variables**. Drag desired variables from **All Variables Available** column into **Selected Variables** column. The checklists at the bottom of the screen will help you narrow down the list in the **All Variables Available** column to only variables corresponding to the type of record you want to enter. After entering the Dam's ID number in the ID box at the top of the form, you will be prompted whether you want to add that dam. After adding that dam you can enter her data or enter other Dam ID numbers before entering additional information on each dam.

NOTE: Dams must have a birth date.

(See also “Enter New Dams” Real player Presentation on your installation CD or on our website by clicking on **Support**, and then clicking on **View Tutorials**.)

To enter bull records, follow the steps below.

1. Go to the **Bulls** tab.
2. Click on the **Enter Data** drop down menu and select **New Bull**.
3. After entering the Bull’s ID number in the ID box at the top of the form, you will be prompted whether you want to add that bull. After adding that bull you can enter his data or enter other Bull ID numbers before entering additional information on each bull.

NOTE: Bulls must have a birth date.

Create New Production Year

CowCalf5 stores herd information in production years that correspond to the calendar year. These production years must be created in two places – the **Cows** tab and the **Bulls** tab. Follow the steps below to create a production year.

1. Select the appropriate tab (**Cows** or **Bulls**).
2. Select **Create Production Year** from the **Edit** drop down menu.
3. The **Create New Production Year** screen will appear. Enter the production year you want to create and click **OK**.

NOTE: CowCalf5 looks at three different criteria to decide whether or not a cow can have a production record.

1. **Birth Date** - The cow has to be at least 2 years old (Unless you click on the Early Production Year option on the cow’s permanent record prior to creating the production year).
2. **Origin Date** - The origin date has to be before or during the production year you are trying to create. You can't create production records for cows before their origin date.
3. **Disposal Date** - The cow's disposal date as to be after or during the production year that you are trying to create.

CowCalf5 looks at the same criteria for origin date and disposal date for bulls when creating production years. The difference is that bulls must be a year old to have a production record, while cows must be two years old to have a production record.

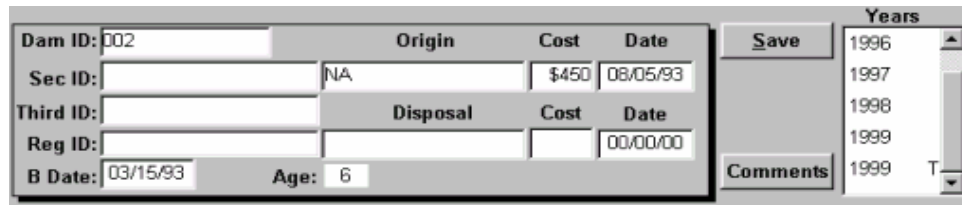
If you add a cow or bull to the herd after you created a production year that the newly added cow or bull should be in, the production year should be re-created. Doing this will give the newly added cow or bull a production record in the production year.

NOTE: The production year will only be listed in the **Year** drop down menu if you make the production year while in the **Cows** tab. Making a new production year in the **Bulls** tab only will not list the year in the **Year** drop down menu.

Create Twin

CowCalf5 stores yearly information in production records that allow for one calf per cow per year. If a cow has multiple offspring, a twin record must be created for each additional calf. Follow the steps below to create a twin record.

1. Select **Create Twin** from the **Edit** drop down menu.
2. Enter the Dam ID and the Production Year associated with the twin and click OK.
3. Double-click on the production year (example below: **1999 T** in the Years column in the picture below) to enter twin's data.



Dam ID:	Origin	Cost	Date
002	NA	\$450	08/05/93
Sec ID:	Disposal	Cost	Date
			00/00/00
Third ID:			
Reg ID:			
B Date:	03/15/93	Age:	6

Save

Comments

Years

- 1996
- 1997
- 1998
- 1999 T
- 1999

NOTE: CowCalf5 will create a production record if the cow does not have a production record. If there is a production record, it will create a twin. If a twin already exists, CowCalf5 will create an additional twin.

Enter Breeding Information

Breeding information is essential to many producers in order to make sire assignments much easier. To enter breeding information on your new dams, use data entry forms. Pre-made data entry forms make it easy to enter Precalving and Breeding information.

To use the Precalving data entry form, select the appropriate production year on the Main Screen of the **Cows** Tab. Go to the **Enter Data** menu and select **Precalving**.

To use the Breeding data entry form, select the appropriate production year on the Main Screen of the **Cows** Tab. Next, go to the **Enter Data** menu, select **Use Saved Form** and select **cc5_Breeding.ccf**.

The columns may be easily arranged in any order to suit the your data (*See Customizing Enter Data Forms*). In addition, you can add or remove variables (data fields) to include only the information you need to enter (*See Customizing Default Enter Data Templates*).

Enter Calving Information

Calving information will help to track birth dates, weights, ease of calving, and calf mortality. Calving information can be entered in two ways.

Enter New Calves:

1. You must have the dams entered in the herd and a production year created for each dam prior to entering calving information for those dams. Select the desired production year in the **Year** drop down menu.

2. Select **New Calves** from the **Enter Data** drop down menu.
3. Enter the Dam ID into the **ID Box**.
4. Enter Calf ID and Calf Data.

Calving Information:

1. You must have the dams entered in the herd and a production year created for each dam prior to entering calving information for these dams. Select the desired production year in the **Year** drop down menu.
2. Select **Calving** from the **Enter Data** drop down menu.
3. Enter the Dam ID into the **ID Box**.
4. Enter Calf ID and Calf Data.

NOTE: Calves must have a birth date.

Other important information can be entered after the Calf ID is entered. These fields include the calf's Birth Date, Calf Sex, Calf Birth Weight, Birth Date, Calving Ability, Maternal Ability, Death Loss (if the calf died), and Death Loss Date (if the calf died). (See also "Enter New Calves" Real player Presentation on your installation CD or on our website by clicking on **Support**, and then clicking on **View Tutorials**.)

Calving Summary

Calving season is a critical time of the year in beef production and the results define the following year in many important ways. For example, calf death loss is a major factor in profitability and is a benchmark measure of herd management before, during, and after calving.

After you have entered all of your calving information, you will want to run the Calving Summary. This set of reports provides information at the end of the calving season for individual animals and whole herd information grouped by age of dam and sire summaries. **It also will calculate the adjusted birth fields.** These reports help in making management decisions and can be filed as a hard copy of that year's calving information.

Input: The variables utilized for output are Dam and Calf ID, Birth Dates of Dam and Calf, and loss information.

Output: All calves, ordered by Dam ID are listed with the above variables. Other summary information such as calving interval and postpartum interval are calculated if data is available. This information is summarized by sex of calf, age of dam, and by sire in order to determine trends in birth weight, calving ability, or calf death loss by group.

Herd Goals: The most meaningful goals to set are based upon each herd's individual records. However, it is important to compare the herd with other general values, such as the following:

Sex Ratio (males : females) - will approach 50% under normal conditions but can vary as much as 20% from year to year with smaller numbers.

Birth Weight - this measurement has been collected primarily for use in controlling

calving difficulty in 2-year-old heifers. It is also important to remember that birth weight is positively correlated with average daily gain. Extremes in at both ends of birth weight are generally undesirable for sires, since low birth weights are often associated with small, weak, less growthy calves and large birth weights can contribute excessive calving difficulty and death loss. In addition, bull calves generally weigh 5 to 6 pounds more than female calves.

Weight at birth is approximately 40% heritable (under genetic control). This level of inheritance is considered moderate and generally permits a reasonable degree of selection for the trait. Therefore, 60% of birth weight is affected by environmental or unknown factors such as nutrition and environmental temperature of the dam, primarily during the last trimester of pregnancy. Birth weight may be adjusted for sex of calf and age of dam to improve accuracy when comparing across age and sex groups within breed. (See **Preferences->Herd Adjustment**). Birth weight has a reasonable amount of variability within a large sire group exposed to a large number of mixed age dams, often with a standard deviation of 7 or 8 pounds and a range of 40 pounds.

Calf Mortality – average mortality in cow calf herds is variable, dependent upon age of dam, season, year, and management factors. Mortality in first calf 2-year-old heifers often averages 8-10 % and older cows 4-5%. Under intense management, levels under 4% are obtainable. Determination of cause of death and date and sometimes even time is critical in order to control and minimize death loss.

Calving Interval – The calving interval is an important reproductive measure within the herd. An average calving interval greater than 365 days indicates the animal is calving later in a fixed calving season. The interval may not be serious if it remains within one or two heat cycles on a one-time basis since the cow may gain days in following years with maturity. However, if the age group of younger animals continues to increase the calving interval, it is likely there is a problem that will eventually manifest itself in later calving, lower pregnancy, and higher culling rates of young cows. This may lead to a younger average herd age, lower unit productivity, undesirable cow longevity and replacement rates.

To run the Calving Summary report, Select **Calving** and then click on **Calving Summary** from the **Reports** drop down menu.

NOTE: To maintain accurate contemporary groups, use work groups to separate calf groups. (See also **Chapter 15, Work Groups**)

Enter Pregnancy Palpation Data

Monitoring frame size and pregnancy rate allows producers to make important management decisions in fulfilling herd goals related to dam size and productivity. Pre-made data entry forms make it easy to enter Pregnancy information.

To use the Pregnancy enter data form, select the appropriate production year from the **Year** drop down menu on the **Cows** Tab. Go to the **Enter Data** drop down menu and select **Pregnancy**.

The columns may be easily arranged in any order to suit the your data (*See Customizing Enter Data Forms*). In addition, you can add or remove variables (data fields) to include only the information you want to enter (*See Customizing Default Enter Data Templates*).

Run Pregnancy Summary

After entering the pregnancy information, we recommend that you run the Pregnancy Summary. This set of reports provides valuable information for management decisions in addition to updating all ratios and adjusted values for pregnancy information. These reports can also be printed to add to this year's hard copy records.

To run the Pregnancy Summary report, click on the **Reports** drop down menu, select **Pregnancy**, and then click on **Pregnancy Summary**.

Enter Weaning Information

Weaning information is critical to making selling decisions for producers. Pre-made enter data forms make it easy to enter weaning information quickly.

To use the Weaning enter data form, select the appropriate production year from the **Year** drop down menu on the **Cows** Tab. Go to the **Enter Data** menu and select **Weaning**.

The columns may be easily arranged in any order to suit the your data (*See Customizing Enter Data Forms*). In addition, you can add or remove variables (data fields) to include only the information you need to enter (*See Customizing Default Enter Data Templates*).

Weaning Summary

The weaning summary is designed to summarize productivity at or near the time calves are weaned. Calf productivity at this point is a good parameter of mothering ability and milking ability of the dam. Calves may be weighed a few days before actual weaning to reduce stress. Individual animal data may be printed and contemporary group reports are provided grouped by dam age. It also provides a sire summary by individual sire, if sire information is provided on individual calf records. The Most Probable Producing Ability (MPPA) is updated on each dam that weans a calf.

Input: The variables utilized are dam/calf/sire ID and birth dates, calf sex, actual or average birth weight, weaning weight, and weaning date. It is very important to maintain proper contemporary groups prior to calculation to accurately compare genetic merit of individuals. The contemporary group must be in a work group when the Weaning Summary is run and the user should elect to calculate if it is the first time to produce a summary.

Output: Individual calves, ordered by dam ID or calf ID are listed with specific information. Summary data provided is grouped by calf sex with the above variables. Other summary information such as calving interval and postpartum interval are calculated if data is available. This information is summarized by sex of calf, age of dam, and by sire in order to determine trends in birth weight, calving ability, or calf death loss by group.

To run the Weaning Summary report, click on the **Reports** drop down menu, then select **Weaning**, and then click on **Weaning Summary**.

Calf Disposal Information

Enter Calf Disposal Information

After you enter all of the weaning information, the next step is to double-check and enter necessary disposal information. Entering Calf Disposal information helps to track each individual calf throughout its life.

This data entry can be done periodically or as needed throughout the year, but should be checked and updated at this point in the year. This information also helps to keep track of calf mortality, promotion to development, and sale information.

Promotion should be done with the **Promote** menu instead of selecting promote to feedlot, replacement heifer, or bull development as a calf disposal reason (See **Promote Calves to the Feedlot** or **Promote Replacement Heifers and/or Bulls**).

Run Calf Disposal Summary

After entering the calf disposal information, we recommend that you run the Calf Disposal Report. This report provides valuable information for management decisions in addition to updating all ratios. This report will also give a graphical depiction of the disposal of all calves with disposal information. The report can also be printed to add to the current year's hard copy records.

To run the Calf Disposal Summary report, click on **Reports** drop down menu, then select **Calving**, and then click on **Calf Disposal**.

Post-Weaning Information

Sell Weaned Calves

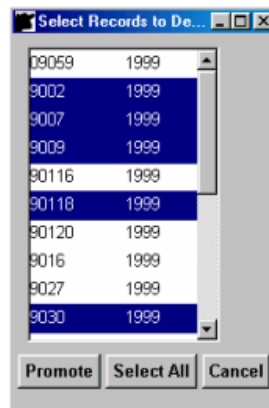
Calves are commonly sold after weaning, so be sure to enter disposal information on all calves that are sold with the appropriate reason and date. Entering this information helps to track each calf throughout its lifetime and maintain current herd inventory.

Promote Calves to the Feedlot

In the Calves tab, CowCalf5 has a specific section to record data on calves promoted to the feedlot. Promoting calves to the feedlot does not move any of their calf data to a different place. The feedlot development section can be reached by clicking on the **Calves** tab and then clicking the **Feedlot Calves** radio button.

To promote a calf to the feedlot, follow the steps below:

1. Select the production year or work group that you want to work with (be sure that you are in the **Calves** tab).
2. From the **Workgroup** drop down menu, select **Promote**.
3. Choose **Calf to Feedlot** (this is the type of promotion).
4. The Select Records screen will appear.



5. Select the records that you want to promote and click **Promote**. When you are finished promoting calves, click **Cancel**.

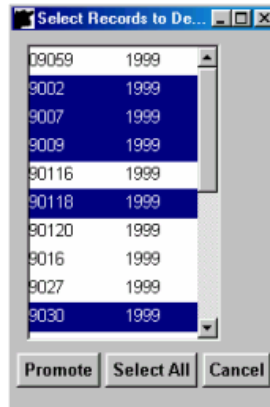
(See also "Utilizing the Feedlot Development Section" Real player Presentation on your installation CD or on our website by clicking on **Support**, and then clicking on **View Tutorials**.)

Promote Replacement Heifers and/or Bulls

In addition to the feedlot section, CowCalf5 has specific sections oriented toward replacement heifer development and bull calf development. These sections provide a place to store heifer and bull-specific information, like heifer breeding information or These sections are located under the **Calves** tab and by clicking on either the **Repl. Heifer** or **Bull Development** radio buttons.

To promote a calf to be replacement heifer or to bull development, follow the steps below:

1. Select the production year or work group that you want to work with.
2. From the **Workgroup** drop down menu, select **Promote**.
3. Choose the type of promotion that you want to do:
 - Calf to Replacement Heifer**
 - Calf to Bull Development**
4. The Select Records Screen will appear.



5. Select the records that you want to promote by clicking on each Calf ID and click **Promote**. When you are done promoting the desired calves, click **Cancel**.
(See also "Utilizing the Replacement Heifer Development Section" or "Utilizing the Bull Development Section" Real player Presentation on your installation CD or on our website by clicking on **Support**, and then clicking on **View Tutorials**.)

Enter Development Data

Enter Heifer and Bull Data

After calves are promoted to the replacement heifer section or the bull development section, information should be entered periodically to ensure that records are current. The replacement heifer section has allocated sections to store yearling, breeding, weight, measurement, and health information. The bull development section has allocated sections to store yearling, measurement, weight gain, and health information during development. When the heifers and bulls join the main herd, they are promoted to Dams and Permanent Bulls.

To enter heifer or bull development data, go to the **Calves** tab, and then click on the appropriate radio button (**Repl. Heifer** or **Bull Dev**). Next, use enter data forms to enter the information or type the information directly on the record and click the **Save** button.

Enter Feeding and Carcass Data

After the appropriate calves are promoted to the feedlot, you will want to enter the appropriate background, feedlot, and carcass information. The feedlot section has sections designated for storing background, feedlot, and carcass information. As the cattle progress through a background operation, the feedlot, and finally the processing

plant, information can be entered after the completion of each stage. This will help to keep calf records current and allow the producer to monitor calf performance in the feedlot. After the cattle are processed, the date and site can also be recorded in the feedlot section under development disposal and date.

To enter feedlot and carcass information, go to the **Calves** tab, and then click on the **Feedlot Calves** radio button. Next, use enter data forms to enter the information or type the information directly on the record and click the **Save** button.

Run Development Summaries

Run Heifer and Bull Development Summaries

Several reports and report summaries are available in the replacement heifer and bull development sections. The replacement heifer reports include the following: yearling worksheet, yearling summary, pregnancy worksheet, pregnancy summary, projected calving pattern, development worksheet, development summary, and heifer health summary. The worksheets contain basic calf information and should be used to collect data. They should be printed and used to record the appropriate information as the cattle are processed. The yearling summary, pregnancy summary, and development summary will all calculate the appropriate adjusted fields and ratios.

To run a replacement heifer report, follow the steps below.

1. Go to the **Calves** tab, and click on the **Repl. Heifer** radio button.
2. Select the **Reports** drop down menu, then click on **Replacement Heifer** and finally click on the desired report or summary.

The bull development reports include the following: yearling worksheet, yearling summary, weight development worksheet, weight development summary, and bull development health summary. The worksheets work in the same way that the replacement heifer worksheets work, except the bull worksheets will have the Bull Dev ID instead of a Replacement Heifer ID. The yearling summary and weight development summary will calculate or recalculate all the adjusted fields and ratios.

To run a bull development report, follow the steps below.

1. Go to the **Calves** tab, and click on the **Bull Dev** radio button.
2. Select the **Reports** drop down menu, then click on **Bull Development** and finally click on the desired report or summary.

Run Feedlot and Carcass Summaries

Feedlot and carcass reports provide a comprehensive summary of all your calves' performance in the feedlot and "on the rail." The feedlot and carcass reports include the following: yearling worksheet, yearling summary, feedlot weight worksheet, feedlot individual weight summary, feedlot carcass summary, and feedlot health summary.

The yearling worksheet and feedlot weight worksheet work the same way that the heifer and bull worksheets work. Use these worksheets to collect data. The yearling summary, feedlot individual weight summary, and feedlot carcass summary reports will calculate or recalculate (if you have run the summary before) the adjusted fields and ratios.

To run a feedlot development report, follow the steps below.

1. Go to the **Calves** tab, and click on the **Feedlot Calves** radio button.
2. Select the **Reports** drop down menu, then click on **Feedlot** and finally click on the desired report or summary.

Palpate Heifers

Enter Palpation Info

As heifers are bred to calve during the next year, pregnancy check information should be recorded in CowCalf5. Palpation information will help generate a likely calving pattern to help the producer know the time span of heifer calving.

To enter palpation information, go to the **Calves** tab, and click on the **Repl. Heifer** radio button. Then, use enter data forms to enter the information, or type directly on the heifer records and click the **Save** button when finished.

Run Heifer Pregnancy Summary

After the palpation information has been entered, you should run the Heifer Pregnancy Summary. This summary will calculate or recalculate all of the adjusted fields and ratios. It will also show a set of reports that comprehensively describe all heifer pregnancy information. These reports can then be printed and added to the current year's hard copy records.

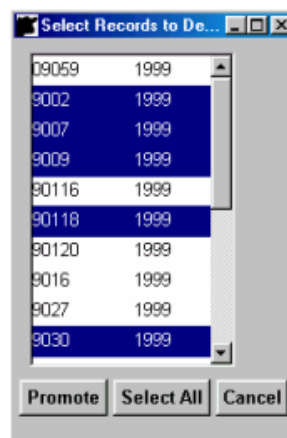
To run the Heifer Pregnancy Summary, follow the steps below.

1. Go to the **Calves** tab, and click on the **Repl. Heifer** radio button.
2. Click on the **Reports** drop down menu, then select **Replacement Heifer** and finally select **Heifer Pregnancy Summary**.

Promote Heifers to Dams

When the heifers are ready to join the main herd or right before they calve, their records must be promoted so that they are made permanent dams. Promoting heifers to permanent dams will not affect their calf or heifer record information. It will give them permanent dam records. You should promote the heifers before a new production year is made. To promote a heifer to a dam, follow the steps below.

1. Select the production year or work group that you want to work with.
2. From the **Workgroup** drop down menu, select **Promote**.
3. Choose the **Replacement Heifer to Dam** (this is the type of promotion).
4. The Select Records Screen will appear.



5. Select the records that you want to promote by clicking on each Heifer ID and click **Promote**. When you are done, click **Cancel**.

Add New Purchased Dams and Bulls

As new cows or bulls are added to the herd, they can easily be added to the herd with a special enter data form. To add new purchased dams, follow the steps below.

1. Go to the **Cows** tab and select the desired production year.
2. Click on the **Enter Data** menu and select **Enter Dams**.
3. Type the new dam's ID in the ID box at the top of the form. A box will pop up asking if you would like to add the cow. Click on the **Yes** button. Then, enter the appropriate information.

NOTE: Dams must have a birth date.

To enter new purchased bulls, follow the steps below.

1. Go to the **Bulls** tab and select the desired production year.
2. Click on the **Enter Data** drop down menu and select **New Bull**.
3. After entering the bull's ID number in the ID box at the top of the form, you will be prompted whether you want to add that bull. After adding that bull you can enter his data or enter other Bull ID numbers before entering additional information on each bull. Remember that bulls **MUST** have a birth date.

Disposal and Culling Information

Enter Disposal Information and Dates on Culls

Before creating another production year, you will want to be sure you enter disposal information on all culled animals so that they don't have an erroneous production year. To ensure that they will not get any more production year records, you must enter a disposal date along with a disposal reason.

To enter this information, you can use a custom enter data form listing Dam ID, Disposal Reason and Disposal Date (*See Custom Enter Data Forms->Create A New Enter Data Form*) or going through the dam and bull records and entering the disposal information directly on the record and then clicking on the **Save** button.

Run Culling Summary

After entering all of your disposal information for your herd, you should run the culling summary. This report will provide comprehensive detail of cow culling for the year. After running this report, you should print it out and add it to the current year's hard copy records.

Return to Creating a New Production Year

Congratulations! You have made it through an entire production year of entering data! It is now time to return to the step "Create a New Production Year." Also, be sure to read through the rest of the manual to learn about the additional features of CowCalf5.

Chapter 4: Entering Data

Enter data forms are a quick and efficient method of entering information. These forms can be used to enter data or they can be sorted and then printed to use as a worksheet in collecting data. Thus, each action that can be taken with an enter data form can also be used with a form that is to be printed (worksheet).

Using Default Enter Data Forms

The following enter data forms are available in the CowCalf5 program to permit rapid entry of herd information at critical times of the year:

Pre-calving	Weaning	Calving	Pregnancy
Pre-breeding	Post-weaning	Breeding	

In order to utilize these forms, all that is necessary is to select the correct production year on the Main Screen, select **Data Entry** from the pull down menu and select the desired entry format. After selecting the form, it will be displayed with the list of animals on-screen followed by columns of information pertinent to the selected entry. The columns may be easily arranged in any order to suit the user's data (*See **Modifying Enter Data Forms->Moving Columns***). In addition, the variable items selected in the forms may be changed to the desired variables (*See **Custom Enter Data Forms->Create A New Enter Data Form***).

Customizing Default Enter Data Forms

You can customize the data forms (or worksheets) or replace the default forms with your own. All predefined forms are saved in the **Forms** folder that is located in the **CowCalf5** folder. Each of the pre-defined forms are saved as the following:

Calving	cc5_calving.cef
Weaning	cc5_weaning.cef
Pre-Breeding	cc5_pbreeding.cef
Breeding	cc5_breeding.cef
Pregnancy	cc5_preg.cef
Post Weaning	cc5_pweaning.cef
Pre-Calving	cc5_pcalving.cef

To replace the default forms with you own personal forms, create a customized form and save it in the **Forms** folder as the name above.

For example, lets say that you want to replace the Breeding worksheet with one that you created. To do this, create the desired worksheet or enter data form and save it in the **Forms** folder as cc5_breeding.cef.

Custom Enter Data Forms

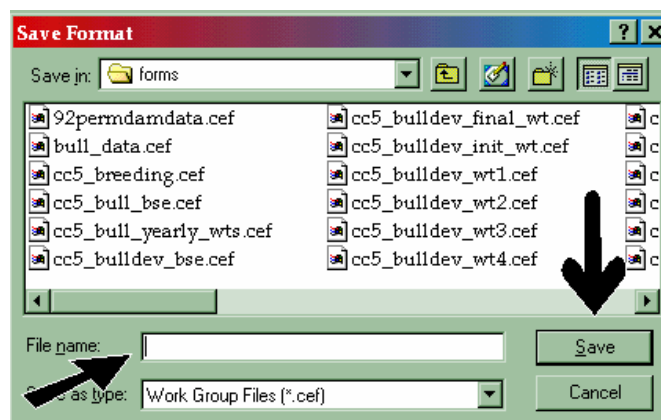
Creating a New Enter Data Form

CowCalf5 allows you to create a new enter data form by selecting your own variables.

1. Under the **Enter Data** drop down menu, choose **Select Variables**.
2. Choose one of the following five field groups:
 1. **By Dam ID**
 2. **By Calf ID**
 3. **By Replacement Heifer ID**
 4. **By Development Bull ID**
 5. **By Feedlot ID**
3. The **Create Enter Data Template** will appear.
4. Drag the variables that you want to appear in your form from the **All Variables Available** column to the **Selected Variables** column. To narrow down the number of variables in the **All Variables Available** column, use the checkmarks in the boxes next to the variables you want to choose from at the bottom of the form.
5. Click **OK**, your new enter data form will appear with the current production year's records in it.

Saving a Custom Enter Data Form

1. Create a new enter data form (*See Custom Enter Data Forms->Create A New Enter Data Form*).
2. While the enter data form is open, select **Save Form As** from the **File** drop down menu.
3. The **Save Format** screen appears, and you should select the location in which to save your form (should be the **Forms** folder in the CowCalf5 folder). Forms **MUST** be saved in this folder, or they will not work in CowCalf5!



4. Type in the name you want the form to be saved as, and click **Save**.

Using Last Form

By selecting **Use Last Form** from the **Enter Data** drop down menu, CowCalf5 will bring up the last enter data form that you created. This is the last form you created, not necessarily the last one you saved.

Using a Saved Enter Data Form

This option allows you to use a saved form to enter data. These forms must be saved in the **Forms** folder in your CowCalf5 folder. Saved forms are very useful if you create forms that correspond to the variables you store data in and use these forms each time you enter data. They can also be customized to fit your needs (*See Customizing Enter Data Forms*). To use a saved enter data form, follow the instructions below.

1. Click on the **Enter Data** drop down menu and select **Use Saved Form**.
2. Select the form you want to use and click **Open**.

Modifying Enter Data Forms

Moving Columns

Columns can easily be moved around in saved enter data forms in order to make entering data easier. To move columns around, follow the steps below.

1. Go to the **Enter Data** drop down menu, select **Edit Form**, and then select **Saved Form**.
2. From the **Edit Form** window that appears, select the form that you would like to edit.
3. From the **Create Enter Data Template** window that appears, click and hold the variable you want to move within **Selected Variables**. Drag the variable up or down to the desired order or position. When you click the **OK** button, the columns will be in your desired order.

Resizing Columns

Some variables may store information that exceeds the width of the column in the data form. To easily see this information, simply follow the instructions below to resize the columns.

1. Open the desired enter data form.
2. Position the mouse arrow on the right border of the column you want to resize.
3. Move it over the border until the mouse arrow turns into a double-headed arrow.
4. Once this arrow is visible, hold down the left mouse button and move the border to your desired column width.

Batch Enter

This function is used to put the same value in all the cells in a column (i.e., to enter the same weaning date for all calves, because they were all weaned on the same day). To do this, complete the following steps.

1. Open the desired enter data form.
2. Click on the column heading text of the column you want to batch enter. The column should now be highlighted, and the **Batch Entry** button should now be usable.
3. Click on the **Batch Entry** button.
4. Type the desired value into the **Batch Enter** window that appears. Click the **OK** button. The value will then be automatically entered into each cell of the column you selected.

Duplicating Data

You can copy data from one cell to another by using the Duplicate Data (**F8**) function. To copy data from one cell to another in any enter data form follow the steps below.

1. Place the cursor in the column you wish to paste the data into.
2. Press the **F8** function key.
3. The first time you press **F8** in an Enter Data form, a window will open displaying all the columns available to copy FROM. Select the column you wish to paste the data from by clicking on that column with the mouse.
4. The data from the column selected will be pasted into the current cell, and the cursor will move down a row.
5. To paste again, simply press **F8**.

If you wish to change the column that you are pasting FROM, go to the **Edit** drop down menu and select **Set Duplicate Variable**, and click on the column you wish to paste from.

Use this function when you want to copy data from one cell to another, and the data to be copied is in the same location but has different content on each record.

Sorting Enter Data Forms

Enter data forms can easily be sorted to put the animals in a convenient order. To sort an enter data form, follow the steps below.

1. Open the desired enter data form.
2. The data entry form columns can be sorted in two ways, a) sorting by one variable and b) sorting by multiple variables.
 - a) In the form, double-click on the title of the column you want to sort by.
 - b)
 1. Go to the **Edit** menu and select **Sort**.
 2. From the window that appears, click and hold the right mouse button on the desired sorting variable. Drag the variable to the right. Once the mouse button is released, the variable should appear on the right side of the window with a check box containing a check mark next to the letters **ASC**.
 3. To sort the data in ascending order, leave the check mark in the box. To sort the data in descending order, click once on the check box to remove the check mark.
 4. Additional sorting variables can be added by repeating this process. To change the order of the sort, simply click on the variable you want to move, hold down the mouse button, and drag it up or down to the desired position. After you have completed your sort specifications, click on the **OK** button. Your enter data form or worksheet will then be sorted into the specified order.

Editing a Sort:

To edit a sort, you have to go back and create a new sort if you want to sort by multiple variables. If you want to sort by one variable, double-click on the column you want to sort by.

Importing Data

Importing data involves using a file from another program to enter a set of data into CowCalf5. The import file must meet the following criteria:

- Be in tab delimited (each field (variable) is separated by a tab) format
- Contain the following fields:

<u>Type of Data</u>	<u>Primary Fields Needed</u>
Importing	
Permanent Dam	Dam ID
Production Dam	Dam ID Production Year
Replacement Heifer	Development ID Production Year Development Type (H)
Feedlot	Development ID Production Year Development Type (F)
Bull Development	Development ID Production Year Development Type (B)

To import data into CowCalf5:

1. Go to the **Enter Data** drop down menu and select **Import Data** and then the desired input option.
2. From the Create Data Enter Template window that appears, choose the variables your import file contains. Click on the desired variable in **All Variables Available** column and drag the variable to **Selected Variables** column. Be sure to organize the variables in the order they exist in your import file (*See **Modifying Enter Data Forms->Moving Columns***). Click on the **OK** button.
3. From the **Select File to Import From** window that appears, select your import file. Click **Open**.
4. A window labeled **Import Data** will appear next. Click on the **OK** button.
5. A notepad document should then appear, listing all the import errors (if any).
6. Close this window by clicking on the close box in the upper right hand corner of the window.
7. If you have problems importing data, try downloading the newest CowCalf5 Update from our web site, <http://www.cowcalf.com/>.

Chapter 5: Reports

Creating Default Reports

CowCalf5 has a large number of default reports that are created simply by clicking on the report name in the Reports drop down menu. These reports are available or not available depending on the tab you are currently in. See **Appendix F: Report Descriptions** for more information on default reports. To create a default report, follow the steps below.

1. Click on the **Reports** drop down menu.
2. Click on the desired report name and that report or set of reports will appear.
3. The report or set of reports can now be printed or exported/saved.

(See also **Chapter 3: The Record Management Cycle** or **Appendix F: Report Descriptions** for explanation of individual default reports)

Custom Reports

Creating a Custom Report

Custom reports are a great way to make worksheets to use gathering data or to print out lists of specific information. They are also easy to make and easy to access. To make a custom report/worksheet, follow the instructions below.

1. Click on the **Reports** drop down menu, then select **Custom**, then select **Report**, then choose **Select Variables**, and finally choose the variable grouping (**By Dam ID**, **By Calf ID**, etc).
2. Drag the variables that you want to appear in your report from the **All Variables Available** column to the **Selected Variables** column. To narrow down the number of variables in the **All Variables Available** column, use the checkmarks in the boxes next to the variables you want at the bottom of the form.
3. Click **OK**, and when your report appears, it can then be printed (See **Printing Reports**).

NOTE: When selecting variables, you can only select variables from one column of checkboxes. For example, fields from the Permanent Dam variable list and fields from the Production Dam variable list can't appear on the same report.

(See also "How To Create Worksheets and Reports" Real player Presentation on your installation CD or on our website by clicking on **Support**, and then clicking on **View Tutorials**.)

Graphs

CowCalf5 offers graphs of nearly any variable under custom reports. These graphs are a great addition to hard copy records or any set of reports. To create a graph, follow the steps below.

1. Click on the **Reports** drop down menu, then select **Custom**, then select **Graphs**, and finally select the appropriate option (**Cows and Calves**, **Replacement Heifers**, **Development Bulls**, or **Feedlot Calves**). The different options will be available based on which tab and section you are currently in.
2. Select the desired variables for the y-axis, x-axis, and x-axis series. You may also enter the title of the graph in the title box. In addition, choose between a line graph or pie graph. When you are done selecting options, click the **Create** button.
3. The graph can then be printed or saved. (*See also **Printing Reports***)

Statistics

Creating statistics reports helps to see the span, average, and variance of each variable. Using these reports, you can work to eliminate extremely high and low values in your herd, or work to move the average up or down. For example, creating a Birth Weight Statistics report will show the minimum birth weight, average birth weight, maximum birth weight, and the birth weight variance. You could next find the sires of the calves that caused the minimum and maximum birth weights to see if the bulls should be removed from the herd. To create a statistics report, follow the steps below.

1. Click on the **Reports** drop down menu, then select **Custom**, then select **Statistics**, and finally select the appropriate option (**By Dam ID**, **By Calf ID**, **By Repl Hfr ID**, **By Dev Bull ID**, or **By Feedlot ID**). The different options will be available based on which tab and section you are currently in.
2. Drag the variables that you want to calculate statistics for from the **All Variables Available** column to the **Selected Variables** column.
3. Click the **OK** button.
4. The statistics report can then be printed or saved.

Printing Reports

Any report, worksheet, or data entry form can be easily printed by following the instructions below.

1. To print a report, you should first create the desired report (*See **Calving Summary** or **Creating a Custom Report***).
2. Once the report is made, go to the **File** drop down menu, and select the **Print** option.
3. From this window, you can select your printer and choose other options for printing.
4. Click **Print**.

Exporting Data

Exporting data means that you save the data as another file type, like Excel, and you can open that file with Excel. CowCalf5 allows you to export data as other file types. To export data, follow the steps below.

1. Open the worksheet or report that you want to export.
2. Select **Save As** from the **File** drop down menu.
3. Select the **Save in** location and the **Save As Type** and click **Save**.

CowCalf5 allows you to export or save in the following file types:

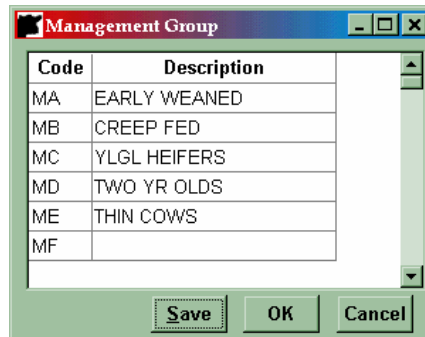
<u>Type</u>	<u>Format</u>
CSV	Comma-Separated Text
Dbase	dBase -II & III
DIF	Data Interchange Format
Excel	Microsoft Excel
HTML	Text with HTML formatting
Powersoft Report	Powersoft Report Format
SQL	SQL Syntax
SYLK	Microsoft Multiplan Format
Text	Tab-separated columns with a return at the end of each row
WKS & WK1	Lotus 1-2-3
Windows Metafile	Windows Metafile Format

Chapter 6: Pasture Management

Creating Management Groups

Management groups are recorded on the Dam, Bull, or Calf's production record for each individual year. You may need only the default management groups. To view management groups and modify them as needed, you must edit the management group codes. To edit management group codes, follow the steps below.

1. Select **Edit Codes** then **Management Group** from the **Edit** drop down menu.
2. From the following window that appears, click in the box next to the codes and write in a new description of the code.



3. For example, if the user wanted to change the MB code, they would just click in the box containing CREEP FED, and type in the description they wanted to use for that code.

NOTE: The code letters themselves cannot be changed. Only the descriptions of the codes can be edited or changed.

Assigning Management Groups

To assign management groups to cows, calves and bulls, follow the steps below.

1. Go to the production record of the Dam/Bull/Calf you want to put in a management group. If you are putting a cow into a management group, you should see the following screen:

The screenshot shows a software window titled 'Cows'. On the left is a list of cow IDs (001, 002, 007, 009, 0116, 0118, 0120, 016, 027, 030, 033, 039) with '001' selected. Below the list are radio buttons for 'Perman' and 'Production', with 'Production' selected. A black arrow points to the 'Mgmt Group' field in the main form, which currently contains '01/01/00'. The main form includes fields for 'Dam ID', 'Sec ID', 'Third ID', 'Reg ID', 'Birth Date' (04/10/96), 'Age' (4), 'Origin', 'Cost', 'Date' (09/16/99), 'Disposal', 'Cost', 'Date' (00/00/00), and 'Comments'. There are also tabs for 'Dam Breeding', 'Dam Wts', 'Dam Health', 'Calf Birth', 'Calf Health', and 'Calf Weaning'. A 'Save' button is in the top right corner.

The black arrow is pointing towards the field where the management group is assigned. When the user clicks in the box, a drop down menu appears and the user is able to select the group the dam is assigned to.

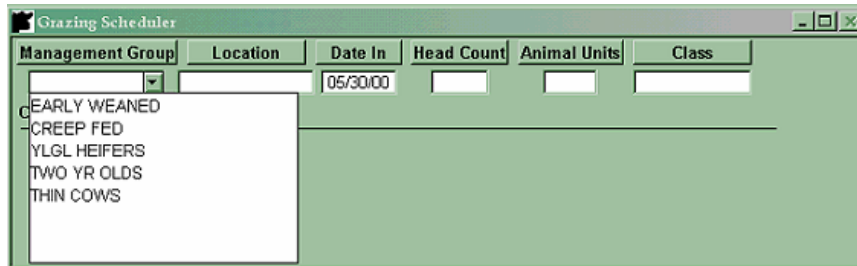
2. Once you have selected the management group and also entered a date, click the **Save** button located in the upper right hand corner of the window.
3. Repeat these steps for all the animals to assign them to management groups (*See also Creating Management Groups*).

(*See also "How to Use the Pasture Management Functions" Real player Presentation on your installation CD or on our website by clicking on **Support**, and then clicking on **View Tutorials**.)*)

Setting Up Grazing or Pasture Schedules

To set up your grazing/pasture schedules, follow the steps below.

1. Assign all animals to management groups (See **Assigning Management Groups** and **Creating Management Groups**)
2. Select the **Calendar** tab. Click on the **Grazing Scheduler** form.
3. Click on the **New** button in the upper right hand corner of the window.
4. Select the Management Group name that you want to move from a location or assign to a location from the **Management Group** drop down menu.

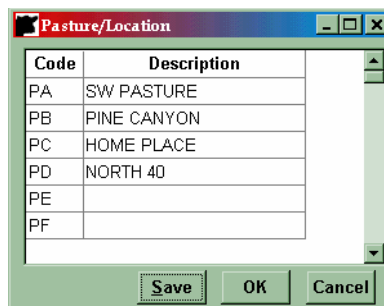


5. Select a **Location** from the drop down list that appears from that box. Enter a **Date In** date. The **Head Count** will be calculated from the number of animals that are currently in the management group. Enter the **Animal Units**. Select the **Class** the animals belong to from the drop down menu that appears when you click in the white box underneath **Class**. To move the management group to a location that is not in the Location drop down list, simply edit the Location Codes (See **Customizing Pasture Codes**).

Customizing Pasture Codes

To customize your Pasture/Location codes, follow the steps below:

1. Select **Edit Codes**, then choose **Pasture** from the **Edit** drop down menu.
2. From the following window that appears, click in the box next to the codes and write in a new description of the code.



Code	Description
PA	SW PASTURE
PB	PINE CANYON
PC	HOME PLACE
PD	NORTH 40
PE	
PF	

3. For example, if the user wanted to change the PB code, they would just click in the box containing PINE CANYON, delete the words PINE CANYON, and type in the desired description for that code.

NOTE: The code letters themselves cannot be changed. Only the descriptions of the codes can be edited or changed.

Chapter 7: Calendar

Using the Calendar Tab

The Calendar section is divided into two sections, the Calendar and Grazing Scheduler sections. The Calendar section is designed to enter herd activities and herd work entries. This section is ideal for recording when you vaccinate a group of animals or when you do something that affects the whole herd. Recording this information will help in remembering all your herd activities at the end of the year.

The Grazing Scheduler section is used to identify the location of a particular management group through out the year. This section helps to keep track of which cows were turned out with which bulls, which can help with sire identification.

Adding Calendar Entries

To add a calendar entry, follow the steps below.

1. Click on the **Calendar** window, and the window will turn gray, identifying that it has been selected.
2. Click on the **Add** button to add an entry for that section. The default date that is entered will be that date that is displayed on the calendar in the upper left hand corner of the window. If you wish to enter the data on a different date, simply change the calendar to the appropriate date before pressing the **Add** button, or simply type the new date in the date field on that item.
3. Once you are done entering information for that date, click the **Save** button to save your information.

Adding Grazing Scheduler Entries

To add a grazing scheduler entry, follow the steps below.

1. Click on the **Grazing Scheduler** window, and the window will turn gray, identifying that it has been selected.
2. Click on the **Add** button to add an entry for that section. The default date that is entered will be that date that is displayed on the calendar in the upper left hand corner of the window. If you wish to enter the data on a different date, simply change the calendar to the appropriate date before pressing the **Add** button, or simply type the new date in the date field on that item.
3. Once you are done entering information for that date, click the **Save** button to save your information. (*See also Setting Up Grazing or Pasture Schedules*)

Modifying Calendar Categories

The Calendar requires that category (type of calendar event) be entered. Only one calendar event is allowed per day with the same category and subcategory. These categories can be modified by editing the Calendar Codes. To modify Calendar Categories, follow the steps below.

1. Click on the **Edit** drop down menu and select **Edit Codes**, then select **Calendar**, and finally select either **Category** or **Sub Category**, depending on which one you would like to modify.
2. Type in new descriptions for the codes you wish to modify.

NOTE: The codes themselves cannot be changed, but the descriptions may be changed.

Deleting Calendar Entries

To delete a calendar entry, follow the steps below.

1. Click on the entry that you wish to delete. **Be certain that the cursor is residing within the event that you wish to delete!**
2. Click the **Delete** button.

NOTE: We do not suggest deleting any calendar entries. Modifying an incorrect record and saving the changes is suggested over deleting the entry.

Deleting Grazing Scheduler Entries

To delete a grazing scheduler entry, follow the steps below.

1. Click on the entry that you wish to delete. **Be certain that the cursor is residing within the event that you wish to delete!**
2. Click the **Delete** button.

NOTE: Unless the grazing scheduler entry is a duplicate, we do not suggest deleting any grazing scheduler entries. Incorrect information can be corrected and saved, instead of deleting the entry completely.

Chapter 8: SPA-P

About SPA

The National Cattlemen's Beef Association (NCBA) initiated Standardized Performance Analysis (SPA) in 1991. SPA is designed to provide the methodology for integration of production and financial information. This analytic tool documents the financial position, financial performance, and unit cost of production along with reproduction and production efficiency. This process is invaluable to the producer in identifying areas to control cost and remaining profitable. SPA-P is built into CowCalf5 as standardized performance analysis of production information that has been entered into the CowCalf5 program. For more information about SPA, including national averages, see the following webpage: <http://agpublications.tamu.edu/pubs/eco/l5355.pdf>.

Calculating SPA-P

To calculate Standardized Performance Analysis-Production (SPA - P) for your herd, follow the steps below:

1. Click on the **SPA - P** tab. A dialog box may come up; read the message and click **OK**.
2. Click on the **Get Dates** button. After you click on this button, all the date fields should contain a date. If one of them is empty or contains the value of 00/00/00, the calculations will not work. Therefore, manually enter the missing dates, if any. Also, be sure to check the dates to ensure that they are correct.
3. Click on the **Save** button.
4. Click on the **Calculate** button.
5. Click on the **Save** button. You can now look at the different tabs to see the calculations, or print out reports that summarize the information (see Printing Inventory Summary).

NOTE: SPA - P is calculated on a yearly basis, with each production year having its own analysis.

Exporting SPA-P

After calculating SPA-P, you can export your results to Texas A & M University's data bank to complete a thorough SPA-P and SPA-F (financial) analysis for your herd.

Inventory Summary Report

To create a SPA-P Inventory Summary, follow the steps below.

1. Click on the **SPA - P** tab.
2. Calculate SPA - P (*See Calculating SPA - P*).
3. Select **SPA Inventory Summary** from the **Reports** drop down menu. (*See also Printing Reports*)

Production Summary Report

To create a SPA-P Production Summary, follow the steps below.

1. Click on the **SPA - P** tab.
2. Calculate SPA - P (*See Calculating SPA - P*).
3. Select **SPA Production Summary** from the **Reports** drop down menu. (*See also Printing Reports*)

Chapter 9: Feedlot Pen Tab

About the Feedlot Pen Tab

The Feedlot Pen tab should be used to store feedlot pen information. This information is stored on a per pen basis, which means that the individuals in the pen are not linked to calves promoted to the feedlot. This tab is very valuable in making comprehensive reports of pen information. The lots are stored by year, so the same lot and pen numbers can be used each year.

Creating Pens

Pens are stored on a yearly basis, so pen records must be created for each year. To create a new pen, follow the steps below.

1. Click on the **Feedlot Pen** tab and then select the appropriate year from the **Year** drop down menu.
2. Click the **New** button.
3. Enter the desired pen and lot numbers and click **OK**.
4. Click the **Save** button.
5. To view the pen record, go to the **Year** drop down menu and select the appropriate year to refresh the list.

Entering Pen Information

Pen information is entered directly on the record. An enter data form is not needed, as the pen record can be modified in the immediate screen. To enter pen information, simply click in the appropriate box and type in the information. Once you have finished, click the **Save** button and move on to the next pen or tab.

Pen Reports

The Pen Summary report was designed specifically to provide a comprehensive data listing. This report will list all of the pen information for all of the pens in the current year.

Customizing the Feedlot Pen Tab

Fields in the pen record can be customized for special data that you wish to store. These fields currently have the name Option and a number from 1-10. This means that there are ten fields that can be customized to store your data for each pen. To customize these fields, follow the directions below.

1. Go to the **Feedlot Pen** tab.
2. Click on the **Edit** drop down menu and select **Edit Labels**.
3. Select the desired screen by selecting an option from the drop down menu (**Pen Feed Summary, Pen Feed Total, Pen Financial, or Pen Carcass Summary**)
4. Highlight the variable name you wish to change and type in the new name.
5. Press the Tab key and click on the **Save** button.
6. Repeat steps 3 through 5 until the all the desired variables have been changed. When you are finished, click **Close**.
7. Select again the year you are working in from the **Year** drop down menu to refresh the variables you have just changed.

Chapter 10: Work Groups

About Work Groups

A work group is a subset of animals selected from the main herd. You define work groups based on the type of record you want to edit or view. After you have defined a work group, you can save it and use it again. To create a work group, CowCalf5 lets you select variables (criteria) from drop down lists. This means that work groups are easy to make and use.

Creating New Work Groups

Follow the steps below to create a new work group.

1. Select **Create New** from the **WorkGroup** drop down menu.
2. Select the desired search criteria in the Create Work Group Screen.
3. Click **Search**.

NOTE: The computer saves the criteria for a work group. If you enter an animal into CowCalf5 after you have created the work group, but the animal meets the criteria of the work group, CowCalf5 automatically puts the animal into that work group. (See also "How to Create a New Work Group" Real player Presentation on your installation CD or on our website by clicking on **Support**, and then clicking on **View Tutorials**.)

Saving Work Groups

After you have created a work group, it is easy to save it so that you can use it later. Follow the steps below to save a work group.

1. Create a Workgroup (See **Create a New Work Group**).
2. Select **Save Work Group** from the **WorkGroup** drop down menu.
3. Enter the name of the work group and click **Save**.

NOTE: The computer saves the criteria for a work group. If you enter an animal into CowCalf5 after you have created the work group, but the animal meets the criteria of the work group, CowCalf5 automatically puts the animal into that work group.

Restoring Work Groups

Once you have saved a work group, you can restore it to retrieve the same group of animals. Follow the steps below to restore a saved work group.

1. Select **Restore a Saved Work Group** from the **WorkGroup** drop down menu.
2. Select the work group that you want to restore from the list and click **Open**.

NOTE: The computer saves the criteria for a work group. If you enter an animal into CowCalf5 that meets the criteria of a work group, CowCalf5 automatically puts that animal into that work group, even if the animal was not included in the original work group.

Chapter 11: Advanced Functions

Importing Data

Importing data involves using a file from another program to enter a set of data into CowCalf5. The import file must meet the following criteria:

- Be in tab delimited (each field (variable) is separated by a tab) format
- Contain the following fields:

<u>Type of Data</u>	<u>Primary Fields Needed</u>
Importing	
Permanent Dam	Dam ID
Production Dam	Dam ID
	Production Year
Replacement Heifer	Development ID
	Production Year
	Development Type (H)
Feedlot	Development ID
	Production Year
	Development Type (F)
Bull Development	Development ID
	Production Year
	Development Type (B)

To import data into CowCalf5:

1. Go to the **Enter Data** drop down menu and select **Import Data** and then the desired input option.
2. From the Create Data Enter Template window that appears, choose the variables your import file contains. Click on the desired variable in **All Variables Available** column and drag the variable to **Selected Variables** column. Be sure to organize the variables in the order they exist in your import file (*See **Modifying Enter Data Forms->Moving Columns***). Click on the **OK** button.
3. From the **Select File to Import From** window that appears, select your import file. Click **Open**.
4. A window labeled **Import Data** will appear next. Click on the **OK** button.
5. A notepad document should then appear, listing all the import changes or problems. Close this window by clicking on the close box in the upper right hand corner of the window.
6. If you have problems importing data, try downloading the newest CowCalf5 Update from our web site, <http://www.cowcalf.com/>.

NOTE: Be very careful when importing data, as the changes made by the imported data cannot be un-done! Be sure to backup your herd file before importing any data!

Exporting Data

Exporting data means that you save the data as another file type, like Excel, and you can open that file with Excel. CowCalf5 allows you to export data as other file types. To export data, follow the steps below.

1. Open the worksheet or report that you want to export.
2. Select **Save As** from the **File** drop down menu.
3. Select the **Save in** location and the **Save As Type** and click **Save**.

CowCalf5 allows you to export or save in the following file types:

<u>Type</u>	<u>Format</u>
CSV	Comma-Separated Text
Dbase	dBase -II & III
DIF	Data Interchange Format
Excel	Microsoft Excel
HTML	Text with HTML formatting
Powersoft Report	Powersoft Report Format
SQL	SQL Syntax
SYLK	Microsoft Multiplan Format
Text	Tab-separated columns with a return at the end of each row
WKS & WK1	Lotus 1-2-3
Windows Metafile	Windows Metafile Format

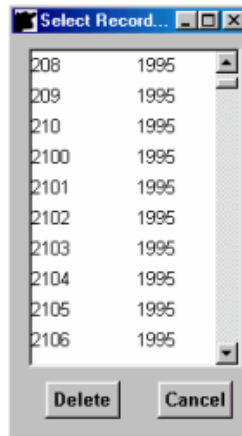
Deleting Records

Be sure to back up your herd prior to attempting to delete any records!

Deleting records can be done six different ways, depending on the type of record you wish to delete. There are two ways to delete cow records. The first method is deleting a cow's production record, which deletes the cow's information for that year. The second way is to delete the cow from the herd completely, which is deleting the cow's permanent record. To delete a bull's production or permanent record, follow the instructions about deleting a cow's record, except use the **Bulls** tab.

To delete a cow's record from the current year (production record), follow the steps below.

1. Go to the **Cows** tab and select the current or desired production year (this will be the year that the cow's production record will be deleted from). Click on the **Production** radio button.
2. From the **WorkGroup** drop down menu, select **Delete Records**.
3. The Select Records Screen will appear.



4. Select the records that you want to delete by clicking on each of the IDs.
5. Click **Delete**. When you are completely finished deleting, click **Cancel**.

To delete a cow permanently from the herd (delete permanent record), follow the steps below.

1. Go to the Cows tab and make sure that the **Permanent** radio button is selected.
2. From the **WorkGroup** drop down menu, select **Delete Records**.
3. The Select Records Screen will appear.
4. Select the records that you want to delete by clicking on all of the IDs.
5. Click **Delete**. When you are completely finished deleting, click **Cancel**.

NOTE: If you delete a cow using this second method, this will delete all of her production years as well!

There are two methods of deleting calf records as well. The first way is to delete the calf's development record, which deletes a replacement heifer, bull development, or feedlot calf record. The second way will delete the calf's record, which deletes the calf from that production year.

To delete a calf's development record, follow the steps below.

1. Go to the **Calves** tab, select the desired production year (the year this calf was born), and select the appropriate development section (**Repl. Heifer**, **Bull Dev**, or **Feedlot Calf**).
2. From the **WorkGroup** drop down menu, select **Delete Records**.
3. The Select Records Screen will appear.
4. Select the records that you want to delete by clicking on all of the IDs.
5. Click **Delete**. When you are completely finished deleting, click **Cancel**.

NOTE: If you delete a calf using this method, this will delete the development record, but not the calf record (the record that is in the **All Calves** section).

To delete a calf's record, follow the steps below.

1. Go to the **Calves** tab, select the desired production year (the year this calf was born), and be sure that the **All Calves** radio button is selected.
2. From the **WorkGroup** drop down menu, select **Delete Records**.
3. The Select Records Screen will appear.
4. Select the records that you want to delete by clicking on all of the IDs.

5. Click **Delete**. When you are completely finished deleting, click **Cancel**.

NOTE: If you delete a calf using this method, this will delete the calf's record, including all of the calf's information!

Changing or Editing a Dam ID

If you change the Dam's ID, all production records will be changed. It is not recommended that you change the ID's!

However, in the event that you absolutely must change a Dam ID, follow the steps below to change a Cow ID.

1. Select the Dam ID that you want to edit in the Cows Tab.
2. Select **Edit ID** from the **Edit** drop down menu.
3. The Change Animal's ID? Screen appears, enter the new ID in the ID Box and click **OK**.

Using Database Files

About Database Files

CowCalf5 allows you to store more than one herd in a common database file. There is no limit to how many herds can be stored in the database. Since multiple herds can be stored within a single database, the database itself can get quite large and slow with the inclusion of many large herds.

Most users will **NOT** need to utilize this feature, because they will not maximize the data capacity of the database. Users that keep many different herds that are quite large may decide to utilize this feature to help speed up the operation of CowCalf5. If this is the case, and you desire to break out some herds into separate databases, then you can use the New Database File/Open Database File function to switch between database files. You can also use Backup Database and Restore Database to restore ALL the herds and restore the database back to its original state.

NOTE: Use this function only if you have many large herds in your CowCalf5 program, which is installed on a very slow computer! Improperly using database files can completely erase all of your herd information!

Database Backup

Follow the steps below to back up the database (all herds).

1. Select **Back Up** from the **File -> Database** drop down menu.
2. Locate where you want to save the database backup file
3. Type the name that you wish to call the backup file.
4. Click **Save**.

Database Restore

Use this function to restore your entire Database (All Herds) from a database backup file. Use of this function will restore all herd information to its exact state that it was when the database backup was performed. Use this function only to recover from a database crash. If you want to restore data from only 1 herd, use Restore Herd, not Database Restore! (See

File ->Restore Herd) Follow the steps below to restore the entire database (all herds).

1. Select **Restore** from the **File->Database** drop down menu.
2. Click **Yes** in the dialog box that appears.
3. In the Restore Database Backup Data From: window, select the backup database you wish to restore to. Once you select it, click the **Open** button.
4. Your entire database will then be restored with the backup database you selected.

New Database File

If you want to create additional Database files so that you can separate large herds into separate databases, then you first need to use the New Database File menu choice to create a new Database File. Follow the steps below to create a new database file.

1. Select **New Database File** from the **File->Database** drop down menu.
2. Type in a new database name, and click **Open**.
3. The new database will be created and will open with the Demo Herd. You can then create new herds in the database.

NOTE: Every database file must contain the Demo herd in order for CowCalf5 to function properly.

Open Database File

If you have created additional databases, use the **Open Database File** option to switch between them. This CowCalf5 database feature works by storing additional databases as files with extensions of .DBS. Then when opened, the current database (CowCalf.DB) is copied to its database name with an extension of .DBS and the selected stored database is then copied to CowCalf.DB and opened by the CowCalf5 program.

Follow the steps below to open a saved database file.

1. Select **Open Database File** from the **File->Database** drop down menu.
2. Select the saved database file from the list and click **OK**.

Chapter 12: Carcass Evaluation Resources

Carcass Data Significance

The beef industry has suffered from vast production inefficiencies in the past. These losses have mainly occurred in the feedlot when cattle have too much external fat and not enough “taste”. Basically, these cattle have too much fat outside with not enough fat inside. Competition from the poultry and pork industries make it imperative for producers to improve carcass performance. (Green, Ronnie. “Just How Important Are Carcass EPDs?” Proceedings, The Range Beef Cow Symposium XIV, 1995.)

Gathering carcass data will allow producers to see the performance of their feedlot calves and allow them to cross-reference this information with sire, birth, weaning, and yearling information. Carcass traits are influenced genetically, so producers should use this data to cull or keep sires (and sometimes dams) with undesirable or desirable carcass performance.

Heritability of Carcass Traits

Heritability is a measure of how much a trait is influenced genetically. Heritability estimates allow the producer to use sires to change their calves’ performance in a specific trait area. CowCalf5 has a specific tab to store carcass information, and many of these fields have been studied for heritability. However, remember that the heritability between breeds may vary as well. The following list illustrates each trait and its average heritability over all breeds. (See also **Appendix E: Carcass Term Definitions**)

<u>Trait</u>	<u>Heritability</u>
Hot Carcass Weight	50% ¹
Back Fat	45% ¹
REA	55% ²
Quality Grade	40% ¹
Yield Grade	30% ¹
Dressing %	30% ²

¹ Taylor, Robert E. Beef Production and Management Decisions. Second Edition. 1994.

² Neumann, A.L. and Lusby, Keith S. Beef Cattle. Eighth Edition. 1984.

Chapter 13: Customizing CowCalf5

Preferences

Herd Information

You can easily change the herd information. To do this, follow the steps below.

1. Click on the **Edit** drop down menu, then select **Preferences**, and finally select **Herd Information**.
2. The Herd Information Screen will appear (pictured below), change the necessary information, press the **Tab** key, and click **Save**. When you are done, click **OK**.

Edit Herd Info

Default Herd Name: DEMO

Owner Name: TEST HERD

Ranch Name: INFO

Address: _____

City, State, Zip: _____, _____ 00000-0000

Phone: () - _____

Auto Save Timer: 15 Minutes (0 = Off)

Save OK Cancel

Cow Age Adjustment

To change the Dam Age Adjustments, follow the direction below.

1. Click on the **Edit** drop down menu, select **Preferences**, and finally select **Cow Age Adjustment**.
2. Change the necessary information and click **OK**.

Dam Years:	Dam Age Days		Birth Weight Additives (lbs)		Weaning Weight		
	Min:	Max:	Bull:	Heifer:	Mult. (%):	Bull: (lbs)	Heifer: (lbs)
1	1	600	8	6	15	60	54
2	601	1004	8	6	15	60	54
3	1005	1338	5	4	10	40	36
4	1339	1703	2	1	5	20	18

Herd Adjustments

The herd adjustments can be changed in the same way as the Cow Age Adjustments. To change the Herd Adjustments, follow the steps below.

1. Click the **Edit** drop down menu, then select **Preferences**, and finally select **Herd Adjustments**.
2. Change the necessary adjustments and click **OK**.

Custom Fields

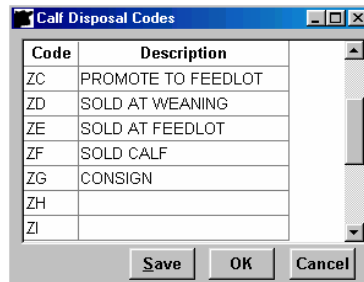
CowCalf5 provides you with many fields that can be customized for data you want to store. The fields can be named appropriately to reflect the type of data that is stored there. To edit these fields, follow the steps below. (See also **Editing Labels**)

1. Choose the appropriate tab (**Cows, Calves, Bulls, or Feedlot Pen**).
2. Click on the **Edit** drop down menu and select **Edit Labels**.
3. Select the desired screen by selecting an option from the drop down menu (**Dam Performance, Dam Breeding, etc**).
4. Highlight the variable name you wish to change and type in the new name.
5. Press the Tab key and click on the **Save** button.
6. Repeat steps 3 through 5 until the all the desired variables have been changed. When you are finished, click **Close**.
7. Select again the year you are working in from the **Year** drop down menu to refresh the variables you have just changed.

Editing Codes

Changing the Description of Codes

Although you can't change the code abbreviations themselves, you can change the description of codes. To edit codes, select **Edit Codes** from the **Edit** drop down menu. Select the code that you want to edit. After selecting a code, you can change any description or add your own description to any empty codes. You can't add or delete any codes, you can just change the description of the code.



Above is an example of the Calf Disposal Codes. You can change the descriptions so they have more meaning to each individual herd. You can also add descriptions to any of the codes with blank descriptions. The codes are herd-specific, meaning you can have different codes for different herds. Herd-specific codes also means that changing the codes for one herd does not change them for all herds. Two examples follow to show how the codes can be customized.

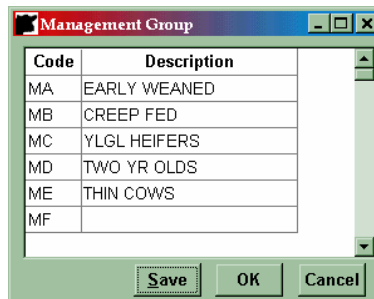
Here is the list of codes that you can edit:

Birth Data	Calving Ability	Maternal Ability
Breeds	Condition Score	Pasture
Bull Death	Dam Disposal	Quality Grade
Bull Health	Dam Health	Reproduction Tract Score
Calf Disposal	Death Loss	Sire Code
Calf Health	Management Group	Weaning Rank

Example: Customizing Management Codes

To customize your Management Group codes:

1. Click on the **Edit** drop down menu, then select **Edit Codes**, and finally select **Management Group**.
2. From the following window that appears, click in the box next to the codes and write in a new description of the code.



3. For example, if the user wanted to change the MB code, they would just click in the box containing CREEP FED, and type in the description they wanted to use for that code.
4. When you are finished typing, press the **Tab** key and then click **Save**. Click **OK** when you are finished editing the codes.

NOTE: The code letters themselves cannot be changed. Only the descriptions of the codes can be edited or changed.

Example: Customizing Animal Class Codes

To customize your Animal Class codes:

1. Click on the **Edit** drop down menu, then select **Edit Codes**, and finally select **Animal Class**.
2. In the window that appears, click in the box next to the codes and write in a new description of the code.
3. When you are finished typing, press the **Tab** key and then click **Save**. Click **OK** when you are finished editing the codes.

NOTE: The code letters themselves cannot be changed. Only the descriptions of the codes can be edited or changed.

Editing Labels

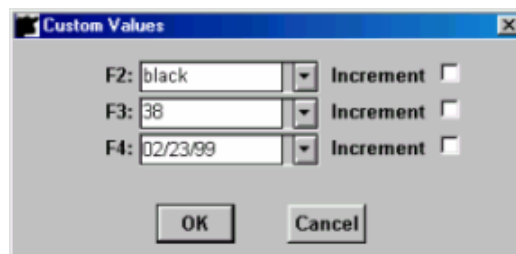
Editing the variable names means changing the label of the variable. This action means that you can change certain variable names to reflect the type of data you want to store in that variable. To edit labels, follow the steps below. (See also **Custom Fields**)

1. Choose the appropriate tab (**Cows, Calves, Bulls, or Feedlot Pen**).
2. Click on the **Edit** drop down menu and select **Edit Labels**.
3. Select the desired screen by selecting an option from the drop down menu (**Dam Performance, Dam Breeding, etc**).
4. Highlight the variable name you wish to change and type in the new name.
5. Press the Tab key and click on the **Save** button.
6. Repeat steps 3 through 5 until all the desired variables have been changed. When you are finished, click **Close**.
7. Select again the year you are working in from the **Year** drop down menu to refresh the variables you have just changed.

Edit Function Keys

CowCalf5 allows you to define functions for three function keys per herd. You can set these three function keys to help make data entry easier as well as faster. To edit your function keys, follow the steps below.

1. Click on the **Edit** drop down menu and then select **Edit Function Keys**.
2. The **Custom Values** screen will appear.



3. Change any of the function keys and click **OK**.

NOTE: In the picture, you can see that F2 is set as 'black'. Now, when you are entering data, instead of typing the word black, you can just press F2 and CowCalf5 will put in the word "black" into a field for you. You can also set up the function keys to increment numbers.

Chapter 14: Integrating CowCalf5 With Handheld Computers

About Palm CowCalf5

You have asked for it, and now you can collect CowCalf5 data on any PDA running the Palm operating system with 8 meg memory. This add-on does require that you are running CowCalf5 version 5.3 or higher. The term Palm and PDA in this document refers not only to Palm brand PDA's but also any other brand PDA that is running the Palm 3.5 or later operating system.

The Palm CowCalf5 program is designed to work seamlessly with CowCalf5 and **will not work as a stand-alone application**. The CowCalf5 software is required to download production records to the Palm database.

NOTE: Before installing the update to CowCalf5, be sure that you have backed up all your herd(s) data.

Installing the Software

If you have not already upgraded to CowCalf5.3A or higher, then download and install the Update53a.exe file (CowCalf5 program enhancements) from our website, then download CCPalm.exe (Application that updates CowCalf5 to function with Palm, and includes the CowCalf5 Palm app). Follow the instructions below to install CowCalf5 Palm application to both the computer and the Palm Pilot PDA.

1. If you have installed a beta copy of the Palm Software installed on the Palm, uninstall it (From the Palm main menu, click on the Menu icon in the graffiti area, and choose Delete. Delete: CowCalf5, Booster, BasicIngot..., DataComm..., Enhance..., and MultiMedia...).
2. If CowCalf5 is running on your computer, shut it down.
3. Download CCPalm.EXE file to hard drive of computer.
4. Run CCPalm.EXE file to configure CowCalf5 to communicate with Palm.
5. HOTSYNC the Palm device to update all installed files. Once completed, CowCalf5 and Booster will be installed on the Palm.

(See also **Using Palm CowCalf5**)

Using Palm CowCalf5

Downloading Records to PDA

Once the CowCalf5 and CowCalf5 Palm software has been installed on both the PC and PDA, you are ready to download your herd data to the Palm device.

1. Start up CowCalf5 on the PC and open the herd you wish to download to the PDA.
2. Select the production year that you wish to download to the PDA from the **Year** drop down menu.
3. Click on the **PDA** drop down menu and select **Export to PDA**.
4. A screen will be displayed identifying the number of records to be exported. While this screen is still up, press the Hot Sync button on the Palm to sync (download) data. Once the sync is completed, click on the button "**Click when Hot Sync is Complete**" to close the export window.

Your herd data should now be on the Palm. You are now ready to use the Palm to collect data, which means making changes as necessary to the data on the Palm.

Updating Computer from PDA

It is recommended that you Hot Sync the Palm with your computer periodically, (even nightly if you are making a lot of updates) to download your changes to the PC. Each time that you Hot Sync, all the data on your hand held PDA will be automatically backed up to the PC. So if the Palm loses its memory, everything can be restored from the PC by simply Hot Sync-ing again.

After each Hot Sync, you should go to CowCalf5 and import the changes into the database. The updates to CowCalf5 from the PDA are made when you import the changes to CowCalf5. When you start CowCalf5 up, you will receive a message that informs you of any Palm records that need to be updated. If there are records to be updated, click on the **Update Records** button. Note only the records that have been changed on the Palm will be updated.

NOTE: It is not necessary to export the records to the Palm after importing the records to the PC, as the records should be the same. If you sync each night, the number of records that the PC will say need importing will increase, as all the updated records on the Palm will be dumped each time. This is not a problem, and shouldn't cause any problems unless you are also modifying the same records on the computer. If you are making modifications on the PC as well as on the Palm, then you would need to export the data to the Palm after you finish modifications on the PC to get the latest revisions on the Palm.

Frequently Asked Questions About Palm CowCalf5

Can I use the CowCalf5 Palm software without CowCalf5?

The CowCalf5 Palm software is designed to work exclusively as a data collection program for the CowCalf5 Computerized Herd Record and Analysis System. In order to utilize the Palm software you must first have your herd inventory entered on the desktop CowCalf5 software. Then you download the records to the Palm to download the yearly production data. The CowCalf5 Palm software does not currently give you the ability to add new cow records, but you can add new calving (calf) records.

Can I have more than one Palm collecting data on a single herd?

It is possible to have multiple PDA's collecting data for one herd. When you are finished exporting the production year records to one Palm, simply sync the other Palm prior to closing the **Export to PDA** window.

After making the changes on the Palms, come back and sync the first device with the computer. After syncing the first device, start up CowCalf5 and import that data into CowCalf5. Then, after shutting down CowCalf5, sync the second PDA. When finished syncing the second Palm, go to CowCalf5 and import that data into CowCalf5.

If you want both (or all) PDA's to have updated records, then you must export the database from the PC back to all PDAs after importing the last PDA's data.

Can I have multiple Palms collecting data on different herds that are in the same computer?

Yes. Each herd in CowCalf5 is identified by a herd number. That herd number is retained in the Palm software. So, as long as the herd number doesn't change, the identity of the individual records will be retained. It is not recommended that one Palm synchronize with more than one computer.

What kind of Palm do I need to utilize this program (hardware requirements)?

Any PDA that is running Palm 3.5 or higher operating system, with at least 8 Meg RAM. This would include almost all Palm devices. We have had great luck running the software on the Palm IIIxe, which is an older model Palm with 8 Meg RAM. Though the software utilizes less than 1 Meg total memory, we have encountered some memory problems running the software on Palms with 2 Meg RAM. We have not tested it on PDA's with 4 Meg RAM. CowCalf5 Palm doesn't require any of the advanced features found in the higher priced Palms, which includes features like wireless internet and email, although CowCalf5 Palm Software should run properly on these machines. **NOTE:** The term Palm and PDA in the document refers not only to Palm brand PDA's but also any other brand PDA that is running the Palm 3.5 or later operating system.

Can I use the CowCalf5 Palm software on a Windows CE device?

The current version of the CowCalf5 Palm software does have the ability to operate on a Windows CE device. But, the synchronization portion of the program currently does not support the Windows CE platform. As such, though the software will run on the CE platform, getting data to and from the device currently doesn't work. We have plans to include this platform as soon as a functional method is developed to move the data between the PC and CE device. The Windows CE device has capabilities to store more data and has faster processors, so we are looking into developing a more complex application for the Windows CE environment.

How much does the CowCalf5 Palm Software cost?

There is no charge for the CowCalf5 Palm software for current CowCalf5 owners. The cost of the CowCalf5 program is US \$500.

Can I customize the fields that show up on the Palm?

To limit the amount of data that is transported between and stored on the PDA, only a limited number of fields are exported. As such, only the fields that are visible on the Palm are utilized. Future versions of the program may address this issue.

What can I do if I wish to collect data on fields that are not on the Palm?

There is no way to add more fields to the PDA software, but the Comments section can be used to store any additional information that you would like to collect about an individual animal. The comments on the Palm are added to the comments on the individual animal in CowCalf5. If an individual has comments, the **Add Comments** button in CowCalf5 will change to **View Comments**. The information stored in the comments field can then be manually transferred to other fields.

How often should I synchronize my Palm with the computer?

Since information stored on the Palm is in memory, and not on a permanent storage media like hard drive, this data may be lost if the Palm's batteries die or the Palm loses power for more than a couple of minutes. It is extremely simple and quick to back up the Palm and all the data stored on it. It is suggested that the Palm be synchronized each evening with the PC. Synchronize more often if there are significant changes made to the Palm data that you do not want to lose.

Troubleshooting Palm CowCalf5 Software

When I sync the Palm and PC, the herd data doesn't get copied to the Palm. What can I do?

When synchronizing with the Palm, the CowCalf5 database will automatically start up allowing for data to flow. If this is not happening, then most likely, the CowCalf5 Palm software is not fully installed on the PC.

To correct this problem, follow the instructions below.

1. Reinstall the CCPalm.EXE program. Be sure and reboot the computer after installation.
2. You can verify a complete installation by looking for the HotSync icon in the lower right. Right-click on the HotSync icon and select **Custom**. If CowCalf5 Palm synchronization software is installed correctly, a CowCalf5 conduit will be listed.

I get an error log message when I sync the PC and Palm, what does it mean?

You need to view the error log to see which function failed. The error log will identify the failing operation. The most common error is:

```
Synchronizing CowCalf5
- pda database
Database error
Error 8038 Cannot open host table 'pda' at DSN 'cowcalf'.
```

This particular error happens when the PDA table located in CowCalf5 on the PC is already populated with records. The synchronization process, writing the records from the PDA to the PC, requires that the table in the PC be empty prior to writing. If it is not empty you will receive this error, and no records will be written from the PDA to the PC. To correct this error, follow the instructions below.

1. Start up CowCalf5.
2. Click on the **PDA** drop down menu and select **Erase PDA Database**. Shut down CowCalf5.
3. Re-sync the Palm with the PC, and the problem should be fixed.

Chapter 15: Menu Functions

File

New Herd

After installing CowCalf5, the next step is to create a new herd to store your information in. To create a new herd in CowCalf5, select **New Herd** from the **File** drop down menu.



Fill out the **New Herd Information** and click **OK**. Your new herd will then be displayed. Your new herd will not have any information in it yet, so do not be alarmed when the fields on your screen are empty.

Open Herd

Once you have created a new herd file, you will want to use this file each time you enter data or work with CowCalf5. Therefore, if the herd isn't open when you start up CowCalf5, you need to open the herd. To open a herd, follow the directions below.

1. Click on the **File** drop down menu and select **Open Herd**.
2. Double-click on your herd name in the list.

Convert Herd

This option converts data from CowCalf4, an earlier version of the software, to CowCalf5. CowCalf4 must be installed on the same computer as CowCalf5 to convert the data. Since most users are now using CowCalf5, contact support@cowcalf.com for more information on converting CowCalf4 data to CowCalf5.

Delete Herd

If you decide to delete a herd from CowCalf5, use this option. CowCalf5 gives you two routes in deleting information from the herd. Delete herd data will delete all of the information in the herd file, which leaves your herd information intact. Delete entire herd will erase the herd completely from CowCalf5. To delete herd information, follow the steps below.

1. Open the herd that you want to delete.
2. Click on the **File** drop down menu and select **Delete Herd**.
3. Select either **Delete Herd Data** or **Delete Entire Herd**.

Cows

Selecting this option will take you to the Cows tab. You can also click on the Cows shortcut underneath the File menu to go to the same place.

Calves

Selecting this option will take you to the Calves tab. You can also click on the Calves shortcut underneath the File menu to go to the same place.

Bulls

Selecting this option will take you to the Bulls tab. You can also click on the Bulls shortcut underneath the File menu to go to the same place.

Grazing Scheduler

Selecting this option will take you to the Grazing Scheduler tab. You can also click on the Calendar shortcut underneath the File menu to go to the same place.

SPA-P

Selecting this option will take you to the SPA-P tab. You can also click on the SPA-P shortcut underneath the File menu to go to the same place.

Feedlot Pen

Selecting this option will take you to the Feedlot Pen tab. You can also click on the Feedlot Pen shortcut underneath the File menu to go to the same place.

Back Up Herd Data

Backing up herd data should be done often, especially after you enter large amounts of data into CowCalf5. Backing up your herd data creates another copy of the herd information so that you have a permanent copy of the herd that can be saved on a separate disk. This should be done often to make sure that you always have a saved copy of your herd in case something happens to your computer. To back up your herd data, follow the instructions below.

1. Open the herd that you want to back up.
2. Click on the File drop down menu and select **Back Up Herd**.
3. Locate where you want to save the backup files.
4. Click **Save**.

Restore Herd Data

NOTE: This function should only be used in cases of recovering or restoring a herd to its previous state. Any changes you have made since the last time you backed up the herd will be lost forever, so be sure that you really want to restore the herd prior to doing it.

Restoring your herd from a back up is quite simple, but there are a few things to keep in mind. First, you will lose all changes made to any animal that is the same as the one you are restoring. Any new records that you have added since the last back up will be erased. For example, lets say you backed up your herd up a month ago, and since then you have added ten new cows. If you restore your herd, those ten new cows will be erased from your herd (because they are not saved on the backup). To restore a herd, follow the instructions below.

1. Click on the **File** drop down menu and select **Restore Herd**.
2. Click **Yes** in the dialog box that appears.
3. Click the check boxes next to the components you want to restore.
4. Click the **OK** button at the bottom of the dialog box.
5. In the **Restore Herd Backup Data From:** window, select the backup you wish to restore to. Once you select it, click the **Open** button.
6. Your herd will then be restored to the backup file you selected.

Database

This is an extremely advanced topic. See **Using Database Files** in the **Advanced Functions** chapter for information about using them.

Print

This option will print the current report or form.

Printer Setup

Selecting this option will allow you to set the default printer and set the properties of specific printers.

Exit

Selecting this option shuts down CowCalf5 completely.

Edit

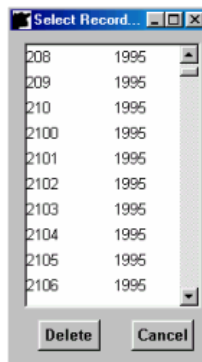
Delete Records

Be sure to back up your herd prior to attempting to delete any records!

Deleting records can be done six different ways, depending on the type of record you wish to delete. There are two ways to delete cow records. The first method is deleting a cow's production record, which deletes the cow's information for that year. The second way is to delete the cow from the herd completely, which is deleting the cow's permanent record. To delete a bull's production or permanent record, follow the instructions about deleting a cow's record, except use the **Bulls** tab.

To delete a cow's record from the current year (production record), follow the steps below.

1. Go to the **Cows** tab and select the current or desired production year (this will be the year that the cow's production record will be deleted from). Click on the **Production** radio button.
2. From the **WorkGroup** drop down menu, select **Delete Records**.
3. The Select Records Screen will appear.



4. Select the records that you want to delete by clicking on each of the IDs.
5. Click **Delete**. When you are completely finished deleting, click **Cancel**.

To delete a cow permanently from the herd (delete permanent record), follow the steps below.

1. Go to the Cows tab and make sure that the **Permanent** radio button is selected.
2. From the **WorkGroup** drop down menu, select **Delete Records**.
3. The Select Records Screen will appear.
4. Select the records that you want to delete by clicking on all of the IDs.
5. Click **Delete**. When you are completely finished deleting, click **Cancel**.

NOTE: If you delete a cow using this second method, this will delete all of her production years as well!

There are two methods of deleting calf records as well. The first way is to delete the calf's development record, which deletes a replacement heifer, bull development, or feedlot calf record. The second way will delete the calf's record, which deletes the calf from that production year.

To delete a calf's development record, follow the steps below.

1. Go to the **Calves** tab, select the desired production year (the year this calf was born), and select the appropriate development section (**Repl. Heifer, Bull Dev, or Feedlot Calf**).
2. From the **WorkGroup** drop down menu, select **Delete Records**.
3. The Select Records Screen will appear.
4. Select the records that you want to delete by clicking on all of the IDs.
5. Click **Delete**. When you are completely finished deleting, click **Cancel**.

NOTE: If you delete a calf using this method, this will delete the development record, but not the calf record (the record that is in the **All Calves** section).

To delete a calf's record, follow the steps below.

1. Go to the **Calves** tab, select the desired production year (the year this calf was born), and be sure that the **All Calves** radio button is selected.
2. From the **WorkGroup** drop down menu, select **Delete Records**.
3. The Select Records Screen will appear.
4. Select the records that you want to delete by clicking on all of the IDs.
5. Click **Delete**. When you are completely finished deleting, click **Cancel**.

NOTE: If you delete a calf using this method, this will delete the calf's record, including all of the calf's information!

Changing a Dam ID

If you change the Dam's ID, all production records will be changed. It is not recommended that you change the ID's!

However, in the event that you absolutely must change a Dam ID, follow the steps below to change a Cow ID.

1. Select the Dam ID that you want to edit in the Cows Tab.
2. Select **Edit ID** from the **Edit** drop down menu.
3. The Change Animal's ID? Screen appears, enter the new ID in the ID Box and click **OK**.

Finding an Animal ID

CowCalf5 has a specific function to quickly find an animal ID. In searching for IDs, CowCalf5 will first search the main Dam ID field, then the Second ID field, and finally the Third ID field. Follow the steps below to find an ID.

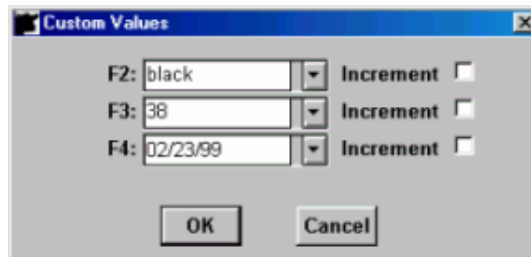
1. Click on the **Edit** drop down menu and then select **Find ID**.
2. When the Find Record Screen appears, type the animal ID into the ID Box and click **OK**.

Edit Function Keys

CowCalf5 allows you to have three function keys that you may define for each separate herd. You can set these three function keys to help make data entry easier as well as faster.

To edit your function keys:

1. Click on the **Edit** drop down menu and then select **Edit Function Keys**.
2. The **Custom Values** screen will appear.



3. Change any of the function keys and click **OK**.

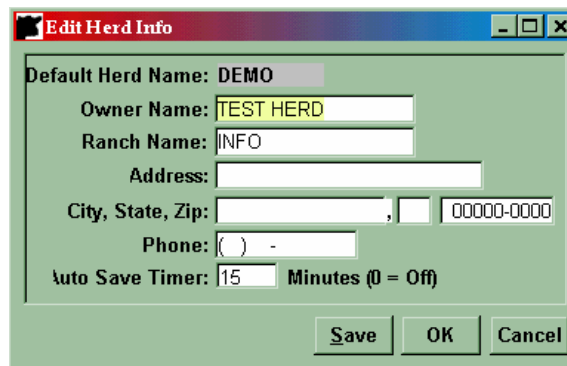
NOTE: In the picture, you can see that F2 is set as 'black'. Now, when you are entering data, instead of typing the word black, you can just press the F2 key and CowCalf5 will put the word "black" into a field for you. You can also set up the function keys to increment numbers.

Preferences

Herd Information

You can easily change the herd information. To do this, follow the steps below.

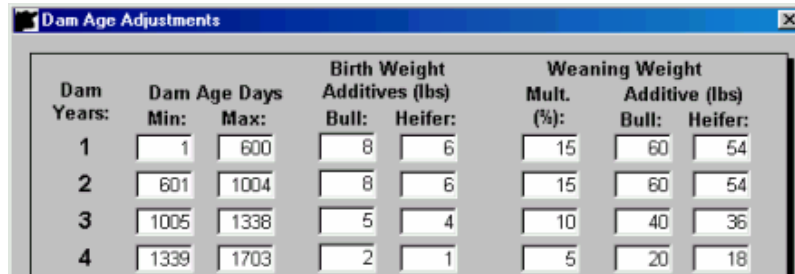
1. Click on the **Edit** drop down menu, then select **Preferences**, and finally select **Herd Information**.
2. The Herd Information Screen will appear (pictured below), change the necessary information, press the Tab key, and click **Save**. When you are done, click **OK**.



Cow Age Adjustment

To change the Dam Age Adjustments, follow the direction below.

1. Click on the **Edit** drop down menu, select **Preferences**, and finally select **Cow Age Adjustment**.
2. Change the necessary information and click **OK**.

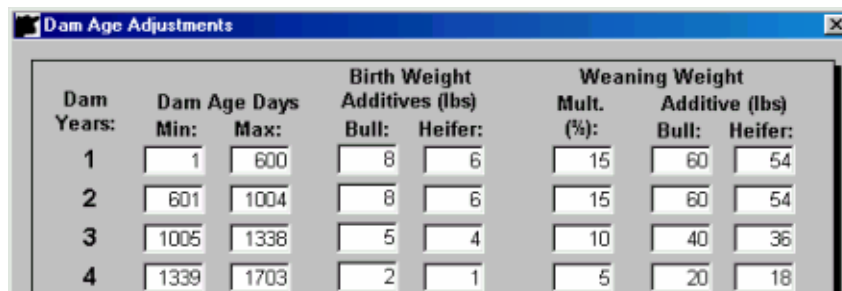


Dam Years:	Dam Age Days		Birth Weight Additives (lbs)		Weaning Weight		
	Min:	Max:	Bull:	Heifer:	Mult. (%)	Bull:	Heifer:
1	1	600	8	6	15	60	54
2	601	1004	8	6	15	60	54
3	1005	1338	5	4	10	40	36
4	1339	1703	2	1	5	20	18

Herd Adjustments

The herd adjustments can be changed in the same way as the Cow Age Adjustments. To change the Herd Adjustments, follow the steps below.

1. Click the **Edit** drop down menu, then select **Preferences**, and finally select **Herd Adjustments**.
2. Change the necessary adjustments and click **OK**.

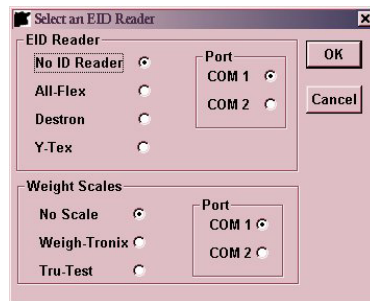


Dam Years:	Dam Age Days		Birth Weight Additives (lbs)		Weaning Weight		
	Min:	Max:	Bull:	Heifer:	Mult. (%)	Bull:	Heifer:
1	1	600	8	6	15	60	54
2	601	1004	8	6	15	60	54
3	1005	1338	5	4	10	40	36
4	1339	1703	2	1	5	20	18

Equipment Setup

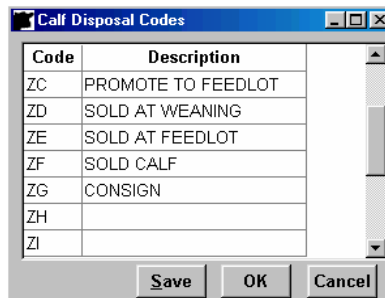
CowCalf5 allows you to hook your computer directly to an EID (Electronic ID reader) or a weight scale. You can use these devices to directly record EIDs or weights into CowCalf5. Setting up your equipment tells CowCalf5 to look for these devices, and where these devices are plugged into your computer. To set up your equipment, follow the steps below.

1. Click on the **Edit** drop down menu, select **Preferences**, and then select **Equipment Setup**.
2. Select the appropriate options from the following screen. When you are finished, click **OK**.



Edit Codes

Although you can't change the code abbreviations themselves, you can change the description of codes. To edit codes, select **Edit Codes** from the **Edit** drop down menu. Select the code that you want to edit. After selecting a code, you can change any description or add your own description to any empty codes. You can't add or delete any codes, you can just change the description of the code.



Above is an example of the Calf Disposal Codes. You can change the Descriptions so they have more meaning to each individual herd. You can also add descriptions to any of the codes with blank descriptions. The codes are herd-specific, meaning you can have different codes for different herds. Herd-specific codes also means that changing the codes for one herd does not change them for all herds. (See also **Customizing CowCalf5->Editing Codes** for examples in editing Code fields)

Here is the list of codes that you can edit:

Birth Data	Calving Ability	Maternal Ability
Breeds	Condition Score	Pasture
Bull Death	Dam Disposal	Quality Grade
Bull Health	Dam Health	Reproduction Tract Score
Calf Disposal	Death Loss	Sire Code
Calf Health	Management Group	Weaning Rank

Edit Labels

Editing the variable names means changing the label of the variable. This action means that you can change certain variable names to reflect the type of data you want to store in that variable. To edit labels, follow the steps below. (*See also Custom Fields*)

1. Choose the appropriate tab (**Cows**, **Calves**, **Bulls**, or **Feedlot Pen**).
2. Click on the **Edit** drop down menu and select **Edit Labels**.
3. Select the desired screen by selecting an option from the drop down menu (**Dam Performance**, **Dam Breeding**, etc).
4. Highlight the variable name you wish to change and type in the new name.
5. Press the Tab key and click on the **Save** button.
6. Repeat steps 3 through 5 until the all the desired variables have been changed. When you are finished, click **Close**.
7. Select again the year you are working in from the **Year** drop down menu to refresh the variables you have just changed.

Create Production Year

CowCalf5 stores herd information in production years that correspond to the calendar year. These production years must be created in two places—the **Cows** tab and the **Bulls** tab. Follow the steps below to create a production year.

1. Select the appropriate tab (**Cows** or **Bulls**).
2. Select **Create Production Year** from the **Edit** drop down menu.
3. The **Create New Production Year** screen will appear. Enter the production year you want to create and click **OK**.

NOTE: CowCalf5 looks at three different criteria to decide whether or not a cow can have a production record. These criteria include the following list.

1. **Birth Date** - The cow has to be at least 2 years old (Unless you click on the Early Production Year option on the cow's permanent record prior to creating the production year).
2. **Origin Date** - The origin date has to be before or during the production year you are trying to create. You can't create production records for cows before their origin date.
3. **Disposal Date** - The cow's disposal date as to be after or during the production year that you are trying to create.

CowCalf5 looks at the same criteria for origin date and disposal date for bulls when creating production years. The difference is that bulls must be a year old to have a production record, while cows must be two years old to have a production record.

If you add a cow or bull to the herd after you created a production year that the newly added cow or bull should be in, the production year should be re-created. Doing this will give the newly added cow or bull a production record in the production year.

NOTE: The production year will only be listed in the **Year** drop down menu if you make the production year while in the **Cows** tab. Making a new production year in the **Bulls** tab only will not list the year in the **Year** drop down menu.

Create Twin

CowCalf5 stores yearly information in production records that allow for one calf per cow per year. If a cow has multiple offspring, a twin record must be created for each additional calf. Follow the steps below to create a twin record.

1. Select **Create Twin** from the **Edit** drop down menu
2. Enter the Dam ID and the Production Year associated with the twin and click **OK**.
3. Click on the production year (example below: **1999** T in the Years column in the picture below) to enter twin's data.

Dam ID:	002	Origin	Cost	Date	Save	Years 1996 1997 1998 1999 1999 T
Sec ID:		NA	\$450	08/05/93		
Third ID:		Disposal	Cost	Date	Comments	
Reg ID:				00/00/00		
B Date:	03/15/93	Age:	6			

NOTE: CowCalf5 will create a production record if there isn't one. If there is a production record, it will create a twin. If there is a twin, it will create an additional twin.

Enter Data

This menu features many default enter data forms to make entering information much easier. These forms can be customized to your needs (*See Customizing Enter Data Forms*). You can also make new forms that contain only the variables you choose. Pre-made forms make it easy and fast to enter data. These forms include the following options from the Enter Data menu: **Calving, Weaning, Breeding, Pregnancy, Post Weaning, Pre-Calving, Replacement Heifer, Feedlot, Bull Development, New Dams, New Calves, New Repl Heifers, New Feedlot Calves, and New Bull Dev.** See **Chapter 3: The Record Management Cycle** and **Chapter 4: Enter Data Forms** for more information on Enter Data Forms.

Comments

Choosing this option from the **Enter Data** drop down menu will bring up a form that you can use to enter comments for cows or calves. This form is quite useful when you would like to enter comments for a large number of cows or calves. To add a comments record, follow the steps below.

1. Go to the **Cows, Calves, or Bulls** tab, depending on which type of comments records you would like to add. Choose the appropriate production year from the **Year** drop down list.
2. Click on the **Enter Data** drop down menu, select **Comments**, and then select **By Dam ID** or **By Calf ID** (if in the Cows or Calves tab) or click on the desired bull production record and click on the **Add Comments** button (if in the **Bulls** tab).
3. Enter the Dam or Calf ID in the ID box and press **Enter**. Click **Yes** to add a comments record for that animal and enter the desired information.
4. After you have added the information, click on the **Save** button and repeat steps as necessary to add more comments records. When you are finished, click on the **OK** button.

To edit the current comments records, follow the steps below.

1. Go to the **Cows, Calves, or Bulls** tab, depending on which type of comments records you would like to modify. Choose the appropriate production year from the **Year** drop down list.
2. Click on the **Enter Data** drop down menu, select **Comments**, and then select **By Dam ID** or **By Calf ID** (if in the Cows or Calves tab) or click on the desired bull production record and click on the **View Comments** button (if in the **Bulls** tab).
3. After you have modified, added, or deleted the desired information, click on the **Save** button. When you are finished, click on the **OK** button.

Health

This option will bring up a form to enter many health entries at once. You may edit the health records that are currently in CowCalf5 or create new health records. If you have not previously entered any health information, the form that appears will not contain any records. To add a health record, follow the steps below.

1. Go to the **Cows, Calves, or Bulls** tab, depending on which type of health records you would like to add. Choose the appropriate production year from the **Year** drop down list.
2. Click on the **Enter Data** drop down menu, select **Health**, and then select **Dam** or **Calf** and the appropriate option or **Bull** (if in the **Bulls** tab).
3. Enter the Dam or Calf ID in the ID box and press **Enter**. Click **Yes** to add a health record for that animal and enter the desired information.
4. After you have added the desired information, click on the **Save** button and repeat steps as necessary to add more health records. When you are finished, click on the **OK** button.

To edit the current health records, follow the steps below.

1. Go to the **Cows, Calves, or Bulls** tab, depending on which type of health records

you would like to modify or add. Choose the appropriate production year from the **Year** drop down list.

2. Click on the **Enter Data** drop down menu, select **Health**, and then select **Dam** or **Calf** and the appropriate option or **Bull** (if in the **Bulls** tab).
3. After you have modified, added, or deleted the desired information, click on the **Save** button. When you are finished, click on the **OK** button.

Import Data

Importing data involves using a file from another program to enter a set of data into CowCalf5. The import file must meet the following criteria:

- Be in tab delimited (each field (variable) is separated by a tab) format
- Contain the following fields:

<u>Type of Data</u>	<u>Primary Fields Needed</u>
Importing	
Permanent Dam	Dam ID
Production Dam	Dam ID Production Year
Replacement Heifer	Development ID Production Year Development Type (H)
Feedlot	Development ID Production Year Development Type (F)
Bull Development	Development ID Production Year Development Type (B)

To import data into CowCalf5:

1. Go to the **Enter Data** drop down menu and select **Import Data** and then the desired input option (**By Dam ID**, **By Calf ID**, **By Repl Hfr ID**, **By Dev Bull ID**, **By Feedlot ID**, **Use Saved Form**, or **Use Last Form**).
2. If you chose **Use Saved Form**, you will now choose the saved form to use in importing the data. If you chose **Use Last Form**, move on to step 3. If you chose any of the other options, from the Create Data Enter Template window that appears, choose the variables your import file contains. Click on the desired variable in the **All Variables Available** column and drag the variable to **Selected Variables** column. Be sure to organize the variables in the order they exist in your import file (See **Modifying Enter Data Forms->Moving Columns**). Click on the **OK** button.
3. From the **Select File to Import From** window that appears, select your import file. Click **Open**.
4. A window labeled **Import Data** will appear next. Click on the **OK** button.
5. A notepad document should then appear, listing all the import changes or problems. Close this window by clicking on the close box in the upper right hand corner of the window.
6. If you have problems importing data, try downloading the newest CowCalf5 update from our web site, <http://www.cowcalf.com/>.

Select Variables

Choosing this option will help you create a customized enter data form with only the variables you want on the form. To make a custom enter data form, follow the instructions below.

1. Under the **Enter Data** drop down menu, choose **Select Variables**. From here, you must choose one of five different field groups:
 1. **By Dam ID**
 2. **By Calf ID**
 3. **By Replacement Heifer ID**
 4. **By Development Bull ID**
 5. **By Feedlot ID**
2. Choose one of the five selections above.
3. The **Create Enter Data Template** will appear.
4. Drag the variables that you want to appear in your form from the **All Variables Available** column to the **Selected Variables** column. To narrow down the number of variables in the **All Variables Available** column, use the checkmarks in the boxes next to the variables you want to choose from at the bottom of the form.
5. Click **OK**, your new enter data form will appear with the current production year's records in it.

Use Last Form

Selecting this option brings up the last form that you opened from the Forms folder. This is the last form that you opened by clicking on **Use Saved Form** or the last form you created, not necessarily the last form you used.

Use Saved Form

This option allows you to use a saved form to enter data. These forms must be saved in the Forms folder in your CowCalf5 folder. Saved forms are very useful if you create forms that correspond to the variables you store data in and use these forms each time you enter data. They can also be customized to fit your needs (*See Customizing Enter Data Forms*). To use a saved enter data form, follow the instructions below.

1. Click on the **Enter Data** drop down menu and select **Use Saved Form**.
2. Select the form you want to use and click **Open**.

Edit Form

Saved forms and newly created forms can be edited to include only the variables you wish to enter. You can also edit a form to change the order of the columns in an enter data form. To edit a form, follow the instructions below.

1. Go to the **Cows** or **Calves** tab and select the desired production year from the **Year** drop down list.
2. Click on the **Enter Data** drop down menu, select **Edit Form**, and select the appropriate option (**Last Form** or **Saved Form**)
3. If you chose **Saved Form**, click on the form name that you wish to modify.
4. Modify the form as desired by moving the variables around, adding variables, or removing variables. When finished, click **OK**.

Use Workgroup

CowCalf5 gives you the option to turn off and on the use work group function in enter data forms. By default, CowCalf5 is set to use the work group, so every animal in the current production year automatically has a record in the Enter Data form. Turning off this option allows you to add dams to the form in the order you wish. To turn off this option, click on the **Enter Data** drop down menu and select **Use Workgroup**.

Work Group

This menu holds all of the functions for working with a Work Group. Work groups are a great way to work with a select group of cattle. For more information on Work Groups, see **Chapter 10: Work Groups**.

Reports

CowCalf5 has a variety of reports for you to view or print. These reports can be used as reports or as worksheets to use to collect data. The default reports are summaries (which update adjusted values and ratios), worksheets, single reports, or a combination of the previous. For more information on a single report, see **Appendix F: Report Definitions**. See also **Chapter 5: Reports** for more information on creating custom reports.

PDA

Export to PDA

Once the CowCalf5 and CowCalf5 Palm software has been installed on both the PC and PDA, you are ready to download your herd data to the Palm device.

1. Start up CowCalf5 on the PC and open the herd you wish to download to the PDA. Select the production year that you wish to download to the PDA from the **Year** drop down menu.
2. Click on the **PDA** drop down menu and select **Export to PDA**.
3. A screen will be displayed identifying the number of records to be exported. While this screen is still up, press the Hot Sync button on the Palm to sync (download) data. Once the sync is completed, click on the button "**Click when Hot Sync is Complete**" to close the export window.

Your herd data should now be on the Palm. You are now ready to use the Palm to collect data, which means making changes as necessary to the data on the Palm.

Import from PDA

If you have CowCalf5 running and you are making changes to the PDA database, synchronize the PDA with your computer and then select **Import from PDA** to import the modified records into CowCalf5. If you have synchronized your PDA before starting up CowCalf5, this function is run automatically to import the modified records into CowCalf5.

Browse PDA Database

This option allows you to look at the modified records in the PDA before they are imported into CowCalf5. You can double-check your PDA records before importing them by choosing this option from the **PDA** drop down menu.

Erase PDA Database

This option is an administrative function to be used only if you are having problems with your PDA and you are in touch with technical support. Clicking on this option is not recommended unless you are instructed to do so by a support technician.

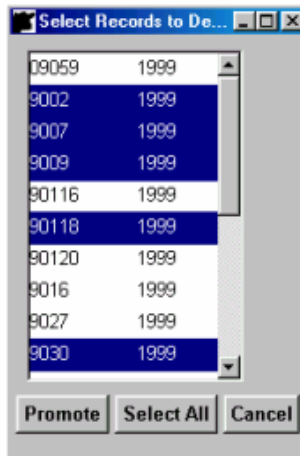
Promote

Promotion should be done with the **Promote** menu instead of selecting promote to feedlot, replacement heifer, or bull development as a Calf Disposal Reason (See **Promote Calves to the Feedlot** or **Promote Replacement Heifers and/or Bulls**). Promotion is also used to add heifers to the herd as permanent dams or to make bull calves in development into permanent bulls. This action gives heifers or bulls permanent records in the herd.

In the Calves tab, CowCalf5 has a specific section to record data on calves promoted to the feedlot, replacement heifer, or bull development. Promoting calves to a development section does not move any of their calf data to a different place. These sections are located in the **Calves** tab and by clicking on the **Feedlot**, **Repl. Heifer**, or **Bull Development** radio buttons.

To promote a calf to a development section or to be a permanent part of the herd, follow the steps below:

1. Go to the **Calves** tab and select the production year or work group that you want to work with. If you are promoting animals to permanent status, go to the appropriate development section (**Repl Heifer** or **Bull Dev**) before continuing. If you are simply promoting calves to a development section, stay in the **All Calves** section.
2. From the **Workgroup** drop down menu, select **Promote**.
3. Choose the appropriate type of promotion (**Calf to Feedlot**, **Calf to Repl Heifer**, **Calf to Bull Dev**, **Replacement Heifer to Dam**, or **Bull Development to Permanent Bull**).
4. The Select Records screen will appear.



5. Select the records that you want to promote and click **Promote**. When you are finished promoting calves, click **Cancel**.

(See also "Utilizing the Feedlot Development Section", "Utilizing the Replacement Heifer Development Section", or "Utilizing the Bull Development Section" Real player Presentations on your installation CD or on our website by clicking on **Support**, and then clicking on **View Tutorials**.)

Window

This menu allows you to customize the way that CowCalf5 looks. Your windows can be arranged in four different ways, vertical, horizontal, layer, or cascade. If you have more than one form or report open, these options will change the way those forms are arranged on your screen. The automatic, or default, setting is cascade.

Help

Help Contents

Selecting this option or pressing the F1 key on your keyboard will start up the CowCalf5 help section. You can look through the different topics, search for a particular topic in the index, or find specific words or phrases in the help section. From this section, you can also print out help information.

CowCalf5 Flow Chart

The CowCalf5 flow chart demonstrates the herd management record keeping cycle. This flow chart can also be found at the beginning of Chapter 3.

About CowCalf5

This option will tell you copyright, version and contact information for your CowCalf5 program.

Chapter 16: Trouble Shooting CowCalf5

Cannot create a production year.

Description of problem:

CowCalf5 will not let you create a production year for a Dam.

Solution:

There are four things that CowCalf5 looks at when creating a production year, so make sure that the Dam meets the following criteria.

1. Dam must have a birth date.
2. Dam must be 2 years old (unless you click on the Early Production Year option).
3. Dam cannot have a Disposal Date prior to that production year.
4. If the Dam has an origin date, you cannot create a production year prior to the origin date.

Cannot find the file MSVBVM50.DLL.

Description of problem:

When trying to install CowCalf5 you come up with the error "Can not find the file MSVBVM50.DLL.

Solution:

Download MSVBVM50.DLL and place it in the C:\Windows\System subdirectory.

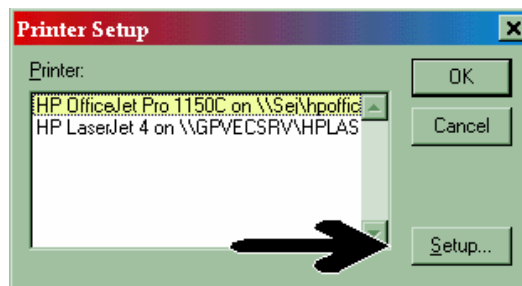
Cannot print dam summary report in landscape mode.

Description of problem:

Cannot print Dam Summary in landscape mode; only prints in portrait mode.

Solution:

To print any report in landscape mode, click on the **File** drop down menu, select **Printer Setup**, click on your printer, and then click on the **Setup** button in the lower right hand corner.



From the window that appears next, you should be able to select landscape paper orientation (the exact location of the paper orientation setting will vary with the brand of the printer).

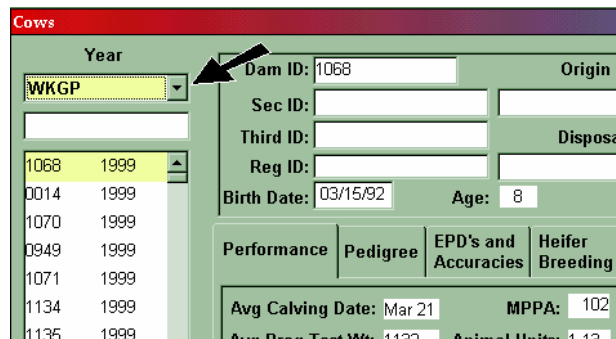
Cannot save a work group right after it is created.

Description of problem:

If you create a work group, try to save it, and get an error message telling you that the work group is not displayed.

Solution:

To be able to save a work group, you have to do one of two things. First, before you go and create a work group, change the year to WKGP. Second, after you create a work group, you need to re-select **WKGP** in the **Year** drop down menu. After completing one of these options, save the work group.



The screenshot shows a software window titled "Cows". On the left, there is a "Year" dropdown menu with "WKGP" selected. An arrow points to this dropdown. Below it is a list of years: 1068 1999, 0014 1999, 1070 1999, 0949 1999, 1071 1999, 1134 1999, 1135 1999. To the right of the dropdown are several input fields: "Dam ID: 1068", "Sec ID:", "Third ID:", "Reg ID:", "Birth Date: 03/15/92", and "Age: 8". Below these are tabs for "Performance", "Pedigree", "EPD's and Accuracies", and "Heifer Breeding". At the bottom, there are fields for "Avg Calving Date: Mar 21" and "MPPA: 102".

Everything looks like it is zoomed in.

Description of problem:

You have tried to resize the screen using the directions on the web site with no luck.

Solution:

To resize your computer display, right click on your desktop (click on any spot of the desktop that is not occupied by an icon) and select **Properties**. You will be presented with the **Display** properties. Under the **Settings** tab, increase the screen area to at least 800 X 600 and click **OK**.

If you cannot resize the screen, or when you do, the screen becomes unreadable, then you have one of two problems. Either your monitor is not capable of handling a higher resolution, or you have not correctly identified your display adapter or monitor type.

Get error message "Calves cannot be promoted" when promoting calves.

Description of problem:

You get the error message "Calves cannot be promoted" when trying to promote 1998 calves to developing heifers. Stated that the calf had the same number as the dam. Does every animal have to have a unique ID number?

Solution:

The calves can have the same ID as their mother, but you can only have one calf ID per year. If you already have a calf in the production year with that ID, then you will get a message that the animal already exists.

Since the program makes all updates at once, try to pick just one ID to promote and see if that works. You probably have two calves with the same ID that you are trying to promote (this generally happens with twins).

Computer calculated data seems to be wrong.

Description of problem:

I have some 2-year old heifers that have impossible adj. pelvic measurements. They seem to have the right measurements, and dates, but 6 of 53 head did not adjust right. How do I adjust them?

Solution:

Run the Development Summary report again to recalculate these fields. When you run this report, you will be prompted if you wish to update the calculated fields. By simply clicking on **Yes**, the fields will be readjusted. The only exception to this is the weaning summary that requires the Weaning rank to be 0 before that record is readjusted.

Removing an individual cow/calf from a work group.

Description of problem:

Can you take a cow out of a work group individually?

Solution:

The only way to permanently remove an animal from a work group is to create a new work group, and specify in the work group criteria that the work group NOT contain a specific animal ID.

But, when you are in an Enter Data, you can remove specific records from the list by clicking on the **Edit** drop down menu and selecting **Remove Record**. This will just remove the record from the list currently being edited. The record will reappear the next time you use and enter data form in that work group.

Reports on workgroups are displaying animals more than one time in the report.

Description of problem:

You run a report on a work group that you created and noticed that animals are appearing in the report more than one time.

Solution:

This happens because when you created your work group, you didn't have a criterion that specified which production year you wanted. For example, you then run a calving report on all 2-year-old cows. Cows would show up once for each production year they had in the report. Keep this in mind when you are creating a work group.

Seeing previous breeding information when entering new calving data.

Description of problem:

When entering calves born this year from AI sires, will CowCalf5 bring up the AI Sire or do you have to go back and look on the cow's record to see who she was AI'd to?

Solution:

CowCalf V5.1B and later allows you to select Previous AI and Natural breeding information to display on a enter data form to help you determine calf sires. Variables Previous AI Sire, Previous AI Date, Previous Natural Sire, Previous Natural Date, and Projected AI Calving Date can be selected to include on any enter data form to assist in the identification of a calf's sire.

Shortcut is creating a bunch of icons on your desktop.

Description of problem:

You created a shortcut on your desktop. When you open CowCalf5, you get an error that no data was retrieved. You look at your desktop and notice that CowCalf5 created a bunch of icons on your desktop that were not there before.

Solution:

To fix this, first close out of CowCalf5. Delete the extra icons that were created on your desktop. Next, right click on the **CowCalf5** icon that is located on your desktop. Select **Properties** and then select the shortcut tab. Type **C:\CowCalf5** in the **Start In** box. Click on **OK** and your problem is fixed.

Get the error "This program has performed an illegal operation and will be shut down."

Description of problem:

When I click on the CowCalf5 desktop icon, the **Registered to:** and **Product Key:** screen comes up. I click **OK** on it and the **Invalid Product Key** screen comes up that says the trial period will expire in X days. I click **OK** on that and then an error message comes up that says, "This program has performed an illegal operation and will be shut down." or sometimes all I get is just my desktop screen back.

I have opened the 32-bit ODBC and made the recommended changes. But, it won't accept the Local selection. It keeps reverting back to Custom setting.

Solution:

Your problem is NOT in the ODBC settings, since the database is opening when you are prompted for your registration info.

Your problem is that other applications are using the resources that CowCalf5 is needs to use. You need to not start any application that you don't need to have running. To fix this problem, follow the instructions below.

1. Make sure that you don't have another application running on your **Start** taskbar.
2. Check the lower right corner of your start bar. You will see icons of applications running in the background. You can put your cursor over them to see what they are. By clicking the right mouse button, or double clicking on them, try to disable or have them not start.
3. Look in the WINDOWS/START MENU/PROGRAMS/STARTUP folder and delete any icons in there that are not vital. Many programs place applications there, but few are vital, the only possible exception would be an anti-virus program.
4. Once you have removed all non-vital applications, restart the computer. When it is done starting up, press and hold down CTRL-ALT-DEL and look to see if there is a **cowcalf** application running. If so, highlight it and click on **End Task**.

NOTE: When you start CowCalf5, and get the registration screen, click **OK**, and nothing happens, then you still don't have enough resources. Shut down the CowCalf5 database application, and press CTRL-ALT-DEL and select the **cowcalf** application and click on **End Task**. Try removing more applications and then try starting up CowCalf5 again.

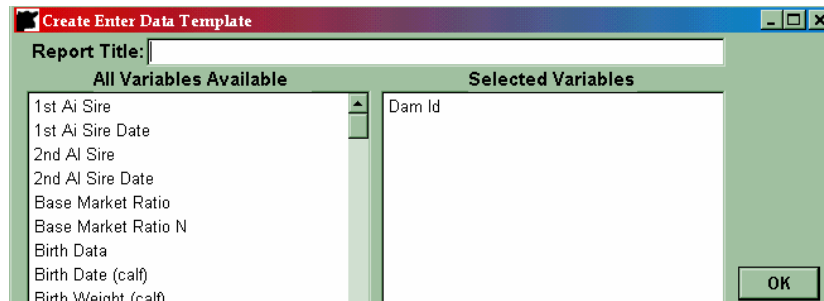
Can I title custom printouts?

Description of problem:

Can you make a title on custom reports?

Solution:

When you create a custom report by clicking on the **Reports** drop down menu, then clicking on **Custom**, then selecting **Report**, then clicking on **Select Variables**, and finally the appropriate option, the following screen should appear:



Type in the desired report title in the **Report Title** box. When you are done selecting your variables, click the **OK** button.

When unzipping files gets message "Cannot create output ...".

Description of problem:

You get the error message "Cannot create output file c:\cowcalf5\general.dll" when unzipping a file.

Solution:

Check to make sure that CowCalf5 is not currently running, or that the Sybase SQL Database is not running. Close these down completely and then try unzipping the file again. If this does not work, try to unzip in a different folder or unzipping after a hard reboot (shutting down your computer, turning it off, and then turning it back on).

When I sync the Palm, the herd data isn't copied to the Palm. What can I do?

When synchronizing with the Palm, the CowCalf5 database will automatically start up allowing for data to flow. If this is not happening, then most likely, the CowCalf5 Palm software is not fully installed on the PC.

To correct this problem, follow the instructions below.

1. Reinstall the CCPalm.EXE program. Be sure and reboot the computer after installation.
2. You can verify a complete installation by looking for the HotSync icon in the lower right. Right-click on the **HotSync** icon and select **Custom**. If CowCalf5 Palm synchronization software is installed correctly, a CowCalf5 conduit will be listed.

I get an error log message when I sync the PC and Palm, what does it mean?

You need to view the error log to see which function failed. The error log will identify the failing operation. The most common error is:

```
Synchronizing CowCalf5
- pda database
Database error
Error 8038 Cannot open host table 'pda' at DSN 'cowcalf'.
```

This particular error happens when the PDA table located in CowCalf5 on the PC is already populated with records. The synchronization process, writing the records from the PDA to the PC, requires that the table in the PC be empty prior to writing. If it is not empty you will receive this error, and no records will be written from the PDA to the PC. To correct this error, follow the instructions below.

1. Start up CowCalf5.
2. Click on the **PDA** drop down menu and select **Erase PDA Database**. Shut down CowCalf5.
3. Re-sync the Palm with the PC, and the problem should be fixed.

Appendices

Appendix A: Terms and Definitions

Accuracy (of Selection)

Correlation between an animal's unknown actual breeding value and a calculated estimated breeding value.

Adjusted Weaning Weight (WW)

An unshrunk, off-the-cow weight adjusted to 205 days of age and to mature-dam age equivalence.

Adjusted Yearling Weight (YW)

An unshrunk weight adjusted to either 365, 452, or 550 days of age.

Artificial Insemination (AI)

The technique of placing semen from the male into the reproductive tract of the female by means other than natural service.

Average Daily Gain (ADG)

Measurement of daily body weight change in animal on a feed test. Most bull tests are 140 days in length.

Beef Cattle Improvement Association (BCIA)

An organization, usually at the state level, that sponsors beef cattle improvement programs.

Beef Improvement Federation (BIF)

A federation of organizations, businesses, and individuals interested or involved in performance evaluation of beef cattle. The purposes of BIF are to bring about uniformity of procedures, development of programs, cooperation among interested entities, education of all segments of the beef industry concerning performance evaluation methods, and to build confidence in the principles and potentials of performance testing.

Birth Weight (BW)

The weight of a calf taken within 24 hours after birth. Heavy birth weights tend to be correlated with calving problems, but the conformation of the calf and the cow are contributing factors.

Body Condition Score

A score on a scale of 1 to 9, reflecting the amount of fat reserves in a cow's body, where 1 equals Severely Emaciated and 9 equals Very Obese.

Breeding Soundness Examination

Inspection of a bull involving evaluation of physical conformation and soundness through genital palpation, scrotal circumference measurement, and testing semen for motility and morphology.

Breeding Value

Value of an animal as a parent. The working definition is twice the difference in performance between a very large number of progeny and the population average when individuals are mated at random within the population and all progeny are managed alike. The difference is doubled because only a sample half (one gene of each pair) is transmitted from a parent to each progeny. Breeding value exists for each trait and is dependent on the population in which the animal is evaluated. For a given trait, an individual can be an above-average producer in one herd and a below-average producer in another herd.

Calving Season

The season(s) of the year when calves are born. Limiting calving season is the first step to performance testing the whole herd, accurate records, and consolidated management practices.

Contemporary Group

A group of cattle of similar age that are of the same breed and sex and have been raised in the same management group (same location, on the same feed and pasture, etc.).

Culling

The process of eliminating less productive or less desirable cattle from a herd.

Current Herd

When you start CowCalf5, you will see the current herd displayed on the **top** in the main screen. CowCalf5 will keep track of more than one herd. CowCalf5 stores all herd information in one database.

Current Work Group

The current WORK GROUP, displayed to the **left**, which is the subgroup of records within a herd with which you're working. You can create and save a variety of WORK GROUPS, but **you can only work with one WORK GROUP at a time.**

Dates

Enter dates in the mm/dd/yy format. For example, enter December 12, 1993 as **12/12/93** or as **121293**. Enter March 1, 1981 as **3/1/81** or as **030181**. Entering dates without slashes saves keystrokes, but you have to remember to put zeros in front of single digits (1 to 9). When you press **[ENTER]**, CowCalf5 automatically will include the slashes. Some dates are default values.

Deviation

A difference between an individual record and the average for that trait for that contemporary group. These differences sum to zero when the correct average is used. A ratio deviation is the ratio less the average ratio (usually 100).

Dystocia (Calving Difficulty)

Abnormal or difficult labor, causing difficulty in delivering the fetus and (or) placenta.

Embryo Transfer

Removing fertilized ova (embryos) from one cow (donor dam) and placing these embryos into other cows (recipient cows), usually accompanied by hormone-induced super-ovulation of the donor dam. More calves can be obtained from cows of superior breeding value by this technique. Only proven producers should become donor dams.

Environment

All external (non-genetic) conditions that influence the expression of cattle traits (reproduction, production, and carcass merit).

Estimated Breeding Value (EBV)

An estimate of an individual's true breeding value for a trait based on the performance of the individual and (or) close relatives for the trait. EBVs for growth traits are generally expressed as ratios. Expected progeny differences (EPDs) have replaced EBVs in most breed association programs.

Genetic Correlations

Correlations between two traits that arise because some of the same genes affect both traits. When two traits (e.g., weaning and yearling weight) are positively and highly correlated to one another, successful selection for change in one trait will result in change in the same direction in the other trait. When two traits are negatively and highly correlated (e.g., birth weight and calving ease) to one another, successful selection for change in one trait will result in a change in the opposite direction in the other trait.

Gestation

The period of pregnancy, or the period of time from conception until young are born.

Half-sibs

Individuals having the same sire or dam. Half-brothers and (or) half sisters.

Heritability

The portion of the differences among cattle, measured or observed, that is transmitted to the offspring. Heritability ranges from zero to one. The higher the heritability of a trait, the more accurately the individual performance predicts breeding value and the more rapid the response should be to selection for that trait.

Most Probable Producing Ability (MPPA)

An estimate of a cow's future productivity for a trait (such as progeny weaning weight ratio) based on her past productivity. For example, a cow's MPPA for weaning ratio is calculated from the cow's average progeny weaning ratio, the number of her progeny with weaning records, and the repeatability of weaning weight.

National Cattlemen's Beef Association

A national spokesperson for the beef cattle industry. Principal services are governmental affairs, public information, management, education, and economic information for members.

Parturition

The act of giving birth (calving).

Percent Calf Crop

The percentage of calves produced within a herd in a given year relative to the number of cows and heifers exposed.

Performance Data

The record of the individual animal for reproduction, production, and carcass traits. These traits include birth, weaning and yearling weights, calving ease, calving interval, milk production, etc.

Performance Testing

The systematic collection of comparative production information for use in decision making to improve efficiency and profitability of beef production.

Permanent Cow Record

This is the primary record for each cow in the herd. The information contained on this record changes very little over time since it contains identification numbers, dam birth date, individual performance, pedigree, and EPD'S, heifer development information, other production data, etc. Some variables such as average weight and MPPA are calculated by the program and do not require entry. It is very important to enter the identification information and birth date initially. Another important entry is disposal

information when the cow leaves the herd.

Polled

Naturally hornless cattle. Having no horns or scours.

Postpartum

After the birth of an individual.

Postweaning Gain

Weight gained after a calf is weaned. Often expressed as ADG.

Prewaning Gain

Weight gained between birth and weaning.

Progeny

Offspring of the parents.

Progeny Testing

Evaluating the genotype of an individual by a study of its progeny records.

Puberty

The age at which the reproductive organs become functionally operative and secondary sex characteristics begin to develop.

Rank

CowCalf5 ranks the animals' adjusted weaning weights in 1/6 increments (from 1 to 6), with 1 being in the top 1/6 or 16 % and 6 being in the bottom 1/6 or 16% of the group relative to adjusted weaning weight. If, for example, CowCalf5 ranks a calf a 3, that means it is in the top 3 / 6 (1 / 2) of the group against which it is ranked. A rank of 0 (zero) indicates no weight adjustment has been made to the animal. If the animal's rank is greater than 6 (7, 8, or 9), the animal's weight was not adjusted because no contemporaries were available for that animal on another reason such as twin or embryo transfer calf. (*See also* Formulas)

Ratio

Ratios refer to the value of an individual animal relative to the average of all animals in a group, such as weight. When you run your summary reports, CowCalf5 figures ratios, relying on the current work group. For example, if an animal has a ratio of 105, this means the animal is 5% above the average of the group. Likewise, an animal with a ratio of 89 indicates its adjusted weight is 11% below the average for the group. (*See also* Formulas)

Reference Sire

A bull designated to be used as a benchmark in progeny testing other bulls (young sires). Progeny by reference sires in several herds enable comparisons to be made between bulls not producing progeny in the same herd(s).

Scrotal Circumference

A measure of testes size obtained by measuring the distance around the testicles in the scrotum with a circular tape. Related to semen-producing capacity and age at puberty of female sibs and progeny.

Scurs

Horny tissue of rudimentary horns that are attached to the skin rather than the bony parts of the head.

Selection

Causing or allowing certain individuals in a population to produce more offspring than others in the next generation.

Selection Differential (Reach)

The difference between the average for a trait in selected cattle and the average of the group from which they came. The expected response per generation from selection for a trait is equal to selection differential multiplied by the heritability of the trait.

Selection Index

A formula that combines performance records from several traits or different measurements of the same trait into a single value for each animal. Selection indexes weigh the traits for their relative net economic importance and their heritabilities plus the genetic associations among the traits.

Sibs

Brothers and sisters of an individual.

Sire

The male parent.

Standardized Performance Analysis (SPA)

Program to determine the commercial and seed stock cow-calf enterprise unit cost of production.

Ultrasonic Measurements

Used to estimate carcass and reproductive characteristics. Operates on the principle that sound waves echo differently in tissues that have different densities.

Variance

Variance is a statistic that describes the variation we see in a trait.

Weight per Day of Age (WDA)

Weight of an individual divided by days of age.

Yearly Production Record

This record contains information that is collected each year from the calving date (or calving season if cow fails to calve). This information changes each year. Examples include the following: breeding dates, sires information, individual weights, condition scores, pregnancy information and health events. The information also coincides with the calf information that is collected for that year. A new yearly record is added for each year the cow is in the herd from her first calving year to the disposal year. If a cow fails to calve, a new yearly record should be created anyway to indicate a reason for not calving, such as diagnosed pregnant and failed to calve or aborted, etc. As stated above, the yearly record for individual cows stops when culling/disposal information is entered on the permanent record.

Appendix B: Field Names, Codes, and Formulas

Adjusted 205-Day Weight

$$\text{Adj. 205-day weight} = \frac{\text{weaning weight} - \text{birth weight}}{\text{Age in days at weaning}} \times M + \text{birth weight}$$

M = number of days adjusted to (205)

Adjusted 365-Day Weight

$$\text{Adj. 365-day weight} = \frac{\text{yearling weight} - \text{weaning weight}}{\text{Number of days between weights}} \times M + \text{adj. weaning weight.}$$

M = number of days adjusted to (365)

Adjusted Pelvic Area

$$\text{Adjusted Pelvic Area} = \text{Actual Pelvic Area} + \text{AF} \ddagger (365 - \text{Actual Age})$$

\ddagger AF = the Adjustment Factor (in centimeters) can be changed in the Herd Adjustments screen (See **Herd Adjustments**). The default AF is .25 cm.

Average Daily Gain

$$\text{ADG} = \frac{\text{actual weight} - \text{beginning weight}}{\text{age in days}} \times 100$$

Birth Dates

It is very important to assign a birth date to every animal. CowCalf5 looks at the birth date to determine whether the animal can have a production year.

Bull Disposal Codes

CowCalf5 records these codes in the **DISPOSAL** field on the **PERMANENT BULL INFORMATION** screen and in the **DISPOSAL REASON** field on the **DEVELOPING BULL INFORMATION** screen. You can change these codes and not risk reporting errors.

Bull Health Codes

CowCalf5 records these codes in the **HEALTH** field on the **BULL PRODUCTION YEAR INFORMATION** and **DEVELOPING BULL INFORMATION** screens. You can change these codes and not risk reporting errors.

Calf Disposal Codes

CowCalf5 records these codes in the **CALF DISPOSAL** field on the **PRODUCTION YEAR INFORMATION** screen. You can change these codes and not risk reporting errors.

Calf Health Codes

CowCalf5 records these codes in the **CALF HEALTH** field on the **PRODUCTION YEAR INFORMATION** screen. You can change these codes and not risk reporting errors.

Calving Ability Codes

User definable coded field where you record the dam's calving ease or difficulty (dystocia). A C.A. of 0 means there was no difficulty, or the calf's birth was not witnessed. Calving Ability is a numeric code, with increasing difficulty having larger coded numbers.

Calving Interval

Calving Interval is the number of days between the last and second to last calvings. The calving interval is an indicator of the dam's reproductive performance over the past year. Cows with consistently long calving intervals (more than 365 days) will eventually fail to rebreed in a fixed breeding season.

The Postpartum Interval is the number of days from the last calf's birth date until the conception date for the next calf. The postpartum interval measures the same reproduction performance that the calving interval does, but it is displayed in number of days open vs. the number of days between calvings. A dam with a postpartum interval of 90 days will calve on nearly the same day of the year as the previous calf's birth date.

Codes

Look under the specific type of code you wish to customize or learn about.

Dam/Heifer Disposal Codes

CowCalf5 records these codes in the **DISPOSAL** field on the **PERMANENT COW INFORMATION** and **YEARLING HEIFER INFORMATION** screens. You should not change codes AA and AK because CowCalf5 uses these codes in the **CULLING SUMMARY** and **SPA-P** reports.

Expected Progeny Differences (EPDs)

Expected Progeny Differences (EPDs) are the differences in performance you expect from future progeny of a sire compared with that expected from future progeny of the average bull in the same test. An EPD is an estimate based on available data and is equal to one-half the estimate of breeding value. EPDs are generally reported in the units of measure of the trait (e.g., lb., cm., etc.). Because EPDs are a factor outside your data set, CowCalf5 does not compute them. It is up to you to enter EPD data. You can user-define five of the EPD fields in CowCalf5.

Feedlot Quality Grade Codes

CowCalf5 records these codes in the **QUALITY GRADE VALUE** field on the **FEEDLOT CALF INFORMATION** screen. You can change these codes and not risk reporting errors.

Formulas

Look under the specific formula you wish to learn about.

Frame Score

Frame score is a score based on subjectively evaluating hip height. It is related to slaughter weights at which cattle will grade choice or have comparable amounts of fat cover over the loin eye at the 12th to 13th rib.

$$\text{Frame Score} = -11.7086 + 0.4723 (\text{HT}) - 0.0239 (\text{Age in Days})$$
$$[\text{Heifer}] + 0.0000146 (\text{Age in Days})^2 + 0.0000759 (\text{HT})$$
$$(\text{Age in Days})$$
$$\text{Frame Score} = -11.548 + 0.4878 (\text{HT}) - 0.0289 (\text{Age in Days})$$
$$+ 0.00001947 (\text{Age in Days})^2 + 0.0000334 (\text{HT})$$
$$(\text{Age in Days})$$

ID Numbers

CowCalf5 tracks records using the animal ID number. When sorting records, CowCalf5 begins sorting in alpha/numerical order. All animal numbers beginning with 1 (one) will precede those beginning with 2; all animal numbers beginning with A will precede those beginning with F. Since, CowCalf5 performs alpha/numerical searches, animal number 10 will come before animal number 2 (but not before 02). If the first two numbers are the same, CowCalf5 will sort by the second or third digit – animal number 112 will come before animal number 113.

CowCalf5 sorts numerically, alphabetically, and alpha numerically. Do not include spaces in animal IDs. Dashes, slashes, periods and commas are all acceptable in animal IDs. Daisy and 881101 and 89A23 and 87-150 are all acceptable animal IDs. Daisy Mae and 88 65 are not acceptable. Animal IDs should follow a common format. For example, if you number cows from 1 to 100, you would enter the cow ID for cow 1 as 001 in the CowCalf5 record system. This common format will make sorting functions run more smoothly and will make searching easier. If you are using special characters such as slashes, periods and commas in IDs, keep the special character in the same location. For example, if you list the animal number and the birth year, as such, 001/93, then list all animals this way: 002/93, 060/95, etc.

A good method for numbering animals in any herd is to begin the ID with the birth year. For example, you would number all calves born in 1995 as 5### (5002, 5148, 5999). This method provides easy entry, optimizes sort functions, and allows you to include the year of birth in the animal ID.

Management Activity/Inventory Codes

CowCalf5 records these codes in the **MANAGEMENT ACTIVITIES TYPE** field in the **CALENDAR** utility. You can change these codes and not risk reporting errors.

Maternal Ability (MA)

User definable coded field where you record the dam's mothering ability. Use this field to identify mothering traits of the Dam, such traits as "Won't claim calf" or "Poor Utter" are examples of Maternal Ability.

A MA of 0 means that no abnormal mothering ability observed, while a MA of 1 means normal Mothering Ability.

Users can customize the Maternal Ability codes to suit their operation by going to the Edit menu, and select Edit Codes, Production, then Maternal Ability.

$$\text{Ratio} = \frac{\text{individual record}}{\text{average of animals in the group}} \times 100$$

MPPA (Dam)

This is the dam's Most Probable Producing Ability score for weaning weights. CowCalf5 calculates the dam's MPPA for weaning weight ratio from the cow's average progeny weaning ratio, the number of progeny with weaning records, and the repeatability of weaning weight. CowCalf5 calculates this when you adjust weaning weights.

$$\text{MPPA} = H + \frac{\text{NR}}{1 + (\text{N}-1) * R} \times (\text{C} - H)$$

H = 100, the herd average weaning weight ratio

Reproductive Codes

CowCalf5 records these codes in the **DAYS PREG** field on the **PRODUCTION YEAR INFO** and **YEARLING HEIFER INFO** screens. Numbers between 0 (zero) and 300 indicate a normal gestation range. Numbers over 300 indicate a reproductive problem (e.g. the cow is open). SPA-P relies on this code when determining **PREGNANCY RATE** and other variables. You have plenty of open code spaces to customize your codes, but you should not change the existing codes.

Sire Codes

CowCalf5 records these codes in the **CODE** field adjacent to the **SIRE(s) USED** field on the **PRODUCTION YEAR INFO** screen. Use this code to track whether the calf is from artificial insemination, or natural breeding, or if you used AI and a cleanup bull, etc.

Unique ID

Cows must have an ID that is unique across the whole herd. You can re-use your calf ID's in different years.

Weaning Weight Ratio

$$\text{Weaning weight ratio} = \frac{\text{adjusted weaning weight}}{\text{average of all adjusted weaning weights}} \times 100$$

Work Group

A work group is a subset of animals selected from the herd. You can save work groups and use them again. You define work groups based on the type of record you want to edit or view. CowCalf5 lets you select variables from drop down lists, which makes creating a work group a breeze.

(See also "How to Create a New Work Group" Real player Presentation on your installation CD or on our website by clicking on **Support**, and then clicking on **View Tutorials**.)

Yearling Weight Ratio

Yearling weight ratio = $\frac{\text{adjusted yearling weights}}{\text{average of all adjusted yearling weights}} \times 100$

Appendix C: CowCalf5 Report and Form Templates

This is a list of all the CowCalf5 Report/Form Templates. These templates are used to make most of the reports on the Reports menu in CowCalf5. These files are grouped according to their location in CowCalf5 (Cows Tab, Calves Tab, Bulls Tab).

The Report Name (left-most column) corresponds to the file name on the same line. This means that you can do a custom report from a saved form, select that file name, and it will bring up the report that is listed in the Report Name column.

Cows Tab

Calving Data	cc5_calving.cef
Weaning Data	cc5_weaning.cef
Breeding Data	cc5_breeding.cef
Pregnancy Data	cc5_preg.cef
Post-Weaning Data	cc5_pweaning.cef
Pre-Calving Data	cc5_pcalving.cef
Add New Dams	cc5_newdam.cef
Add New Calves	cc5_newcalves.cef

Calves Tab

Feedlot Calves

Yearling Data	cc5_fl_yearling.cef
Prior-to-Background Data	cc5_fl_background_in.cef
After Background Data	cc5_fl_background_out.cef
Prior-to-Feedlot Data (Feedlot In)	cc5_fl_feedlot_in.cef
Mid-Feedlot Data (Feedlot Mid)	cc5_fl_feedlot_mid.cef
Feedlot Period Data (Feedlot Out)	cc5_fl_feedlot_out.cef
Carcass Data	cc5_fl_carcass.cef
Carcass-related Financial Data	cc5_fl_carcass_financial.cef
Newly Purchased Feedlot Calves	cc5_new_feedlot.cef

Replacement Heifers

Yearling Data	cc5_hfr_yearling.cef
Breeding Data--AI sires, etc.	cc5_hfr_breeding.cef
Breeding Weights, Condition Score, and Hip Height	cc5_hfr_breeding_wts.cef
Pregnancy Testing Data	cc5_hfr_pregtest.cef
Mid-Pregnancy Data	cc5_hfr_mid_preg.cef
Pre-Calving Data	cc5_hfr_precalving.cef
Newly Purchased Replacement Heifers	cc5_new_heifers.cef

Bull Development

Yearling Data	cc5_bulldev_yearling.cef
Bull Breeding Soundness Exam (BSE)	cc5_bulldev_bse.cef
Initial Weight Gain Data	cc5_bulldev_init_wt.cef
Weight Gain 1 Data	cc5_bulldev_wt1.cef
Weight Gain 2 Data	cc5_bulldev_wt2.cef
Weight Gain 3 Data	cc5_bulldev_wt3.cef
Weight Gain 4 Data	cc5_bulldev_wt4.cef
Final Weight Gain Data	cc5_bulldev_final_wt.cef

Bulls Tab

Newly Purchased Bulls Data Form (New Bull)	cc5_newbull.cef
Bull Breeding Soundness Exam	cc5_bull_bse.cef
Yearly Record (Yearly BSE)	
Yearly Weights Data (Yearly Wts)	cc5_bull_yearly_wts.cef

Appendix D: SPA-P Field and Variable Definitions

Actual Weaning Weights

Computation:

$$\text{Average Weaning Weight} = \frac{\text{Total Weight of Weaned Calves}}{\text{Total Number of Calves Weaned}}$$

Interpretation: While weaning weight is extremely difficult to interpret, it must be assessed to measure productivity and performance. As with any other measure, it must be compared to similar operations in order to have any meaning. The best use of this measure of performance is to establish gross revenue for the operation and to evaluate the effect of changes in the breeding program or management. Also, since the environment and feed supply greatly affect weaning weights in any year, long-term trends should be more useful than yearly changes.

Limitations:

1. Since producers calve and wean calves at different times and ages, actual weaning weights are not standardized to age. However, including average aged weaning in the data serves as a guide in interpreting weaning weights for comparative purposes.
2. Due to pasture production and management, it can be difficult to compare weaning weights between operations. This is especially a problem when comparing fall versus spring calving herds in which calf weaning age may differ by 3 months. Where two calving seasons are used it is best to do a separate analysis for each season.
3. Weaning weights are greatly affected by annual environmental conditions. For example, high and low levels of moisture, extremes in temperature, etc., which are beyond the manager's control, can influence weaning weights more than all controlled management factors. Thus, producers should avoid placing too much emphasis on the weights for any single year and should concentrate on long-term trends.

Users of this measure must remember that higher weaning weights normally mean higher gross revenue but not necessarily increased profit. Increased profit is dependent also on calf crop and production costs.

Average Age at Weaning

Calving distribution should be considered when evaluating average age at weaning.

Computation:

CowCalf5 finds the sum of the WEANING AGE fields for every PROD YEAR record. The Average Age at Weaning is this sum divided by the total number of calves with WEANING DATE information.

If either BIRTH DATE or WEANING DATE is zero on any PROD YEAR record, it will

adversely affect this calculation.

Criteria:

- Origin Date is before beginning breeding date
- HEIFER'S year of birth is fiscal year minus two
- FIRST CALF HEIFER'S year of birth is the fiscal year minus three
- MATURE COW'S year of birth is BEFORE fiscal year minus three

Beginning Breeding Date

This is the earliest date that the mature cowherd is exposed to breeding. CowCalf5 checks the previous production year record and finds the earliest breeding date under 1st AI, 2nd AI, or NAT Sire Date on mature cow records (> 2 yrs).

Beginning Calving Date

This is the third earliest BIRTH DATE of a calf born to a mature cow in the production year. These are cows whose year of birth is greater than 2 years before the current production year.

Breeding Females Exposed

This is the number of females in the beginning inventory that are exposed either to bulls or in an artificial insemination (AI) program. CowCalf5 checks previous production year (n-1) and looks for breeding dates. Cow Calf checks Heifer Record (age fiscal year minus 2) for heifer breeding dates.

Criteria:

- Mature Cow has current production year
- Origin Date is before beginning breeding date
- HEIFER'S year of birth is fiscal year minus two
- FIRST CALF HEIFER'S year of birth is the fiscal year minus three
- MATURE COW'S year of birth is BEFORE fiscal year minus three

Breeding Year

Year in which annual breeding data is collected.

Bull/Steer Calves Weaned

CowCalf5 checks the Production Year record for a WEANING DATE to include the record in the Total Calves Weaned count (TCW). The TCW count is then divided into Heifer Calves or Bull/Steer Calves by the codes in the CALF SEX field.

Criteria:

- Calves with calf sex NOT "F", "H", "C", or "2"
- WEANING DATE does not equal 0

Calf Crop or Weaning Percentage

Computation:

$$\text{Calf Crop or Weaning Percentage} = \frac{\text{Number of Calves Weaned}}{\text{Number of Females Exposed}} \times 100$$

Accurate computation requires the following adjustments to the number of females actually exposed during the breeding season:

1. Subtract the number of exposed pregnant females sold or transferred out between breeding and weaning (from the number of exposed females).
2. Add the number of exposed females or pairs purchased between breeding and weaning (to the number of exposed females).
3. Subtract the number of calves purchased and grafted on females from the number of calves weaned.

Interpretation: This percentage measures the reproductive rate of the herd; and since reproductive rate has been shown to be a major factor in profitability, it is probably the most important single measure of production performance. Since reproduction is largely a function of nutrition, it is an excellent indicator of the adequacy of the nutritional program. Additionally, it is an excellent indicator of how well the cows are matched to the resources. The adequacy of the herd health program used and any disease problems can be, in part, evaluated by this measure. As with any measure of performance used in evaluating cow herd management, comparisons should only be made between herds with similar calving seasons, management systems, and environmental inputs.

Limitations:

1. This measure of performance is a good indicator of total herd output, nutritional adequacy and managerial skills or husbandry practices; it should be noted that this measure does not account for excessive use of feed and non-feed inputs.
2. Calf crop percent may not correlate highly to economic performance in cases where cull marketing decisions are made prior to times of high input costs when the measure is compared to herds where this practice is not followed.

NOTES:

- a) All death losses of exposed females should remain in the exposed female numbers.
- b) Females that are intended to be culled and/or sold but remain in the exposed female herd during the breeding season should be subtracted from the exposed number when sold.
- c) The exposed females that were intended to be bred but are later culled when found open must remain in the exposed number.
- d) Do not include purchased grafted calves that are nursing cows in the number of weaned calves.

Calf Death Loss

Computation:

$$\text{Calf Death Loss Based on Exposed Females} = \frac{\text{Number of Calves That Died}}{\text{Number of Exposed Females}} \times 100$$

$$\text{Calf Death Loss Based on Calves Born} = \frac{\text{Number of Calves That Died}}{\text{Number of Calves Born}} \times 100$$

Interpretation: This measure of performance can be very useful in evaluating the herd health program, calving environment, nutritional program, and genetic selection program. The cause of death in each case would make the information much more valuable since calf losses can result from many factors at or following birth.

Limitations:

1. The type of operation, extensive versus intensive, should be considered when a comparison is made using this measure of performance.
2. The age make-up of the cow herd could influence calf death loss and must be considered when comparisons are made between herds.
3. Calf death loss at birth versus death loss during the suckling period is not distinguished here. Therefore, one may want to keep more detailed records if consistently high calf death loss occurs.

NOTE: Calf death loss should include those calves lost at birth and any that die up to weaning time. Abortions before calving should be included in the pregnancy loss percentage.

Calves Died at Birth

Calf loss due to calving problems - Include in the count the number of full term calves that died due to calving problems.

Criteria:

- Has a Birth Date
- Any death code OR disposal code "ZK"
- Disposal Date minus Birth Date is less than or equal to 7

Calves Died Before Weaning

Criteria:

- Disposal code "ZK"
- Disposal Date more than 7 days greater than birth date
- Disposal Date before SPA weaning date

Calving Distribution

Records all births within the first 21 days of the calving season, between 22 and 42 days, 43 to 63 days, and births after 63 days. Include births of full term calves even though calves may have died during the calving process.

Criteria:

- Birth date is within 21 (or 42, etc.) days from the beginning calving date
- Must have current production year
- Birth data code not 8I
- Birth date equal or less the beginning calving date plus 21, plus 42, or plus 63 or more.

Computation:

$$\begin{array}{r} \text{Calving Distribution} = \\ \text{Cumulative Number of Calves Born by 21, 42, and 63 Days} \\ \text{and Those After 63 Days of the Calving Season} \\ \hline \text{Total Number of Calves Born} \end{array} \quad \times \quad 100$$

NOTE: Compute calving distribution at each of these days. The starting date for the first 21-day period is 285 days following the bull turn in date with the mature cowherd. If this is unavailable, then start the first 21-day period when the third mature cow (3 years and older) calves. All calves born, either alive or dead, should be included in this analysis.

Interpretation: Since calf weaning weight and uniformity of the calf crop is greatly affected by calf age, this measure of how early in the calving season that calves are born is an excellent measure of reproductive performance. This measure is very useful in evaluating the adequacy of nutrition during crucial reproductive periods and adequacy of bull power, herd health, and heifer development programs.

Calving distribution is most useful if calculated by age of females since the distribution for certain groups, particularly second-calf-heifers, is often much lower than for the mature cows. Additionally, separate calculations by age of females may be necessary for meaningful comparisons when yearling heifers are bred prior to the cow herd.

Limitations:

1. This measure of performance may not be as useful in the southern part of the U.S. as in the northern part where pasture growth is more seasonal; however, a tight calving distribution has many benefits in all environments.
2. Calving distribution cannot be used in extensive grazing environments where accurate counts of the number of calves born may be difficult to obtain.

Calving Percentage

Computation:

$$\text{Calving Percentage} = \frac{\text{Number of Calves Born}}{\text{Number of Females Exposed}} \times 100$$

Accurate computation requires the following adjustments to the number of females actually exposed during the breeding season:

1. Subtract the number of exposed pregnant females sold or transferred out between breeding and calving (from the number of exposed females).
2. Add the number of exposed females or pairs purchased between breeding and calving (to the number of exposed females).

Interpretation: This measure of performance is a good indicator of breeding performance and gestational management in the herd. If the measure is lower than the average of similar operations, it may indicate that the nutrition or grazing program is inadequate, that bull power or fertility is inadequate, that there is the presence of diseases causing embryonic death, or that a mismatch between herd genetics and the environment exists. The meaning of this percentage is greatly enhanced if it is kept by female age group since rebreeding is often a problem with certain age groups, i.e., rebreeding first-calf heifers.

Limitations:

1. As with any measure of reproductive performance, this value should be used only in comparing similar operations.
2. This value may serve only as an indicator of an existing problem but does little to pinpoint the cause.
3. Year-to-year variation will exist in this value due to environmental stresses.
4. This value does not indicate in what manner the calf crop is born. Are the calves tightly grouped or spread out?

NOTE: All "term" calves born should be included in the number of calves born even if they are dead on arrival.

Cow/Calf Pairs Transferred In

Females purchased or transferred-in with nursing calves between calving and weaning - These cows were exposed by the previous owner so they should be included in the exposed female count. Since they have calves, they should increase the overall performance measure at weaning.

Criteria:

- Do not have previous production year records, and cow is not a heifer.
- Calf birth date not equal to zero and is not before cow's origin date.
- Cow's origin date is before ending calving date.

Cow/Calf Pairs Transferred Out

Females sold or transferred-out with nursing calves between calving and weaning - If exposed females are sold or transferred out with nursing calves, they should be deducted from the exposed females and the calves from the number of calves born. Since these are females that met the first reproduction test (birth of a live calf), exclusion of them will likely reduce the overall weaning performance level.

Criteria:

- No weaning date for calf
- Calf has no death codes
- Cow disposal date is before SPA weaning date
- Cow disposal doesn't start with "C" or "D" (mortality)

Ending Breeding Date

This is the last breeding date of the mature cow herd (> 2 yrs). CowCalf5 finds the latest date in BIRTH DATE field of a calf born during current production year. The ending breeding date is 285 days before this birth date.

Ending Calving Date

This is the last calving date of the mature cowherd, or the latest BIRTH DATE of a calf born to a cow in that production year.

Exposed Cows Transferred Out

Exposed females sold or transferred - out after the breeding season - If pregnancy tests are not performed before the sale or transfer out, then the number should be recorded here and will be included in the number of exposed females.

Criteria:

- Days Pregnant is < 1 or > 299
- Disposal Date between ending breeding and ending calving
- Disposal Code doesn't begin with "C" or "D" (mortality)
- Breeding data on previous production record

Exposed Female Culling Rate

Computation:

$$\frac{\begin{array}{l} \text{Transfers Out During Breeding} + \\ \text{Pregnant Females Transferred Out (after breeding)} + \\ \text{Exposed (or Open) Females Transferred Out (after breeding)} + \\ \text{Cow/Calf Pairs Transferred Out} \end{array}}{\text{Total Adjusted Exposed Females}} \times 100$$

NOTE: This does not include Breeding Females Exposed Not Intended To Be Kept.

Exposed Female Death Rate

Computation:

$$\frac{\text{Females Died During Production Year}}{\text{Total Adjusted Exposed Females}} \times 100$$

NOTE: This includes only those females that have a mortality code (beginning with "C" or "D" in DISP REASON) and a DISP DATE between January 1 and December 31 of the PROD YEAR.

Exposed Not to be Kept

Culled exposed females not intended to be calved but in exposed herd - Often cows are identified to be culled at the beginning of the breeding season but are left in the exposed cow herd. For example, older cows that have a nursing calf that will be culled when the calf is weaned. This number should not include those females that are diagnosed as open during pregnancy testing.

The user must enter the number of breeding females not to be kept. If they have not been given a production year, they do not need to be entered here, as they were not included in the Total Females Exposed at Breeding.

Exposed/Open Cows Transferred Out

Open females sold or transferred out after the breeding season - These are females that are not pregnant and are removed from the breeding herd. This does not include any females that were not intended to be pregnant. This number should be included in the number of females diagnosed as open, the number of sales or transfers of open females and the number of exposed females.

Female Replacement Rate Percentage

Computation:

Female Replacement Rate =

$$\frac{\text{Raised Replacement Heifers Exposed for First Calf +} \\ \text{Purchased Replacement Heifers \& Breeding Cows Exposed}}{\text{Number of Females Exposed}} \times 100$$

Accurate calculation requires the following adjustments to be computed:

1. Subtract the number of heifers sold or transferred out from the number of heifers exposed.
2. Add the number of heifers and cows purchased between breeding and calving to the number of heifers exposed.
3. Include both heifers and cows in the number of females exposed, that is using the previously defined female exposed definition.

Interpretation: This measure of performance is a good indicator of herd replacement rate and cow longevity. If this percentage is higher than the average of similar operations it may indicate the herd has reproductive problems or may be in an expansion phase. Generally, a high percentage will mean higher herd costs and lower productivity per cow because a larger portion of the herd is first and second calving females. Also, if this percentage is high it may mean the current genetic type does not match the resources, thus causing higher than normal culling rates and heifer retention. A low percentage may indicate the herd is in a liquidation phase.

Limitations:

1. As with any measure of performance, this value should be used only in comparing similar operations.
2. This value may only indicate that a problem exists with little indication of the cause of the problem.
3. Market fluctuation may cause this percentage to vary more than production factors in some herds.
4. Farmers or ranchers with herds in either an expansion or liquidation phase will find this percentage hard to compare and of less value.

Fiscal - Production Year

The Fiscal-Production Year is the year the calf crop is weaned. This year is titled "Prod Year" on the cow or calf record.

Gestation Length

User enterable number from progeny summary.

Heifer Calves Weaned

CowCalf5 checks the Production Year record for a WEANING DATE to include the record in the Total Calves Weaned count (TCW). The TCW count is then divided into Heifer Calves or Bull/Steer Calves by the codes in the CALF SEX field.

Criteria:

- Calves with calf sex "F", "H", "C", or "2"
- WEANING DATE does not equal 0

Heifer Calves Weaning Weight

$$\text{Actual Weaning Wt. Of Heifer Calves} = \frac{\text{Sum of Female Weaning Weights}}{\text{Number of female calves}}$$

If all weaned calves do not have a weaning weight entered, then the average and total weight may not be correct. Edit to correct.

Male Calves Weaning Weight

$$\text{Actual Weaning Wt. Of Steer Calves} = \frac{\text{Sum of Male Weaning Weights}}{\text{Number of male calves}}$$

If all weaned calves do not have a weaning weight entered, then the average and total weight may not be correct. Edit to correct.

Num

The number of animals CowCalf5 averaged together to find each ratio. Also a calculated field.

Pounds Weaned Per Exposed Female

Computation:

$$\text{Pounds Weaned Per Exposed Female} = \frac{\text{Total Pounds of Calf Weaned}}{\text{Total Number of Females Exposed}}$$

Interpretation: This calculation combines into one figure the herd reproductive rate, calf death loss, genetics for growth, and maternal traits. Thus, from a herd production standpoint, this is probably the best measure of performance. This measure is a tool to assist producers in managing the tradeoffs between growth rate and reproductive rate. In other words, concentrating on improving the number of pounds weaned per cow exposed should be more profitable than emphasizing either calf crop or weaning weight separately.

Limitations:

1. Since this measure is a combination of the measures used to analyze reproduction and production, it has some of the limitations of each.
2. Age at weaning and distribution of calving can influence this value a great deal, making it more valuable as a measure for an individual operation than for comparison between farms or ranches.

NOTE: The number of females exposed must be adjusted for the same factors that were used in the calf crop percent calculation.

Preg Cows Transferred Out

Pregnant females sold or transferred - out after the breeding season - These are females that are pregnant and removed from the breeding herd. This does not include any females that were not intended to be pregnant. This number should be included in the number of females diagnosed as pregnant, but subtracted from the number of exposed females.

Criteria:

- Days Pregnant is > 0 or < 300
- Disposal Date between ending breeding date and ending Calving date
- Disposal Reason doesn't begin with "C" or "D" (mortality)

Preg/Exposed Cows Transferred In

Number of females diagnosed as open - This is the number of females diagnosed as not being pregnant or the total number pregnancy tested minus those diagnosed as being pregnant. Includes females that were diagnosed as open but sold or transferred out of the breeding herd after the breeding season.

Criteria:

- Days Preg is < 1 or > 299 on the previous year's record and Preg Check date was entered

Pregnant or exposed females purchased or transferred-in after the breeding season - All females entering the herd after the breeding season should be pregnancy tested. This allows for the inclusion of purchased, exposed, or bred females in the exposed female count.

Criteria:

- Has a production year record from previous year
- Birth date indicates that cow is not a heifer
- Origin date after ending breeding and before ending calving date

OR

- Origin date lies before ending calving date
- Does not have a previous production year
- Does have current calf birth date OR Birth Data does not equal "AK"

Pregnancy Loss Percentage

Computation:

Pregnancy Loss Percentage =

$$\frac{\text{Number of Females Pregnant That Failed to Calve}}{\text{Number of Females Diagnosed as Pregnant}} \times 100$$

Pregnancy Loss Percentage = (Pregnancy Percentage - Calving Percentage)

Accurate computation requires the following adjustments to the number:

1. Females that abort and are sold between pregnancy diagnosis and calving should be included in the numerator.
2. Subtract pregnant females sold and add pregnant females purchased to the divisor.

Interpretation: This measure is a good indicator of reproductive performance. If the measure is higher than the average of similar operations, it may indicate late pregnancy reproductive disease problems which cause abortions. When kept over time, this measure may point out a potential problem before it becomes serious. There may be nutritional inadequacies of feedstuff quality groups or a management problem with the females.

Limitations:

1. As with any measure of reproductive performance, this value should be used only in comparing similar operations.
2. This value may only indicate that a problem exists with little indication of the cause of the problem.
3. There will be year-to-year variation due to environmental stresses, i.e., droughts, severe winters, etc.
4. This value will only be available to those who routinely diagnose pregnancy through rectal palpation procedures. However, small herds with good heat checking will know which females are not pregnant without rectal palpation, therefore, can calculate this pregnancy.
5. Accuracy is reduced if only a portion of the total herd is tested for pregnancy. The exposed females not tested may have a higher or lower pregnancy rate.

NOTES:

- a) Do not count purchased females or pairs which are open and added to the herd between pregnancy diagnosis and calving season.
- b) All death losses of pregnant females should remain in the females diagnosed as pregnant numbers.

Pregnancy Percentage

Computation:

$$\text{Pregnancy Percentage} = \frac{\text{Number of Females Exposed Diagnosed As Pregnant}}{\text{Number of Females Exposed}} \times 100$$

Accurate computation requires the following adjustments to the number of females actually exposed during the breeding season:

1. Subtract the number of exposed pregnant females sold or transferred out between breeding and pregnancy diagnosis (from the number of exposed females).
2. Add the number of exposed females or pairs purchased between breeding and pregnancy diagnosis.

Interpretation: This measure of performance is a good indicator of breeding performance in the herd. If the measure is lower than the average of similar operations, it may indicate that the nutritional program is inadequate, that bull power or fertility is inadequate, that there is the presence of diseases causing early embryonic death, or that there is a mis-match between herd genetics and the environment, i.e., feed resources and management style. The meaning of this percentage is greatly enhanced if it is kept by female age group since rebreeding is often only a problem with certain age groups, i.e., females exposed for their second calf.

Limitations:

1. As with any measure of reproductive performance, this value should be used only in comparing similar operations.
2. This value may only indicate that a problem exists with little indication of the cause of the problem.
3. There will be year-to-year variation due to environmental stresses, i.e., droughts, severe winters, etc.
4. This value will only be available to production systems that routinely diagnose pregnancy through rectal palpation procedures. However, small herds with good heat checking will know who is not pregnant without rectal palpation, therefore can calculate this percentage.
5. Adding in exposed females may influence the pregnancy percentage.

NOTES:

- a) Do not count purchased females (pairs) which are open and added to the herd between breeding and pregnancy diagnosis. Do include purchased females (pairs) which are diagnosed as pregnant or exposed and added to the herd between breeding and pregnancy diagnosis.
- b) All death losses of exposed females should remain in the exposed female numbers.
- c) Females that are intended to be culled and sold but remain in the exposed female herd during the breeding season should be subtracted from the exposed number when sold.

Pregnancy Test Date

This is the date that the mature cow herd (> 2 yrs) is checked for pregnancy. If no dates are kept, it needs to be entered to create a complete report, although it will not be used in any calculations. If dates are kept, CowCalf5 chooses the earliest date from the breeding year (previously on n-1 record).

Sets of Twins Born

Criteria:

- Calf has a "T" at the end of production year, created using the CREATE A TWIN option.
- Birth Data not 8I on either twin record.

Nursing calves purchased and grafted onto females in herd - At times, baby calves are purchased and placed on females in the herd whose calves have died at birth. Grafted calves are not included in calculating calving or calf crop percentage but are included in revenue and weaned calf production values.

Criteria:

- BIRTH DATA code "8I"

Total Death Loss of Exposed Females

This value reflects the death loss of exposed females for the fiscal year which will prevent double counting death loss between years.

Criteria:

- Disposal date during fiscal year
- Disposal reason code begins with "C" or "D" (mortality)

Total Females Calving

This is the total number of females calving. Include the number of all births of full term calves even if the calves are born dead (i.e. calves which died during calving due to dystocia) but do not include abortions (i.e. calves which have not reached full term).

Criteria:

- Females have production year
- Calf birth date is non-zero

Total Females Pregnant

This is the actual number of the exposed females diagnosed as pregnant. The accuracy of the pregnancy rate improves when all females that are exposed are pregnancy tested. Include females which were diagnosed as pregnant but sold or transferred out of the breeding herd after the breeding season.

Criteria:

- Days Preg is > 0 and < 300 previous year's record
- Preg Check date was entered.
- In the case of heifers, CowCalf5 examines the heifer pregnancy info.

Total Pounds Weaned

Computation:

Sum of all of the weaning weights for PROD YEAR records that contain a WEANING DATE. If weaning weights not recorded, then edit average weaning weights by sex of calf to reflect total weaning weight.

Total Progeny

Number of calves sired by a bull in this production year.

Transfer In During Breeding

Exposed females purchased or transferred-in during the breeding season - This is a count of the exposed females, including pairs, that are purchased. The actual reproductive performance reflects previous owner's management, which must be considered as part of the total exposed females.

Criteria:

- ORIGIN DATE lies between beginning and ending breeding dates and breeding on previous year (n-1) record or Heifer Record.

Transfer Out During Breeding

Exposed females sold or transferred-out before the breeding season ends - Exposed females that are sold before the breeding season ends should not be counted in the calculation of reproduction or production performance. Cows sold because they are diagnosed as open based on a pregnancy test should not be counted here either as these sales are made after the breeding season ends.

Criteria:

- Origin date is before beginning breeding date on previous year (n-1) record.
- Disposal date between beginning and ending breeding dates
- Disposal reason doesn't start with "C" or "D" (mortality)

Weaning Date

The earliest date in the WEANING DATE field for all calves born to a mature cow in the production year.

Weight

Bull weights collected at specific times during the production year. If two weights are recorded, enter them consecutively, to make the summaries more meaningful and accurate.

Appendix E: Carcass Term Definitions

Carcass Evaluation

Techniques of measuring components of quality and quantity in carcasses.

Hot Carcass Weight

Weight of carcass just prior to chilling. Used in determining yield grade.

Dressing Percent

Chilled carcass weight live weight x 100.

USDA Yield Grade Explained

Measurements of carcass cutability categorized into numerical categories with 1 being the leanest and 5 being the fattest. Yield grade and cutability are predicted with an equation based on four carcass traits: fat thickness opposite the rib-eye, rib-eye area, hot carcass weight, and the KPH (kidney, pelvic, and heart) fat percentage.

Yield Grade of 2.5 is calculated as follows:

$$\begin{array}{r} + 2.5 \quad (\text{adjusted fat thickness, in.}) \\ + 0.2 \quad (\text{kidney, pelvic and heart fat \%}) \\ + 0.0038 \quad (\text{hot carcass weight, lb.}) \\ + 0.32 \quad (\text{rib-eye area, sq. in.}) \\ \hline = 2.5 \end{array}$$



Yield Grade 1: The carcass will have a thin layer of external fat over the ribs, loins, rumps and slight deposits of fat in the flanks, cod, and udder. There is a thin layer of fat over the outside of the rounds and over the tops of the shoulders and necks. Muscles are usually visible through the fat in many areas of the carcass. Yields are typically greater than 52.3% of the carcass weight in boneless, closely trimmed retail cuts.

Yield Grade 2: This carcass is nearly covered with fat but the lean is plainly visible through the fat over the outside of the rounds, the tops of the shoulders and the necks. There is a thin layer of fat over the loins, ribs and inside rounds. The fat over the rumps, hips and cods is usually slightly thick. There are small deposits of fat in the flanks, udder, and cod. Yields are typically between 52.3% and 50 % of the carcass

weight in boneless, closely trimmed retail cuts.

Yield Grade 3: The carcass is completely covered with fat and the lean is visible through the fat only on the necks and lower part of the outside rounds. A thick layer of fat is over the loins, ribs and inside rounds. The fat over the rumps, hip and cods is moderately thick. There usually are slightly large deposits of fat in the flanks, cod, or udder. Yields are typically between 50% and 47.7 % of the carcass weight in boneless, closely trimmed retail cuts.



Yield Grade 4: The carcass is completely covered in fat. The only muscles visible are those on the shanks and over the outside of the plates and flanks. There usually is a moderate thick layer of fat over the loins, ribs and inside rounds. The fat over the rumps, hips and cods is thick. Large deposits of fat are in the flanks, cod, or udder. Yields are typically between 47.7% and 45.4% of the carcass weight in boneless, closely trimmed retail cuts.

Yield Grade 5: This carcass has more fat on all the various parts than YG 4. Yields are typically less than 45.4% of the carcass weight in boneless, closely trimmed retail cuts.

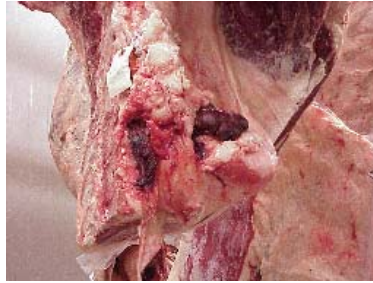
Rib-eye Area

Area of the longissimus muscle measured in square inches at the 12th rib interface on the beef fore quarter. REA is the highest weighted factor in the yield grade formula. Each one-inch increase or decrease in REA changes the yield grade by +/-0.3.



Kidney, Pelvic and Heart Fat

The internal carcass fat associated with the kidney, pelvic cavity and heart expressed as a percentage of chilled carcass weight. The kidney is included in the estimate of kidney fat. The baseline in the yield grade formula is 3.5% of the carcass weight. Each 1% increase or decrease in KPH changes the yield grade by +/-0.2.



Fat Thickness

Fat thickness is measured as the depth of fat in tenths of an inch over the rib-eye muscle at the 12th rib. It consists of a single measurement at a point three-fourths of the lateral length of the rib eye muscle from the split chine bone. Of the four factors used to determine yield grade, adjusted fat thickness is by far the most influential factor affecting cutability. Each 0.1-inch increase or decrease in fat thickness changes the yield grade by +/-0.25.



USDA Quality Grade Explained

A grade assigned by a Federal grader to predict the palatability or eating characteristics of the meat (tenderness, juiciness, flavor). The grades from highest to lowest are Prime, Choice, Select, Standard, Commercial, Utility, Cutter, and Canner. The primary components are maturity and marbling score. Texture, firmness and color of the lean are also considered.

Prime: Abundant marbling and A or B maturity



Choice: Moderate marbling and A or B maturity



Select: Slight marbling and A or B maturity



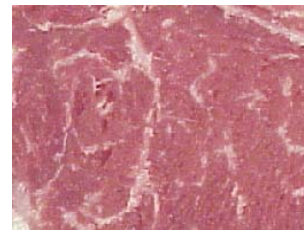
Standard: Traces of marbling and A or B maturity

Commercial: Moderate marbling and C, D, or E maturity

Utility, Cutter, Canner: Devoid of marbling and can be from any maturity grade

Marbling

Marbling is the specks of fat (intramuscular fat) distributed in muscular tissue, and it is the primary determinant of USDA quality grade. Marbling is usually evaluated in the rib-eye between the 12th and 13th rib. Marbling scores include Abundant, Moderately Abundant, Slightly Abundant, Moderate, Modest, Small, Slight, Traces, Practically Devoid, and Devoid. The following pictures illustrate the various categories of marbling.



Maturity Score

Carcass maturity is determined by evaluating the size, shape and ossification of the bones and cartilage as well as the color and texture of the cut lean surface. As an animal matures, ossification occurs. Measures of ossification are taken at the skeletal sacral vertebrae (first to ossify), lumbar vertebrae, and thoracic vertebrae (last to ossify). Ossification amounts in the cartilaginous buttons of the split thoracic vertebrae (feather bones) are of primary importance in classifying beef maturity.

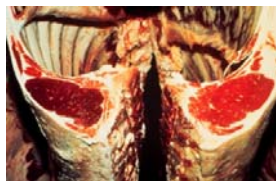
The USDA recognizes five maturity groups--designated as A, B, C, D, and E. A and B maturity is from young cattle (steer and heifer beef) while C, D, and E grades are for more mature carcasses. The following pictures illustrate the differences in maturity.



Dark Cutters

Dark-cutting beef is believed to be a result of a reduced glucose content of the lean due to stress at the time of slaughter. Common stresses associated with dark cutters include hot ambient temperatures, delay between shipment and slaughter, and poor handling techniques. As a result, this condition does not have the same significance in grading as do the darker shades of red associated with advancing maturity.

Although there is no evidence indicating that dark cutters have any effect on palatability, it is considered in grading because of its effect on consumer acceptability. Dark cutters can be reduced a whole quality grade (from Prime to Choice) in the higher quality grades and half a grade in the lower grades (Cutter and Canner). The following picture shows the difference between a regular carcass (right) and a dark cutter (left).



Appendix F: Report Descriptions

The report descriptions are grouped according to the category they are assigned in the Reports drop down menu. To find a particular report description, find the group it is in and the description will be located in that sub-group of report descriptions.

Calving Reports

PreCalving

This report lists all of the precalving information for the current production year. It can also be used as a worksheet to gather precalving information in the field. This report looks up previous sires, so if you are palpating females prior to calving, you can compare the palpation information with the breeding information to make a preliminary sire determination. This report may take a longer time to run, because of all the information it contains.

Calving Summary

This set of reports will update the adjusted fields and ratios in the calving information. It also generates five individual reports. These reports include the following: calving summary by calf sex, calving summary by cow age, calving sire summary, and calving individual summary. (*See also Chapter 3, Calving Summary*)

Calving Pattern

This report lists the number of calves born in each calving period. The program will ask for a beginning calving date and make the report based on that date. This report is useful for identifying problems with breeding that carried over to the calving season and to use in trying to decrease the length of calving season.

Calving Graphs

This report brings up two graphs, Dam Age Distribution and Average Birth Weight by Sire. These graphs help show the age of the herd at calving and to help delineate the sires that had favorable and unfavorable calf birth weights on average. The graphs can be individually resized to increase readability.

Birth Data Summary

This report summarizes the information from calving by grouping the number of calves with birth data information by dam age. This report also generates a graph of the number of calves in each birth data category. The graph can be individually resized to increase readability. (*See also Chapter 3, Birth Data Summary*)

Death Loss Summary

The death loss summary report works in nearly the same way as the birth data summary report. The difference is that this report shows calf death loss grouped by dam age and the total number of calves that died from each death loss reason. It also creates a graph of the total number of calves in each death loss category. The graph can be individually resized to increase readability. (See also **Chapter 3, Death Loss Summary**)

Calf Health Summary

This report generates a list of all of the calf health information for the current production year. It will group the health information by calf so that all of the health information for one calf is listed in the same place. The calves will be listed in ascending order by Calf ID.

Calf Disposal

The calf disposal summary displays calf disposal reasons in the same format as the birth data and death loss summaries. It groups the number of calves in each disposal reason category by dam age and also calculates a total number of calves in each category. It also generates a pie graph of the total number of calves in each category, which can be individually resized to increase readability. (See also **Chapter 3, Calf Disposal Summary**)

Pedigree

This report generates a pedigree list for each calf if the dam has a production record for the current production year. The pedigree begins with the calf and includes the calf's sire, calf's dam, and the parents and grandparents of the calf's sire and dam. Use a work group to see the pedigrees on a select group of animals.

Weaning Reports

Worksheet

The weaning worksheet should be used to collect data in the field. This report will list all of the cows that have a production record for the current production year and all available information on their calves. There is also space allocated for weaning weight and comments. To use this in the field, simply print it out and write in the necessary information to be entered into CowCalf5 later.

Summary

The weaning summary generates several reports including average weaning weight grouped by dam age, a comprehensive weaning information breakdown by sire, average weaning weight grouped by calf sex, and a list of all weaning information for each calf. Running the summary also recalculates weaning adjusted values and ratios and updates the MPPA of each cow that weans a calf. (See also **Chapter 3, Weaning Summary**)

Calving Pattern

This report lists the number of calves born in each calving period. The program will ask for a beginning calving date and make the report based on that date. This report is useful for identifying problems with breeding that carried over to the calving season and to use in trying to decrease the length of calving season.

Graphs

This report will generate two bar graphs, containing average weaning weight grouped by sire and average weaning weight grouped by weaning rank. These graphs help to compare sire performance and the differences in rank and weaning weight. The graphs can be individually resized to increase readability.

Dam Reports

Cow Weight

Worksheet

This worksheet lists all entered breeding information in addition to having space allocated for written information to be collected in the field.

Breeding Summary

The breeding summary generates a set of reports showing all of the breeding information that has been entered. These reports are included in the following list: Breeding WHR (weight to hip height ratio) Summary, Dam Breeding Weight grouped by Calf Rank, Dam Breeding Weight grouped by Dam Age, Dam Breeding Weight Summary (including a statistical breakdown), and Individual Dam Weight Summary (listing all dam weight information from the current production year). The graphs in the reports can be individually resized to increase readability.

Preg Test Summary (Pregnancy Test Summary)

The pregnancy test summary generates a set of reports showing all of the pregnancy test information that has been entered. These reports are included in the following list: Pregnancy Test WHR (weight to hip height ratio) Summary, Dam Pregnancy Test Weight grouped by Calf Rank, Dam Pregnancy Test Weight grouped by Dam Age, Dam Pregnancy Test Weight Summary (including a statistical breakdown), and Individual Dam Weight Summary (listing all dam weight information from the current production year). The graphs in the reports can be individually resized to increase readability.

Post Weaning Summary

The post weaning summary generates a set of reports showing all of the pregnancy test information that has been entered. These reports are included in the following list: Post Weaning WHR (weight to hip height ratio) Summary, Dam Post Weaning Weight grouped by Calf Rank, Dam Post Weaning Weight grouped by Dam Age, Dam Post Weaning Weight Summary (including a statistical breakdown), and Individual Dam Weight Summary (listing all dam weight information from the current production year). The graphs in the reports can be individually resized to increase readability.

Pre Calving Summary

The precalving summary generates a set of reports showing all of the pregnancy test information that has been entered. These reports are included in the following list: Precalving WHR (weight to hip height ratio) Summary, Dam Precalving Weight grouped by Calf Rank, Dam Precalving Weight grouped by Dam Age, Dam Precalving Weight Summary (including a statistical breakdown), and Individual Dam Weight Summary (listing all dam weight information from the current production year). The graphs in the reports can be individually resized to increase readability.

Dam Disposal

This report shows the number of cows that have been disposed of grouped by age at the time of disposal. It also shows a graph of the number of cows in each disposal reason category. The graph in the report can be individually resized to increase readability.

Dam Health

This report lists out all of the health information that has been entered for the current production year. It groups the information by Dam and then by date. The report is sorted in ascending order by Dam ID, with the information for each Dam sorted in ascending order by Health Date.

Reproductive-Culling

This set of reports generates a comprehensive report to assist with culling cows for reproductive reasons. This report will tell you if the cow possesses any of six common culling criteria including over 10 years old, diagnosed as pregnant but did not calve, has health information, lost last calf, MPPA is less than 90, or that the pregnancy information indicates a problem. This report also lists other valuable information, including average calving interval, MPPA, and weaning weight of last calf. The reproductive-culling report option will also generate two graphs detailing average calving interval grouped by weaning rank and average calving interval grouped by the cow's age.

ET Summaries

This set of reports shows information only on embryo transplant calves. It generates two reports that show information about current production year's ET calves. These reports group information by donor cow. A calving summary and weaning summary are generated for ET calves to compare their performance.

Pregnancy Reports

Worksheet

This report generates a list of all of the cows that have production records for the current year and their ages. It also allocates space for pregnancy checking information like days pregnant, weight, and condition score. This worksheet also has space to write comments about each cow.

Summary

The pregnancy summary generates a set of reports that provide a comprehensive listing of all pregnancy information that has been entered. These reports include the following pregnancy average condition score by age, pregnancy condition score summary, pregnancy summary by cow age, graph of average days pregnant grouped by dam age, and an individual pregnancy listing.

Calving Patterns (projected)

This report asks for a projected calving start date and creates a table of information based on that date. The report will calculate the percent of cows that should calve in time periods after the start of calving based on days pregnant information.

Herd Performance Reports

Produce of Dam Summary

This report provides a comprehensive listing of each dam's lifetime production, including detailed information on the dam's calves for each production year that she has a production record. This report will bring up information on every cow that has a production record, not only the cows in with a record in the current production year.

Herd Book

The herd book report creates a complete list of all information on each cow, including pregnancy, breeding, and calf information. This report includes everything in the Produce of Dam Summary and adds all of the cow information from the cow's permanent record and production records.

Replacement Heifer Reports

Yearling Worksheet

This worksheet shows all the calf information that has been entered thus far, including birth and weaning information. It also provides space to collect the calf's yearling weight and write individual comments. Use this worksheet to collect yearling data in the field.

Yearling Summary

The yearling summary generates a set of reports detailing all of the replacement heifers' yearling information. It also updates birth, weaning, and yearling adjusted values. This set of reports includes the following individual reports: yearling weight statistics grouped by calf sire, yearling weight statistics grouped by dam age, yearling weight statistics grouped by calf sex, and an individual yearling weight listing. The graphs in the reports can be individually resized to increase readability.

Pregnancy Worksheet

This report is designed to help gather pregnancy data in the field. It shows information about previous AI breedings and allocates space to record palpation information. It also provides space to write comments about individual heifers.

Pregnancy Summary

This set of reports generates a comprehensive list of pregnancy information. The individual reports that are generated include an individual heifer pregnancy report and a total pregnant report grouped by weight.

Projected Calving Pattern

This report will categorize the projected heifer calving dates into time period groups, showing when the greatest percentage of heifers will calve. To make the time periods, it will ask you to enter a projected calving start date and make the report based on this date.

Development Worksheet

The heifer development worksheet lists all entered pregnancy and breeding information with space to gather more data. It also provides space for comments or other data that doesn't fit into the specified categories.

Development Summary

This report will update all of the calculated fields and ratios on the replacement heifer development record. It will also generate two individual reports including a group averages report and an individual summary of all development information.

Heifer Health Summary

This report will bring up a summary of all health information that has been entered for all replacement heifers in the current production year. This includes information in the Dev Health tab on the Replacement Heifer record. Any health information entered on the replacement heifer's calf record will not show up, because this report shows only development health information.

Feedlot Reports

Yearling Worksheet

This worksheet shows all the calf information that has been entered thus far, including birth and weaning information. It also provides space to collect the calf's yearling weight and write individual comments. Use this worksheet to collect yearling data in the field.

Yearling Summary

The yearling summary generates a set of reports detailing all of the feedlot calves' yearling information. It also updates birth, weaning, and yearling adjusted values. This set of reports includes the following individual reports: yearling weight statistics grouped by calf sire, yearling weight statistics grouped by dam age, yearling weight statistics grouped by calf sex, and an individual yearling weight listing. The graphs in the reports can be individually resized to increase readability.

Feedlot Wt Worksheet

The feedlot weight worksheet provides information that has been previously entered in CowCalf5, including weights, condition scores, and hip heights. It also allocates space to record new weight, condition score, and hip height measurements. In addition, this report provides space to write individual comments about the calves.

Feedlot Individual Wt Summary

The feedlot individual weight summary generates a report that details all of the feedlot weight information on an individual calf basis. This summary will also calculate or update all of the weight ratios for each type of weight.

Feedlot Carcass Summary

The feedlot carcass summary generates a set of reports that details all of the carcass information that has been entered in CowCalf5 for the current production year. This set of reports includes the following individual reports: carcass statistics grouped by calf sire, carcass information grouped by calf sex, carcass summary by dam frame score, carcass summary by dam weight, carcass summary by dam age, and a summary listing information on an individual basis.

Feedlot Health Summary

This report will bring up a summary of all health information that has been entered for all feedlot calves in the current production year. This includes information in the Dev Health tab on the Feedlot Calf record. Any health information entered on the feedlot animal's calf record will not show up, because this report shows only development health information.

Bull Development Reports

Yearling Worksheet

This worksheet shows all the calf information that has been entered thus far, including birth and weaning information. It also provides space to collect the calf's yearling weight and write individual comments. Use this worksheet to collect yearling data in the field.

Yearling Summary

The yearling summary generates a set of reports detailing all of the bull development calves' yearling information. It also updates birth, weaning, and yearling adjusted values. This set of reports includes the following individual reports: yearling weight statistics grouped by calf sire, yearling weight statistics grouped by dam age, yearling weight statistics grouped by calf sex, and an individual yearling weight listing. The graphs in the reports can be individually resized to increase readability.

Weight Dev Worksheet

The weight development worksheet provides information that has been previously entered in CowCalf5, including weights, condition scores, and hip heights. It also allocates space to record new weight, condition score, and hip height measurements. In addition, this report provides space to write individual comments about the calves.

Weight Dev Summary

This report will update all of the calculated fields and ratios on the bull development record. It will also generate a summary of all bull development information showing the data on an individual basis.

Bull Dev Health Summary

This report will bring up a summary of all health information that has been entered for all bull development calves in the current production year. This includes information in the Dev Health tab on the Bull Dev record. Any health information entered on the bull's calf record will not show up, because this report shows only development health information.

Management Report

This report shows the movement of your management groups from location to location. It shows the location the group was moved to, the date they were moved, the total number of animals in the management group, the total animal units moved to the location, and comments about the move. This information is all grouped by management group.

Pasture Report

The pasture report shows all of the information in the management report with the addition of a total number of animal units moved to each pasture for each date. In addition, this report groups all information by location. Use this report to see the movement of management groups in and out of a pasture throughout the grazing season.

Calendar Report

The calendar report details all of the calendar information for the production year selected from the **Year** drop down menu. Events are grouped by category and then by sub-category. This report provides an easy way to view your herd events from the whole year at one time, instead of going to the **Calendar** tab and selecting the appropriate date to see the entries.

Verify Dam Info Reports

Incorrect Prod Yrs

This report is designed to help you determine if production years were created in error. Incorrect production years are when an animal has a production year before it's birth date or origin date. These production years are also be created by adding disposal dates after you create a new production year. An animal with a production year after its disposal date would have an incorrect production year for the year after its disposal date year. Deleting these production years helps to clean up reports and worksheets. For more information on deleting, see **Chapter 11** or **Chapter 15**. This report brings up all incorrect production years, regardless of the year you have selected from the **Year** drop down menu.

Missing Prod Yrs

When a dam is added to the herd after a production year is created and you do not re-create the production year, the dam will be missing a production record. This report shows the dams that are missing production years and the particular year they are missing a production year from. This report lists all dams with missing production years, not just the dams that are missing the current production year.

Blank Prod Yrs

This report will help you identify which cows have production records that are blank so you can enter the appropriate information. This report will list all of the cows that have blank production years and the specific production year of the blank production record. This report will list all of the dams with blank production years, not just the dams with blank production records for the current production year.

Verify Calf Info Reports

Missing Calf Data

This report shows calf records that are missing birth or disposal information, including the calf ID and the production year with missing calf information. This report will list all calf records with missing information, not just the calf records that are in the current production year.

Missing Heifer Data

This report shows replacement heifer records that are missing birth or disposal information, including the replacement heifer ID and the production year with missing information. This report will list all replacement heifer records with missing information, not just the records that are in the current production year.

Missing Feedlot Data

This report shows feedlot records that are missing birth or disposal information, including the feedlot ID and the production year with missing information. This report will list all feedlot records with missing information, not just the records that are in the current production year.

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