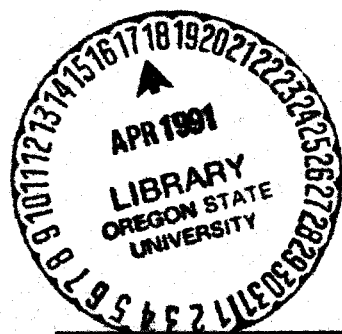


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CALFWNTR Computer Software



OREGON STATE UNIVERSITY EXTENSION SERVICE

CALFWNTR

Pilot • SR 874 • April 1991

Description

CALFWNTR is a microcomputer program designed to help producers compare the economics of alternative production and marketing strategies. It allows users to develop and customize a partial budget for backgrounding calves in a feedlot. This could include keeping weaner cattle for a period of time or evaluating costs of feeding cattle before they're put out on pasture and marketed as yearlings or long yearlings.

Users

Cattle producers, Extension agents, professional consultants, and lenders.

Authors

William W. Riggs, Extension agent (farm management), Lake County, Oregon State University; and Duane Griffith, Extension economist, Montana State University.

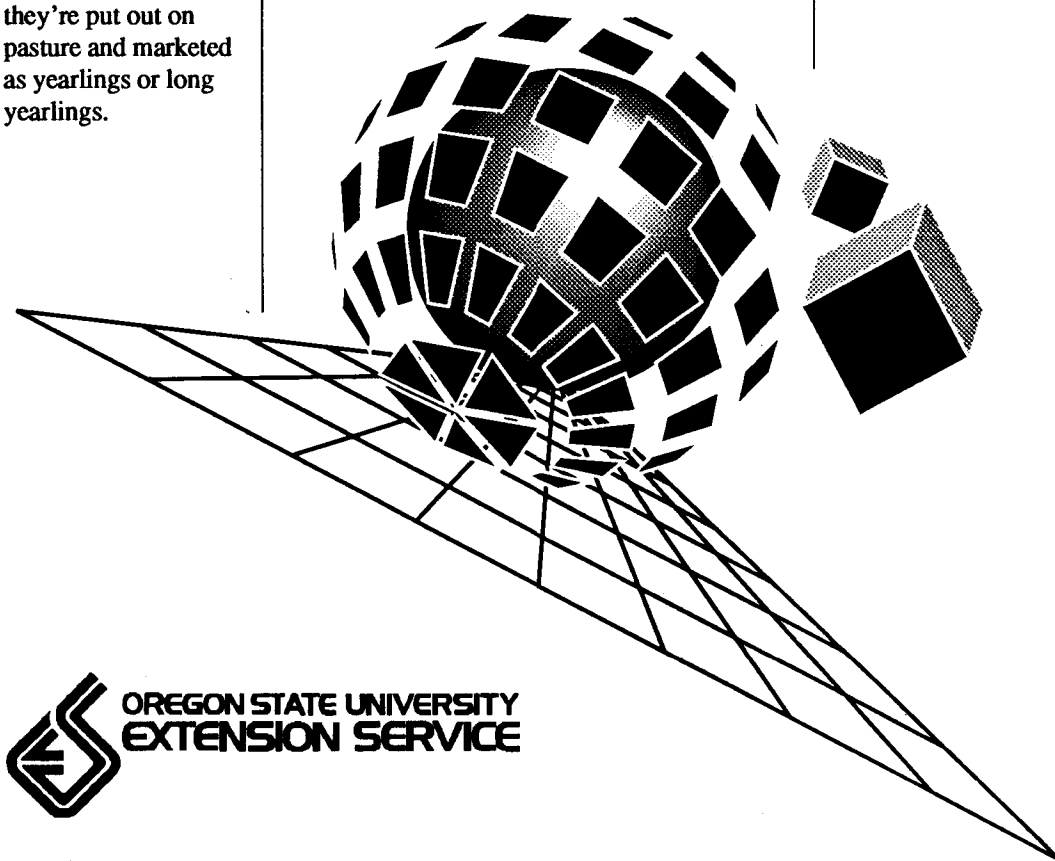
Compatibility

Requires IBM PC, or any fully compatible personal computer with a minimum of 512K RAM and at least one disk drive. Two different copies are supplied: CALFWNTR.WK1 requires Lotus 1-1-3, version 2.01 or 2.2. The compiled version, CALFWNTR.OVR, CALFWNTR.WKB, and RUN.EXE, doesn't require any software other than DOS.

Ordering

Order copies of CALFWNTR, SR 874, from:

William W. Riggs
Extension Agent
OSU Extension Service
Lake County Office
Courthouse
Lakeview, OR 97603



OREGON STATE UNIVERSITY
EXTENSION SERVICE

PREFACE

What is Backgrounding?

Backgrounding means keeping your cattle through more stages of the production process. Profit potential exists each time cattle change hands. Some advantages of backgrounding are that it allows you to vertically integrate and diversify your operation, spread risk by marketing cattle at different times of the year, and more closely evaluate the performance capabilities and genetic potential of your cattle.

Numerous factors influence the economics of backgrounding. Some of the major considerations include: initial weight of cattle, sex, breed, body type, background (nutritional status, disease exposure), shrink, price spread, and environmental factors (McNeill 1990). Because so many factors influence the performance and economic potential of putting cattle in a backgrounding lot, a careful evaluation of this management option should be made before cattle enter the feedlot.

Why use the CALFWNTR program?

Budgeting your production alternatives on the computer before investing in these alternatives may save you money. The CALFWNTR program was developed to help producers compare the economics of alternative production and marketing strategies. The CALFWNTR program allows you to develop and customize a partial budget for backgrounding calves in a feedlot. This could include keeping weaner cattle for a period of time in order to increase weight and take advantage of different prices at a later marketing date, or evaluating costs of feeding cattle before they are put out on pasture and marketed as yearlings or long yearlings.

Why use this guide?

To help you use the CALFWNTR program. The guide includes sample menus, screens, and instructions. These features are designed to help you build, modify and print a partial budget of the backgrounding production/-marketing option.

What will you need to get started?

- A DOS operating system disk.
- An IBM-compatible computer with at least 512K RAM and at least one disk drive.

- Financial documents that apply to the budget you want to create.
- Cost and production information from records or the lot you may contract with to feed your cattle. Use a printed copy of the input form listed in this users guide as a reference.

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CALFWNTR

A Computer Program for Estimating the Economics of Backgrounding Weaner Calves

William W. Riggs and Duane Griffith

INTRODUCTION

The decision to retain ownership of weaner cattle through a backgrounding period requires careful consideration of the added costs and added returns of this marketing strategy. Use the CALFWNTR program to budget this marketing alternative on paper before committing funds to retain ownership of cattle that may or may not make you money. Numerous analyses can quickly be performed to evaluate under what market conditions retained ownership through the backgrounding phase would be the most profitable marketing strategy.

Program Design

The CALFWNTR computer program is menu driven and consists of three major components. The first component is the MENU and legend. The menu outlines six alternatives for the user: 1) INPUT, input market and production conditions; 2) VIEW, view the budget; 3) PRINT, print the input and budget reports; 4) FILE, save as new file or get/retrieve another file; 5) QUIT, exit menu driven routines and 6) EXIT, save the file and exit the program. The second part of the program is the required user input (Figure 1). The third program component gives the partial budget that was constructed using the program (Figure 2).

Two different copies of the program are supplied on the enclosed disks. The file CALFWNTR.WK1 is a spreadsheet template written in LOTUS 1-2-3® version 2.2. If you are an experienced spreadsheet user and have access to LOTUS 1-2-3® version 2.01 or 2.2 you may want to use this version of the program. Also on the disk is a copy of the CALFWNTR program that has been compiled using the Baler® compiler. This compiled version, CALFWNTR.OVR, CALFWNTR.WKB, and RUN.EXE, of the program does not require that you have access to any software other than DOS.

This users manual is divided into three sections. The first section is for the experienced LOTUS 1-2-3® user requiring only minimal assistance to use the program. Only a brief description of the program name and menu is provided. The second section is for the user needing more help to run the LOTUS 1-2-3® version of the

program. This section also provides a detailed explanation of the menus that are common to both the spreadsheet and compiled versions of the program. The third section describes how to use and access the compiled version of the program.

Section 2 shows how to load and use the CALFWNTR program on a system with two floppy disk drives. If your computer has a hard drive or only one disk drive you will need to alter the way LOTUS is accessed. Numerous alternative setups of hard disks are possible including different disk designations (e.g. C drive, D drive, E Drive), menu routines and batch files for software execution. Because of the numerous alternatives that your system might use we limit our examples to a two floppy disk system. If your computer has a hard drive you may need to consult the manual to see how LOTUS® is accessed on your computer.

Program Requirements

To run the CALFWNTR program requires an IBM-personal computer or IBM compatible computer running under the DOS operating system and with at least 512K RAM and at least one disk drive. With this minimal configuration the compiled version of the program can be run.

To run the spreadsheet version of the program requires LOTUS 1-2-3® software. A printer is desirable but not necessary.

The LOTUS 1-2-3® system is one of the popular spreadsheet programs that is available. It requires either a two floppy disk system or a hard disk drive and a computer with a minimum of 512K of RAM memory. Section 1 and 2 of this publication assumes at least some familiarity with the LOTUS 1-2-3® program.

As a precaution, a copy of the CALFWNTR program should be made on a permanent storage diskette in case the original is accidentally destroyed. This can be done using the DOS operating system COPY command.

PROGRAM INPUT AND OUTPUT

Appendix A provides a glossary of terms used to describe the required user input. Figure 1 gives an example of the input screen.

The cost of backgrounding will vary from year-to-year, location, feed stuffs, etc. and the example included in the users manual should not be considered an indication of what the costs and returns from preconditioning might be. Past and present records, experience, market values, or the feedlot you are considering contracting with will be able to provide input information. Other production rates such as the expected average daily gain (ADG) and feed ration information can be estimated by other computer models, consultants, extension agents, and experienced cattle feeders.

Figure 2 shows the partial budget generated by the computer program. As shown, the program uses a partial budget approach; only the added costs and added returns from backgrounding are considered. One of the major costs will be the value of the cattle that could have been sold at the time the cattle were put in the feedlot. This opportunity cost is considered in the budget.

The program calculates net return per head for both heifers and steers (line D, Figure 2). If budgeted net returns are positive, the economics of backgrounding is estimated to be positive. Similarly, if net returns are negative the implication is that retained ownership with the specified costs and returns would not be profitable. Breakeven prices and average cost per pound of gain is also calculated by the program. Appendix B contains complete explanations and interpretations of the terminology and calculations used in the results section.

SECTION 1

Instructions for the Advanced LOTUS User

The spreadsheet version of the CALFWNTR computer program has been saved on the enclosed diskette under the file name CALFWNTR.WK1. When the program is loaded you will automatically enter a macro driven menu to assist with data input, viewing and printing. If you should exit the menu and wish to go back press the ALT key and the A key at the same time (ALT A). The letters CMD will appear at the bottom of the screen when in Macro mode.

SECTION 2

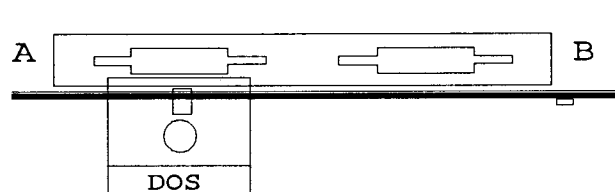
A More Detailed Set of Instructions

Starting the CALFWNTR Program (Two Disk System)

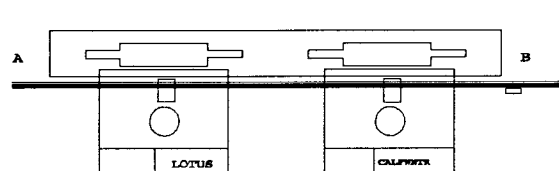
- Load the CALFWNTR program into your computer.

To start the LOTUS 1-2-3® version of the CALFWNTR program:

1. Boot your computer with DOS. Then, remove the DOS disk.



2. Insert a LOTUS system disk in Drive A. Insert the CALFWNTR program disk in Drive B.



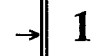
3. Type <LOTUS>¹ at the A> and press <RETURN>.

A > LOTUS



4. Press <1> to choose the 1-2-3 option from the menu at the top of the screen. The LOTUS spreadsheet should be initiated.

1-2-3 Printgraph Translate Install



5. Press the slash </> key.



¹/The <> keys are used to highlight the number or letter to be typed. Do not type the brackets <>.

CALF WINTERING COST ANALYSIS

INPUT DATA

	STEERS	HEIFERS
Purchase Price of Feeder Cattle/(\$/cwt)	\$90.00	\$90.00
Average Purchase Weight/head/(lbs)	550	550
Number of Head you Intend to Feed	100	100
Number of Days on Feed	122	120
Number of Days on Pasture	0	0
Expected Fed Average Daily Gain ..(lbs/head)	1.25	1.00
Expected Average Daily Gain on Pasture	0.00	2.10
Calculated Ending Weight Including Shrink	698	666
Interest Rate on Borrowed Money/(%)		
(or Opportunity Cost of own Money)	12.25%	12.25%
Monthly Pasture Charge Dollar/Head/(\$)	\$0.00	\$12.00
Tax on Livestock/(\$/head)	\$0.00	\$0.00
Veterinary and Medical Expenses/(\$/head)	\$5.00	\$5.00
Transportation Costs to Feedlot/(\$/head)	\$7.00	\$7.00
Transportation Costs to Market/(\$/head)	\$0.00	\$0.00
Facility Repair Costs for Enterprise/(\$)	\$0.00	\$0.00
Total Fuel Costs for Enterprise		
(Excluding Cattle Transportation)/(\$)	\$0.00	\$0.00
Custom Charges/(\$/head/day)	\$0.00	\$0.00
Death Loss/(%)	1.00%	1.00%
Shrink at Time of Purchase/(%)	0.00%	0.00%
Shrink at Time of Sale/(%)	3.00%	3.00%
Sale Commission and Yardage/(%)	4.50%	10.00%
Total Depreciation to this operation/(\$)	\$0.00	\$0.00
Miscellaneous Costs/(\$/head)	\$5.00	\$5.00
Total Hired Labor For Enterprise/(\$)	\$0.00	\$0.00
Expected Selling Price/(\$/cwt)	\$75.00	\$75.00

FEED INFORMATION: For each Feed Item, include the pounds fed per Head per Day and the Cost in Dollars per Ton of Feed.

The Costs/Day and \$/lb will be Calculated

INGREDIENT	LBS/HEAD/DAY	\$/LB	COST/DAY	\$/TON
1) HAY	17.00	\$0.04	\$0.72	\$85.00
2) BARLEY	0.00	\$0.00	\$0.00	\$0.00
3) SALT MINERAL	0.00	\$0.00	\$0.00	\$280.00
4)	0.00	\$0.00	\$0.00	\$0.00
5)	0.00	\$0.00	\$0.00	\$0.00
6)	0.00	\$0.00	\$0.00	\$0.00
7)	0.00	\$0.00	\$0.00	\$0.00
8)	0.00	\$0.00	\$0.00	\$0.00
9)	0.00	\$0.00	\$0.00	\$0.00
10)	0.00	\$0.00	\$0.00	\$0.00
TOTALS:	17.00	\$0.04	\$0.72	\$85.00

CAPITAL PURCHASES AND IMPROVEMENTS:

For each capital purchase or improvement for this enterprise enter the cost and expected life years.

IMPROVEMENT	COST	LIFE	SLCOST
1) WATER TANKS	\$0.00	10	\$0.00
2)	\$0.00	0	\$0.00
3)	\$0.00	0	\$0.00
4)	\$0.00	0	\$0.00
5)	\$0.00	0	\$0.00
6)	\$0.00	0	\$0.00
7)	\$0.00	0	\$0.00
8)	\$0.00	0	\$0.00
9)	\$0.00	0	\$0.00
10)	\$0.00	0	\$0.00
TOTAL CAPITAL COST	\$0.00		\$0.00

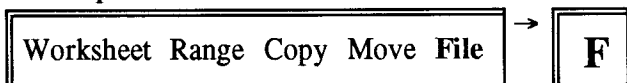
Figure 1. User Input.

CALF WINTERING COST ANALYSIS

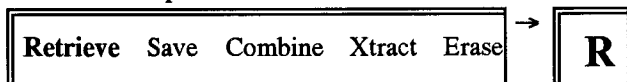
RESULTS	STEERS	HEIFERS
COMPUTED SALE WEIGHT (INCLUDING SHRINK)	697.93	666.40
COMPUTED FEED CONVERSION	13.60	13.60
INTEREST CHARGE/HEAD	\$22.56	\$22.16
COST OF GAIN PER HEAD (EXCL. PURCHASE COST).....	\$156.50	\$180.84
TOTAL COST/HEAD (INCLUDING PURCHASE COST).....	\$651.50	\$675.84
TOTAL COST PER HEAD PER DAY OF FEEDING	\$1.28	\$1.51
COST PER POUND OF GAIN	\$1.03	\$1.51
TOTAL DAYS (Fed plus Pasture)	122	120
BREAKEVEN SELLING PRICE AT GIVEN		
PURCHASE PRICE (\$/CWT)	\$93.35	\$101.42
BREAKEVEN PURCHASE PRICE AT GIVEN		
SELLING PRICE (\$/CWT)	\$66.72	\$57.99
NET RETURN/LOSS PER HEAD	(\$128.05)	(\$176.04)
NET RETURN/LOSS PER CLASS.....	(\$12,805)	(\$17,604)
TOTAL NET RETURN/LOSS	(\$30,410)	

Figure 2. Preconditioning Partial Budget.

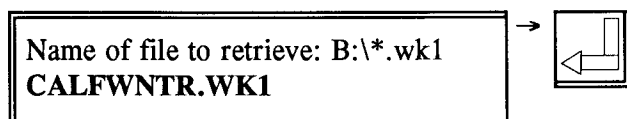
6. Press <F> to choose the **File** option from the menu at the top of the screen.



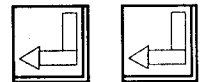
7. Press <R> to choose the **Retrieve** option from the menu at the top of the screen.



8. Use the arrow keys to move the highlighted cursor to the file **CALFWNTR.WK1**. Then press <RETURN> to retrieve the ranch value file.

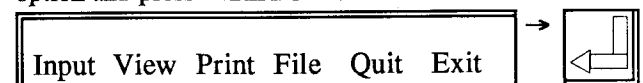


9. Press <RETURN> twice more to go past the copyright and disclaimer and to enter the main menu of the program.



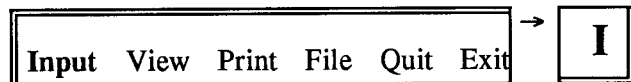
Using the CALFWNTR Program

The main menu is displayed as soon as the CALFWNTR program is loaded. To select any one of the five menu options either type the first letter of the option desired or move the cursor (highlighted rectangle) to that option and press <RETURN>.



INPUT Menu Option

Highlight <INPUT> and then <RETURN> or press <I> to choose the INPUT option from the CALFWNTR main menu.



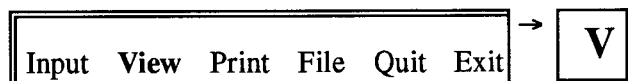
Entering the input menu option places the cursor in the data region of the worksheet. The user is then allowed to enter data in certain cells of the worksheet. Other cells are protected formulas and will not accept input. The user inputs numerous factors which describe the cost and production rates for the partial budget analysis (Appendix A). Required user input is highlighted as shaded cells in Figure 1.

Data is entered by moving the cursor to the appropriate data line with the up (↑) or down (↓) arrow keys at the right of the keyboard. The user moves the cursor to the appropriate cell, enters the required data and moves to the next cell using the arrow keys. Pressing <RETURN> ends the input menu execution and returns the user to the main menu.

VIEW Menu Option

The partial budget generated by the CALFWNTR program can be viewed by entering the view option. The user can move up and down the partial budget using the up (↑) or down (↓) keys. Pressing <RETURN> returns the user to the main menu. The input data can be viewed by entering the INPUT menu.

Press <V> to choose the VIEW option from the CALFWNTR main menu.



PRINT Menu Option

If a printout of program results is desired, make sure the printer is on-line and then enter the PRINT option. This will print both the input data and the partial budget.

Press <P> to choose the PRINT option from the main menu. A message to align the paper to the top of the page will appear. Press <RETURN> and the data will be sent to the printer. The PRINT command is set to a parallel printer, if you have a Serial printer you may need to consult your printer manual to properly setup.

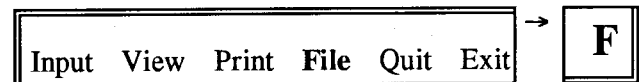
→

Input View Print File Quit Exit

P

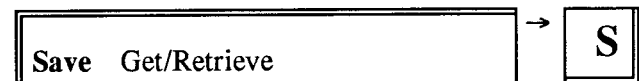
FILE Menu Option

The File menu option contains commands to save the data in a new file or to get/retrieve a file that was previously saved. Press <F> to choose the File option from the CALFWNTR main menu.



SAVE Sub-menu Option

Press <S> to save the data to file. Selecting replace will replace the original data with the current data. To save as a new file, type the desired name followed by <Return>. Press Alt A to re-enter the main menu.



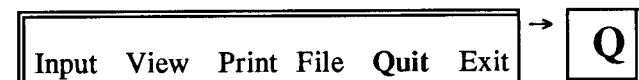
GET/RETRIEVE Sub-menu Option

Press <R>, if using the LOTUS version to retrieve a file that has previously been saved. Use cursor key to highlight the desired file and press <Return>. This command works the same as the file retrieve command explained in Section 2.

Press <G>, if using the BALER version to get a file that was previously saved. Highlight the desired file and press <Return> followed by Alt A to retrieve the saved data into the compiled program.

QUIT Menu Option

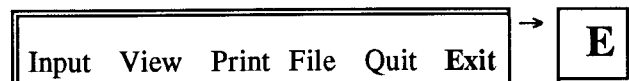
Press <Q> to choose the Quit option from the main menu. Execution of this menu option terminates the menu driven routines.



The user can now freely move about the worksheet. To return to the menu options press and hold down the ALT key while at the same time pressing the A key (command ALT A) and release.

EXIT Menu Option

Press <E> to choose the EXIT option from the CALFWNTR main menu.



The program is terminated when the Exit option is chosen. The program first asks for a file name to use when saving. If you want to save the file with the same name that was loaded, or if you do not want to save the file, type <RETURN>. The program will then ask if you want to cancel (leave the existing file intact) or replace the file. If cancel is chosen then the file is not saved. Telling the computer to <REPLACE> will replace (update) the file on disk. The user can also type a new file name when prompted for the file name after entering the EXIT option from the main menu. This will leave the original file as it was when loaded and save a new file with a different name. After canceling, replacing, or renaming, press <Y>, to exit the program. If you wish not to exit press <N> followed by Alt A.

SECTION 3

Instructions For The Compiled Program

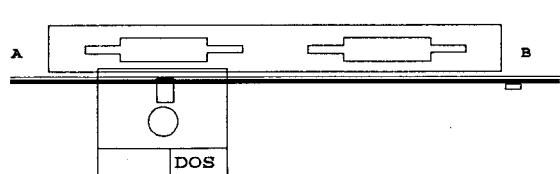
A compiled version of CALFWNTR is saved on the diskette. The compiled version of CALFWNTR does not require the use of LOTUS 1-2-3® it is strictly stand alone. The compiled version of CALFWNTR operates in the same fashion as the worksheet version, the only differences being the loading of the program and the programs appearance.

Starting the CALFWNTR Program (Compiled Version)

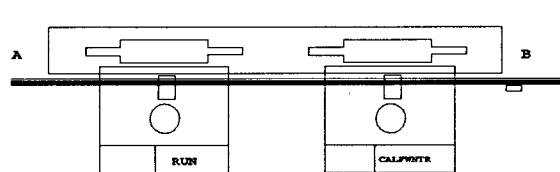
- . Load the CALFWNTR program into you computer

To Start the BALER compiled version of the CALFWNTR program:

1. Boot your computer with DOS. Then, remove the DOS disk.



2. Insert the RUN PROGRAM disk in Drive A. Insert the CALFWNTR PROGRAMS disk in Drive B.



3. Type RUN B:CALFWNTR at the A> and press <RETURN>.

A > Run B:CALFWNTR →



The title sheet for the program will now show on the screen. Press <RETURN> twice to go past the copyright and disclaimer and to enter the main menu of

the program. Refer to SECTION 2 Using the CALFW-NTR Program for explanation referring to the use of the menu screens. Note that the Menu will be vertical in the center of the screen as compared to horizontal as is in the LOTUS version.

INPUT
VIEW
PRINT
FILE
QUIT
EXIT

Input Production Param..

SECTION 4

Problems and Solutions

Common User Errors

This section is provided to answer some of the most common questions and problems that users of the CALFWNTR program encounter.

Problem: The program will not load on the computer.
Solution: Check to see if computer is IBM compatible, has 512K of memory, and that you followed the correct loading procedures.

Problem: I can't get out of one section of the program.

Solution: To get back to the Main Menu from any part of the program press the <RETURN> key one time. Some computers run slower than others so it is important to be patient and allow computer time to do what is asked of it.

Problem: I press the <RETURN> key but nothing happens.

Solution: You may not be in the macro mode. Check the bottom of the computer screen to see if the letters **CMD** appear. If **CMD** does not appear press ALT-A, the ALT key and A key at the same time. This will put you back to the beginning of the program.

Problem: The percentage won't enter correctly.

Solution: All Percentages must be entered as decimals. For example 12% interest would be entered as .12.

Problem: The computer BEEPED and is flashing "Protected Cell".

Solution: You have tried to enter data where you shouldn't. Press the Esc key one time, then press ALT-A.

Problem: I had to press ALT-A and re-enter the program, do I have to re-input my data again.

Solution: Once you have entered your data it will be there until you change it, or leave the program.

- Problem: The computer won't print.
Solution: Check to see if the printer is a parallel printer, that the printer is on and on-line.
- Problem: I pressed the PRINT, SAVE, or EXIT key by mistake.
Solution: Press the Esc key until **Ready** appears in the upper right hand corner of the screen. Then press ALT-A to get back into the menu.

LITERATURE CITED

- McNeill, J.W. 1990. *Some factors affecting performance of cattle in feedyards*. Factsheet compiled for the Research Committee of Texas Cattle Feeders Association. Amarillo, TX.

APPENDIX A

Input interpretation and Explanation

The following glossary of terminology is listed in the order that it appears in the input section of the program. The terms are defined as best as possible. However, different regions often use the same terminology in relation to different things. These terms are defined as they are used in this program.

Purchase Price The price (per hundred-weight) that was paid for or could have been received for, the animal on the day it enters the feedlot or is weaned.

Purchase Weight What the approximate animal weight is when weaned.

Number of Head you Intend to Feed Number of weaners held for backgrounding.

Number of Days on Feed The number of days the cattle will be in a situation where they are being fed a ration on a daily basis.

Number of Days on Pasture After the animals are weaned an operator may put the weaners on pasture for a period before moving them into a feedlot. If this option is available enter the number of days the weaners will be on pasture prior to entering feedlot.

Expected Average Daily Gain-Feedlot Average Daily Gain (ADG), or the average amount of gain that the animal is expected to gain per day during the period the animals are in a feedlot situation.

Expected Average Daily Gain-Pasture Average Daily Gain, or the average amount of gain that the animal is expected to gain per day during the period the animals are in a pasture situation.

Calculated Ending Weight This number is calculated for information purposes using the beginning weight, ADG, days, and shrink.

Interest Rate The interest rate on money that is used to retain the animals in a feedlot situation. This rate is the interest cost on owned and borrowed capital.

Monthly Pasture Charge If the weaners are put on pasture prior to feedlot enter the amount charged per head per month.

Tax on Livestock Enter any taxes that pertain to the livestock on a per head basis. Not all areas incur a livestock tax, if no tax enter 0.

Vet. Drugs and Supplies Includes any veterinary work, vaccines, or implants that are required during the feeding period.

Transportation Costs to Feedlot The per head charge that a producer pays to transport the animals to the feedlot. A cost may not incur if the animals are not transported rather they may be moved into adjoining pastures or lots.

Transportation Costs to Market The per head charge that a producer pays to transport the animals to place of marketing. A cost may not incur if the animals are not transported rather they may be moved into adjoining pastures or lots to be kept as yearlings.

Facility Repair Cost The total dollar amount allotted to the general up-keep of buildings, feed bunks, corrals, etc. related to backgrounding weaner cattle.

Total Fuel Cost The cost of fuel that is used to grind, mix, and distribute feed. Do not include transportation cost. May include diesel for tractor, mix truck, mill, etc.

Custom Charges The amount per head per day that is charged if animals are in commercial feedlot.

Death Loss The percentage of animals entering the feedlot that die or are expected to die.

Shrink at Time of Purchase Enter the expected shrink the animals may incur. I.E. if the animals are hauled to a feed yard they may incur a 3% shrink whereas animals that are not hauled may incur no shrink. Although the animal may weigh an amount the day it is weaned, by the time it goes back on feed it will incur some amount of shrink.

Shrink at Time of Sale Expected or penciled shrink at time of sale.

Sale commission and Yardage If sold in an auction yard enter the percentage charged.

Total Depreciation for Enterprise The amount of depreciation on the capital equipment involved with backgrounding calves.

Miscellaneous Any cost that is not included in other input sections is entered in the miscellaneous category. Brand inspection fees and Beef Check off fees can be included in this category.

Total Hired Labor The dollar and benefit amount paid to employees related to backgrounding calves.

Expected Selling Price The price (per hundred weight) that the animal is expected to be sold for when finished.

Feed Information There can be up to 10 different feeds in the ration. This is not a ration program, it does not least cost, or balance the feed. Enter the feed name, pounds of that feed fed per head per day, and the cost of the feed per ton. To enter a feed name type '1)feedname followed by <Return>. The <'> is needed to tell the program that the cell is a label, not a number.

Capital Purchases and Improvements Enter any capital improvements that are acquired during the backgrounding period. Enter the total cost and the expected life.

Conversion Rates The amount of feed fed in order to produce one pound of gain. The conversion rate will vary depending on type and breed of cattle, cattle condition, time of season and the ration to be fed. An experienced feedlot operator or a producer that has fed large numbers of cattle will be able to estimate an acceptable conversion rate. The actual conversion rate cannot be known until the cattle come out of the feedlot.

APPENDIX B

Result Explanation and Interpretation

The following is an interpretation of those inputs and results that are not included in the previous Input Terminology section.

Computed Sale Weight Calculated from the beginning weight, total days on feed, ADG, and Shrink.

Total Net Return/Loss Added profit or loss from entire backgrounding option, steers and heifers.

Computed Feed Conversion The amount of feed that it takes to acquire one pound of gain.

Interest The interest occurred from owned and borrowed capital.

Cost of Gain per Head The amount of money needed to produce the gain from beginning to ending weight, excluding the value of the animal at time of purchase.

Total Cost per Head All added costs of backgrounding cattle, including animal value at beginning of period.

Total Cost per Head per Day of Feeding The average amount of that each animal costs per day over the backgrounding period.

Cost per Pound of Gain The cost attributed to each additional pound of gain.

Total Days Total number of days that the animals are in the backgrounding phase.

Breakeven Selling Price given Purchase Price Given the purchase price, this is the price (per hundred-weight) at which the animal would have to be sold to achieve a \$0 Return over Total Cost.

Breakeven Purchase Price given Selling Price Given the Sale price, this is the price (per hundred-weight) at which the animal would have to be purchased to achieve a \$0 Return over Total Cost.

Net Return/Loss per Head Added profit or loss that each animal generates.

Net Return/Loss per Class Added profit or loss that each class (steers or heifers) generates.

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