



Dairy One News

Where Information Creates Opportunity

Dairy Comp 305 Newsletter

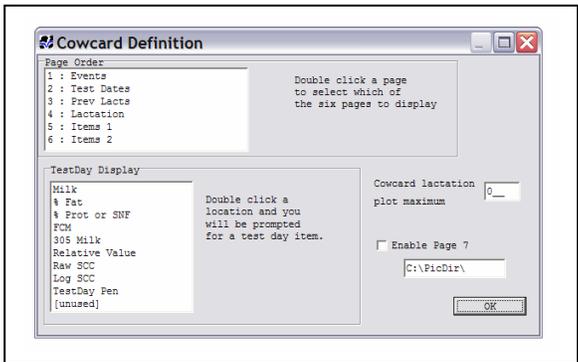
Pictures, Pedigree and Notes Added to the Cow Card

We have added an optional, seventh page to the cow card that can include a cow's picture, her pedigree, and a text message. This information is stored as files that are kept in a separate, user defined, directory and is accessed by the program when page 7 is enabled. The file formats are:

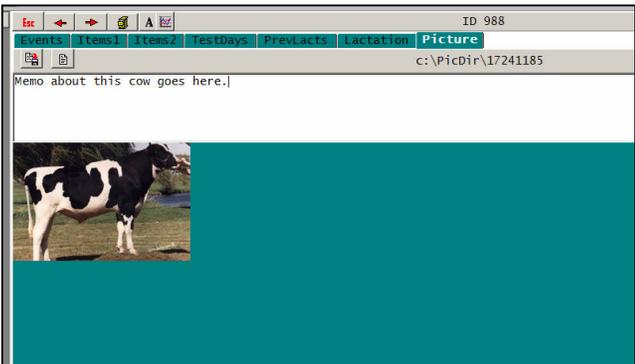
- Pictures: jpg files
- Pedigrees: pdf files
- Messages: txt files

The files are named using each animal's permanent ID.{ext}. Thus, 93WTS5432. JPG would be the picture for the cow whose permanent ID (USDA) was 93WTS5432.

These files require a lot of disk space. This feature should only be implemented on newer, faster "XP" PCs with a lot of space on the hard disk. Also make sure you have adequate backup capacity. Whatever is being used to back these up must be able to hold a lot of data. The JPG files used for this example averaged 20 K per cow with the range of 10K to 50K. A PDF file was 160 K. One thousand pictures would there take somewhere between 20 to 40 megabytes of disk space and 1000 PDF files would take up 160 or more megabytes.



You can enable the extra cow card page by selecting choice "A" Cowcards, from the Alter menu. Once you are at the Cowcards dialogue box, "left click" on Enable Page 7 so that a check is displayed in the box, and then specify the directory where these files will be stored. We suggest a directory named c:\picdir\. Once you enable page 7 and specify the location of the files, the extra tab labeled "Picture" will appear on your cow cards.



Notice that the file name is the animal's permanent ID (REG or USDA). If a TXT file exists, its content will be displayed in the white space above the picture. Clicking in this space will allow editing of notes for this animal. To save, click on the first icon that is located above the word "Memo" in this example.

If PDF files exist a second icon will appear. Clicking on it will activate Adobe Acrobat® and display the pedigree. These files usually come

from the breed associations. Adobe Acrobat is on the update CD and can be installed on your computer if it is not already. To summarize, there are three files for this cow. They are 17241185.jpg, 17241185.txt and 17241185.pdf and they are located in the c:\picdir directory.

“Preg” and “Open” Handled Differently

The EVENTS command is primarily used to look at and analyze the events that have happened over the past year. These can be viewed in **EVENTS >Table by Month**.

Event	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
FRESH	2154	192	162	199	169	214	243	218	195	149	142	133	138
OK	1405	35	55	137	155	147	98	179	75	142	140	129	113
RECHK	49	5	2	4	7	6	5	1	0	3	10	3	3
HEAT	724	49	45	63	62	56	54	60	76	54	73	76	56
BRED	5734	451	342	428	465	477	471	552	620	480	518	480	450
PREG	1453	142	110	126	178	131	129	110	69	0	163	147	148
OPEN	3334	265	200	279	276	323	314	387	366	21	319	301	283
PREV	126	8	11	15	5	9	12	9	9	16	7	11	14
BULLPEN	2309	158	178	194	205	212	233	260	221	163	163	173	149
DRY	1200	99	44	36	114	108	144	108	139	67	104	114	123
ABORT	160	15	14	20	10	17	13	19	9	1	8	22	12
DNB	70	8	3	2	0	8	6	14	17	4	3	0	5
SOLD	711	39	85	35	23	0	114	104	70	57	56	82	46
DIED	45	1	3	8	1	0	8	5	1	8	6	2	2
CHECK	123	10	7	16	11	4	9	4	11	9	23	14	5
XID	57	2	4	10	6	3	5	12	11	4	0	0	0
MAST	193	9	14	16	24	13	20	26	26	22	3	12	8

This table shows the number of events that have occurred during each month for the past year. You can quickly see how many mastitis cases have occurred over the last 12 months (193 in this example). This is still true except for two events, PREG and OPEN. These events were previously listed the month that you checked the cow pregnant or checked her open. Now they refer to the results of breedings.

People often want to look at this table and determine their abortion percentage. However, when the PREG event is used to both declare a cow pregnant initially, and confirm she is still pregnant later in gestation, it makes estimating abortion rates (number of abortions / number of pregnancies) impossible with this table. In the 2004 updates, PREG and OPEN are really looking at the breeding result code in the event BRED and reporting that in the month of the breeding. Thus if a cow was bred in February, found pregnant in April, there would be 1 PREG in February. Notice that in this table, there is a "0" in the PREG row for September because this was the month this table was made.

PREV events will continue to be displayed in the month they occurred. If a bull bred cow was declared 60 days pregnant, she would get 3 events added to her display on this table. One for the BRED event that was estimated, one for the fact that she is PREG to that breeding and one for the PREV in the month it occurred.

The other addition is that OPEN is no longer the OPEN event when the cow was diagnosed not pregnant. It will show up when a cow gets bred twice. When this happens, the first breeding receives an "O" result code and an OPEN event will appear in this table in the month it occurred. In "Events" OPEN now represents a breeding that did not result in a pregnancy.

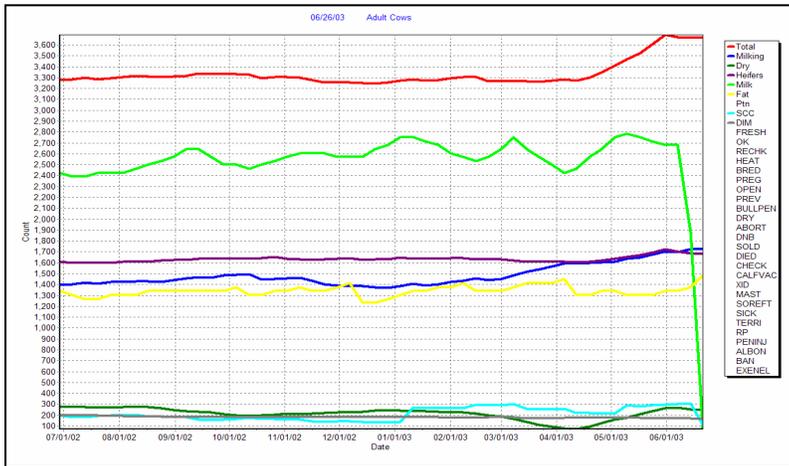
Reading the example table helps us determine that out of the 1453 pregnancies that occurred on this dairy, 160 aborted (or about 11%). The cows that abort and have an "A" breeding result code will still show a PREG in the month of the breeding. ABORT will show up in the month the abortion was determined to have occurred.

Looking at History Using the ECON Command: ECONID

The inventory feature of ECON has been expanded so that you can look back over time and graphically view changes that have occurred in the dairy week by week. The command for this is **ECONID**.

Type ECONID on the command line. **Note: Capitalization is not important.** When you run this command you will be asked to specify a date range. The default is one year. The tab on the right side defines what is being displayed on the graph. Clicking on a parameter will add or remove it from the graph.

ECONID

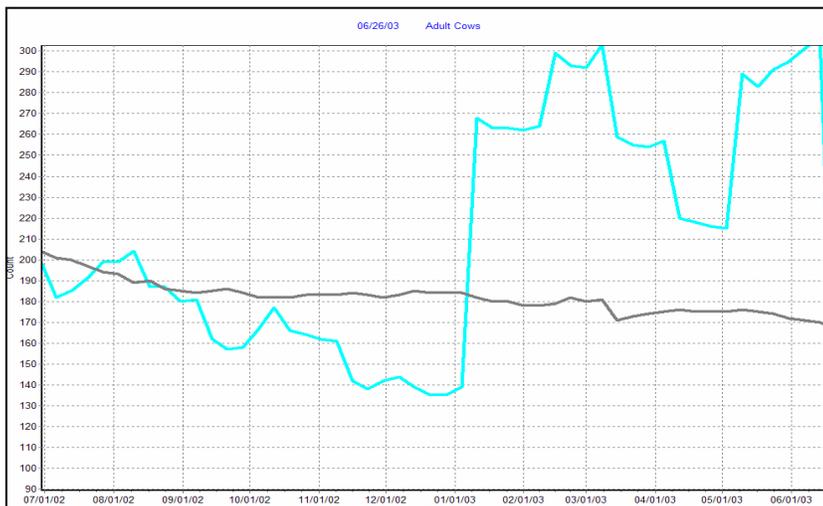
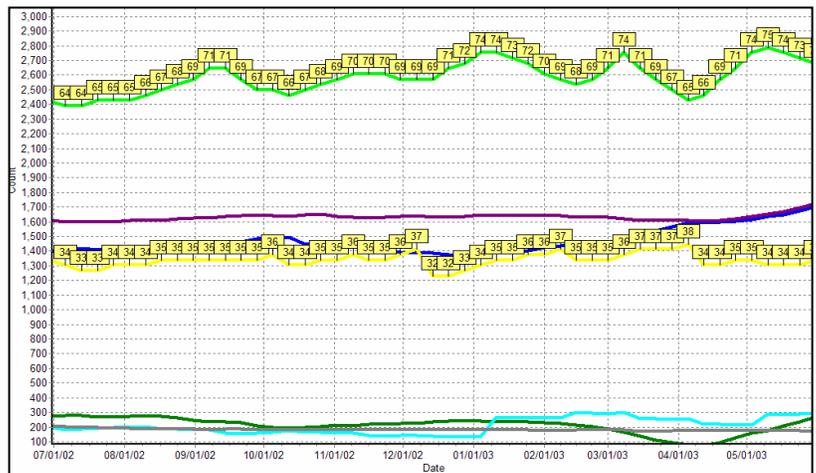


Each point on this graph is taken from a week in the dairy's past. The milk line is taken from the average weekly milk plotted on page 6 of the cowcard. Inventories are taken from the animals that were in the herd at the beginning of each weekly interval. The program is using cow records from archive files and data files to back calculate these inventory numbers. The numbers will be reliable if you have your archive files with your cowfile.

SCC. The others are scaled off an un-shown 0 to 100. This is changed where appropriate. Thus, Percent Fat is actually multiplied by 10 so it shows up approximately 1/3 of the way up the graph. Clicking on a line will display its values.

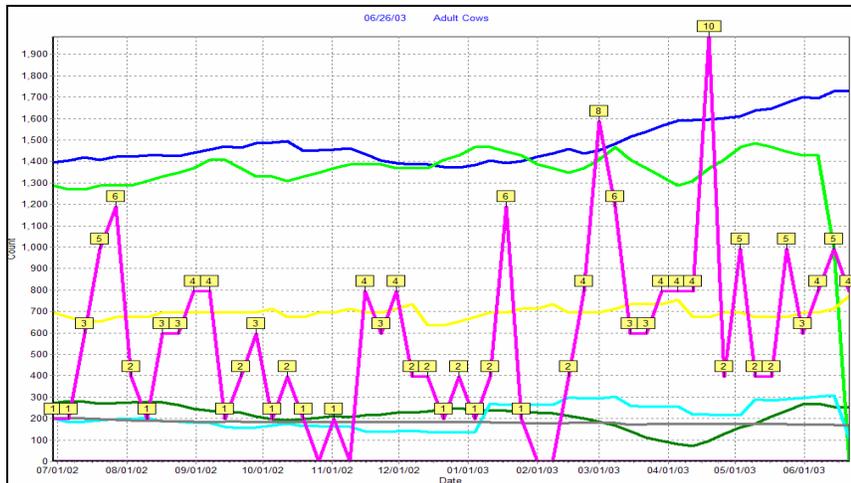
The MILK and PCTF lines have been "left clicked" to show their actual values.

Using the zooming feature of graphs, can dramatically show changes that are otherwise not obvious. For example, the dry cows were removed (by clicking on DRY in the inventory portion of the selection tab) and we then zoomed in at around 300 to accent the SCC graph line.



(You can zoom in on a graph by left clicking in the top left portion of the graph you wish to zoom in on, and then holding the left click button as you drag the pointer to the bottom right section of the graph that you want to zoom in on. When you release the button, you will get a new, zoomed in, graph.)

Clicking on an event will add its incidence to the graph.



Clicking on MAST produces the pink line that graph the number of mastitis cases that have occurred for the past year. This line will display the actual values, which are needed to understand the true importance of the event incidence. With the values shown it can be seen there is a high of 10 mastitis cases per week and an average of 3 or 4 on this 1400 to 1600 milking cow dairy.

You can also select a longer time period. It is important to have all the archive files available to cover the desired range.

If you click on the "Grid" tab when the graph is displayed, you will see the raw inventory and average milk data that is used for the graph. There is a further inventory breakdown showing the number of first calf heifers, cows and young stock.

Multi-Herd Reports and Summaries

Commands using the "&" should only be done on heifer ranches, dairies running multiple cowfiles on one computer or by consultants with clients' data that was collected on almost the same date.

While the majority of the dairies use DC305 in single file mode, most consultants and an increasing number of dairies are running the program in Multi-Herd mode. This is defined in SETUP and allows the user to pick from a displayed list the dairy that is to be logged onto. We now have the ability to run commands through the all the herds using special characters to designate this procedure. These are outline as follows:

	Char	Definition	Example	Notes
1	*	Command is run in each cowfile	*VLIST	Makes a vet list report from each cowfile in the Multi-Herd Directory
2	&	Run the command through all cowfiles	&BREDSUME	Runs this command through each herd in the M-H Dir, combing data for all herds together
3	@	Use only herds in file HERDLIST.TXT	@EVENTS\5 FOR LACT>0	Used in substitution for "*" to use only herds listed in the file called HERDLIST.TXT for the reports

What Date to Use?

When the program is going through all cowfiles running the same command in each one, it uses the logon date from SETUP for the report. Thus if the SETUP preference is to use the last logon date, that date will be used for each report. If it is to use the System clock date, "Today" (as defined by the computer) will be the date used for each report. For printing reports, the printer should be "Enabled" (use SETUP\4E) and commands like SUM, PCT and GRAPH should be followed by an "!" that denotes to print immediately. List commands will run fine as long as the printer is enabled.

When using the "&" sign to run through many cowfiles collecting data for the same report, the logon date will be the date of the cowfile initializing the command. For consultants this is especially important to understand. Running the command &BREDSUM\E through all cowfiles, some of which may be years old, will result in a totally useless report. Likewise listing items in a combined report such as DIM or DCC will be wrong if the logon date of the initial cowfile is not appropriate for all the other cowfiles.

HERDLIST.TXT is a list of a few of the directory names in which you want to have the spanning commands to run. The following is a simple example:

```
93120997
BROWNS
WILLY_
```

Notice the difference between the file listed above and

```
93120997
BROWNS
WILLY
—
```

The Enter key was hit after "WILLY" and a spare line was put at the end of the file (as designated by the cursor position). This will cause the spanning command to prompt for a final herd when the report is run.

Avoid Using Punctuation Marks in Items and Command Abbreviations

VAS reserves the right to use punctuations for new features as they are developed. These should never be used in items, command abbreviations or events names. The one exception that is allowed is the "_" (underscore) character which is most often used as a space when a space is not allowed by other standards. Thus PEN=%WHAT_PEN is ok for PEN=%WHAT PEN. The "WHAT PEN" will not be handled properly by DC305 whereas "WHAT_PEN" is handled as one word by our program.

Daily Milk Weekly Averages Now Plot

The plot command typically is used for graphing monthly "test day" data from page 4 of the cow cards. Now daily milk data can now be graphed using the PLOT command. Rather than graphing this by a monthly test date, it will plot the weekly average. Try PLOT MILK FOR ID>0\RL (R reverses to show by testday, and L says to use Look in archives).

Archive Files

Archive files are being used more and more to create reports and perform analysis. The following commands will always look through archive files to find data (unless you specify not to with \X): BREDSUM, EVENTS, ECON and EGRAPH. All these commands look at events in the cows' records to get their data.

BREDSUM and EGRAPH require a \Y switch to include young stock. You no longer need to also write "FOR LACT=0" in the commands. Using "\Y" specifies only looking at young stock.

The commands EVENTS and ECON will look at the events of both young stock and adults together unless specified differently using the FOR statement. EPlot is used to look at height and weight of heifers and the body score of cows. While this command looks at all animals, usually one event is used for weight and wither height and a different event is used for body scoring cows.

SUM and PCT will look through the archive files if the \L switch is used. Thus SUM BY MOFSH FOR FDAT>10.1.2\L will look through all archive records as well as COWFILE1.DAT for all cows that have come fresh since October 1, 2002. (If you have an item MOFSH.)

Earlier versions of DC305 required special setup strings to tell the program to look through all archive files, not just COWFILE1.ARC. This has changed now and no setup strings are necessary. The program will run through any ARC files that are located in the same drive as COWFILE1.DAT. If you are having problems getting the new program to search through your archive files properly, contact support and they can help you.

Uses Archives?		Animals Considered?
Bredsum	Y	Adults only, or Heifers only with\Y
Egraph	Y	Adults only, or Heifers only with\Y
Events	Y	All animals
Econ	Y	All animals
Sum	with \L	All animals
Pct	with \L	All animals
Plot	with \L	All animals
Exam	with \L	As defined by FOR statement, or animal number keyed
List\show	N	All animals

A "FOR" statement can be used with any Dairy Comp 305 command.

ENTER - Limiting Choices

Sometimes you know exactly what options are available when entering data and it can help reduce errors if we restrict what can be entered. An example is if fresh cows can go to one of 3 different pens, rather than having the pen prompt in the fresh command say "PEN" one can say "PEN=2;5;6". The choices will show up as:



Only these three pens can be entered into this cow's record at this point. The entry can be made by typing the number, moving the highlight bar with an arrow key, or "left clicking" on the number with the mouse.

Vet Enter Screen Font Size

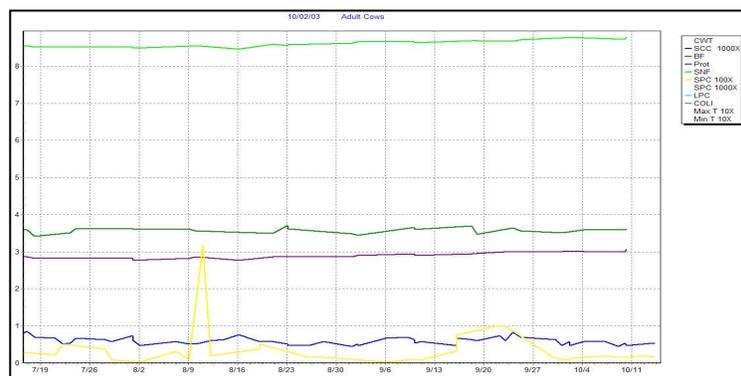
The input screen for Vet Entry can be enlarged by clicking "A-A" button in the upper left hand corner of the Vet Entry display. Be a little careful when making these changes. It is possible to make the letters so big that part of the message (like the cow's ID number) does not show up properly. This is dependent on the "native font" settings of the computer and is sometimes difficult to control. On most computers it is possible to put the font size at 12, 13 or 14 before the message starts to run out of the allotted box. (You can also change the "Picklist" fonts, in Setup\Preferences, on the Cowcards, and in the Grid). Look for the A-A buttons

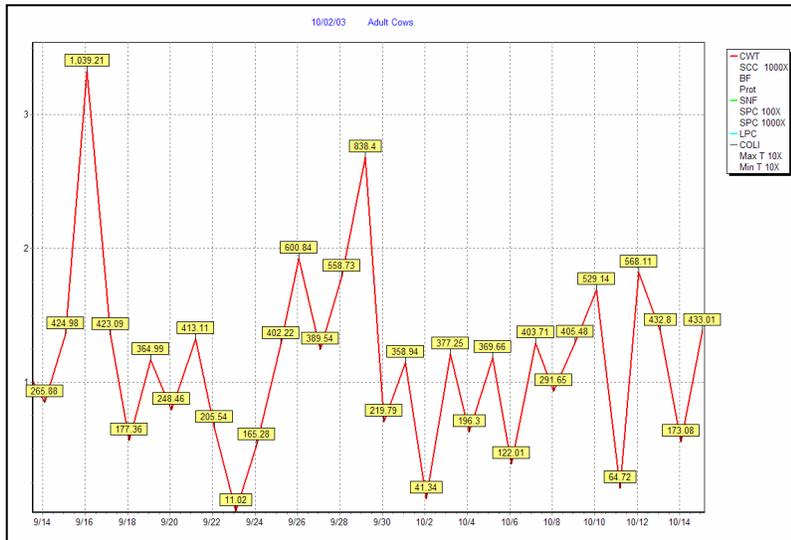
Tank Watch Demo

Tank Watch is a program we've developed to let the dairyman look at the test results from the milk they have sold. You can see a demo of this program by typing TANKW on the command line in Dairy Comp. There are 3 main features to the program.

1. Data is downloaded to the dairy's PC for each tank of milk tested. This data can be seen as a table or graphed over varying time lengths. This demo data is available on the web or can be view it by selecting "Plot Current Data" from the menu choice.
2. "Alerts" can be set up within the program to notify people when certain limits are reached. This could be bacteria or SCC counts, low butter fat reading, etc. These alerts can be directed to varying people including owners, herdsmen or service personnel.
3. Permission to receive the data can be given by the user to whomever the owner desires to have it. This includes veterinarians, nutritionists, equipment staff, etc.

The following is a graph of 3 months from the demo data.





The small box in the upper right displays the color codes for each item on the graph. As with all graphs, one can zoom into a special area, add numbers to the lined data and add or subtract data from the graph.

Backups - you will eventually need one. Are you ready?

We recommend using "Zip" disk drives for your backups. The disks are written using standard methods common to all electromagnetic drives and can be read by one another. There currently are three sizes of Zip disks, 100mb, 250 mb and 750 mb disks. The 750 mb disk drive will read all the others but write only to the 750 and 250 mb disks. The 250 will read and write both 250 and 100 mb disks. These drives are portable and rugged.

Another method of data storage are "memory sticks". These are small, portable devices that act like memory expansions that plug into USB ports. They often look like something that would be placed on a key chain. They may have up to 250mb of data storage or more. They are fast, portable, and so far have proven reliable. They are easy to use especially on XP and Windows 2000 machines. Older Windows versions often require a special program or driver for these to operate.

If you use CD drives for backing up, make sure that you have a second computer available that is able to read the CD's you are writing. Also, make sure the CD is set up in such a way that backups are easy to do. By this we mean they can take files sent by batch commands or you are willing to use the mouse and Windows Explorer to do your backups - EVERY DAY and in different files for different days.

If you are not confident your backups are working correctly please call us to discuss testing them.

Parlor Command

If you have not yet used the Parlor command please take some time to watch the demonstrations on your update CD and then type Parlor on the command line and select a milking to view. Be sure to click on the Graph tab and experiment with zooming in on the graph.

Parlor Graph

The Parlor Graph function is also active if you are running an up-to-date interface. If you have not been using this please call support for help getting it setup for you.

Reproductive Monitoring A Discussion

Why do we monitor reproduction?

1. Find when something about reproduction is broken
2. Evaluate the effectiveness of management changes.

If a cow that is being bred gets pregnant, whatever is being used to monitor reproduction should show an improvement. If she does not get pregnant, the monitor method should show a decrease.

Many feel that average days open (Avg DOPN) is a good monitoring tool. Certainly, most breeding programs are designed to have a short Avg DOPN. To start with it is important that all agree that Avg DOPN is calculated by subtracting the fresh date from the conception date. If a cow doesn't have a conception date, she is not included in the Avg DOPN calculation. (The logic behind this is if you wanted to know the average age of kids starting kindergarten, one would only include the kids that go to school. If you wanted to know the average life span of people in a community, you'd go to the cemetery to get your data. You don't get data from those who haven't met the end date - starting school or dying.)

Consider a three cow dairy.

Cow 1: is pregnant to a breeding at 90 DIM and is milking 200 days.

Cow 2: is pregnant to a breeding at 110 DIM and is milking 200 days.

Cow 3: is open to a breeding at 130 DIM and is milking 200 days.

What is the average DOPN? It is 100 ($90 + 110 = 200 / 2 = 100$).

If cow 3 is now found pregnant to a breeding at 160 DIM, what is the new Avg DOPN? It is 120 ($90 + 110 + 160 = 360 / 3 = 120$). Avg DOPN has gotten worse but the last cow got pregnant - which is good.

Now look at the same scenario using pregnancy rate. To start, pregnancy rate is calculated by dividing the number of pregnant cows by the number of eligible heat cycles. For this discussion the voluntary waiting period (VWP) will be 50 DIM. Thus, if we are looking at one cow and she gets pregnant to a 90 day breeding (cycle number 2 as shown in the chart below), her pregnancy rate is 50% (1 pregnancy / 2 cycles).

```
|---1---|---2---|---3---|---4---|---5---|---6---|
50    71    92    113   134   155   176   DIM
```

So, starting with the same 3 cow dairy:

Cow 1: is pregnant to a breeding at 90 DIM and is milking 200 days.

Cow 2: is pregnant to a breeding at 110 DIM and is milking 200 days.

Cow 3: is open to a breeding at 130 DIM and is milking 200 days.

```
|---1---|---2---|---3---|---4---|---5---|---6---|
50    71    92    113   134   155   176   DIM
```

To calculate the pregnancy rate:

Cow 1: is pregnant to a breeding at 90 DIM, or 2 cycles.

Cow 2: is pregnant to a breeding at 110 DIM, or 3 cycles.

Cow 3: is open to a breeding at 130 DIM, or 4 cycles.

There currently are 2 pregnancies / 9 cycles which equals a 22% pregnancy rate.

If cow 3 is declared pregnant to a breeding at 160 DIM

Cow 1: is pregnant to a breeding at 90 DIM, or 2 cycles.

Cow 2: is pregnant to a breeding at 110 DIM, or 3 cycles.

Cow 3: is pregnant to a breeding at 160 DIM, or 6 cycles

Now there are 3 pregnancies / 11 cycles for a 27% pregnancy rate. This monitor method shows an improvement when the desired cow got pregnant. Average DOPN indicated the breeding was getting worse.

It is also very important to remember the economics of reproduction and what it means to a dairy. In most cases, we find that the day the average cow gets pregnant, her value increases by about \$300. This "pregnancy value" increases as the calf gets bigger so that on average, when the cow freshens it is equal to the cost of replacing a cull cow (replacement cost minus cull beef cost) or about \$1000. Many have asked, "What is the value of increasing a pregnancy rate by one percent?" There are many ways to look at this but here is one simple approach.

If a 1000 cow dairy has a 15% pregnancy rate, it could normally have somewhere between 25% to 30% eligible to be pregnant during any given 21-day cycle. If we say that averages 300 cows, 15% or 45 will get pregnant during each cycle. If the rate goes up 1% then that will be three extra cows per cycle. Assuming 17 21-day cycles in a year, that is 3×17 or 51 extra pregnancies. This multiplied by \$300 (minimum average pregnancy value) is over \$15,000 or about \$15 per cow per year for each 1% increase in pregnancy rates. Therefore, one could spend quite a bit of money on reproduction as long as the benefits of increased pregnancy rates followed.

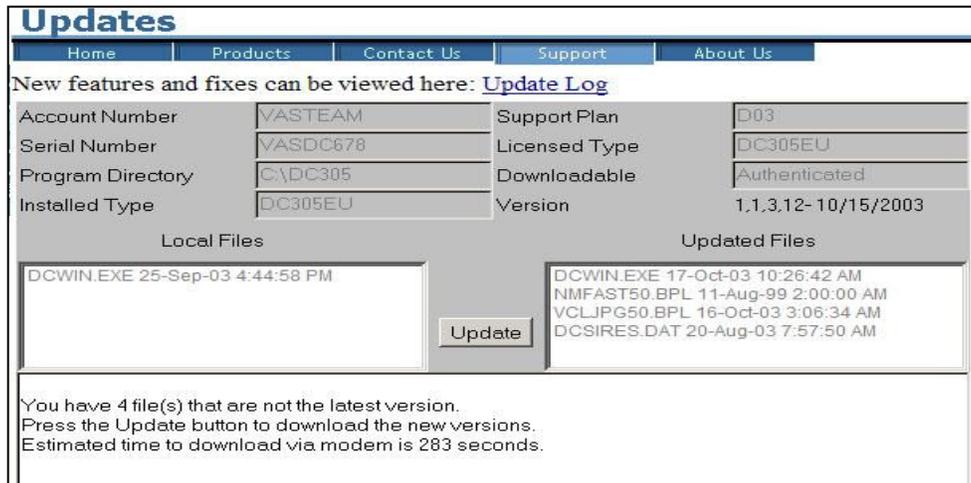
There are many variables in this scenario. First, the lower the pregnancy rate, the higher the pregnancy value of the next cow that gets pregnant. Generally, the more of any "thing" one has, the less valuable each increment of that "thing" is. This applies to pregnancies also. A dairy that is having breeding difficulties will pay a lot to get the next cow pregnant while one that has a good breeding program will justifiably look with suspicion at spending more money for improvement. The value of getting the next cow pregnant will vary from almost \$800/ pregnancy in a poor breeding herd (5% pregnancy rates) to about \$200/ pregnancy in an excellent breeding herd (35% pregnancy rates).

The second factor is that the increase of 1% represents a different percentage increase depending on where the breeding performance starts. If one has a 10% pregnancy rate, increasing it 1% to 11% will produce 10% more pregnant cows. If one starts with a 20% pregnancy rate, going to 21% will produce only 5% more pregnant cows.

A third variable that goes along with this is that the lower the herd pregnancy rate, the higher the percent of the herd (and therefore the actual number of cows) that are eligible to get pregnant. As the pregnancy rates increase, there are less additional cows that will get pregnant for each 1% improvement. This last variable has only a finite affect on the value of changing pregnancy rates. There quickly comes a point when the faster cows get pregnant, the faster they will calve again and become eligible to breed the next time.

In summary it can be shown that the cost of good reproduction can almost never be too much. Obviously, spending a lot of money with poor success is bad. Not spending money and having poor breeding is not much better. The profits of a good breeding program (as defined by a high pregnancy rate) are well worth all reasonable expenses.

Automatic "Web" Updates



Updates									
Home		Products		Contact Us		Support		About Us	
New features and fixes can be viewed here: Update Log									
Account Number	VASTEAM	Support Plan	D03						
Serial Number	VASDC678	Licensed Type	DC305EU						
Program Directory	C:\DC305	Downloadable	Authenticated						
Installed Type	DC305EU	Version	1.1.3.12-10/15/2003						
Local Files					Updated Files				
DCWIN.EXE 25-Sep-03 4:44:58 PM					DCWIN.EXE 17-Oct-03 10:26:42 AM NMFAST50.BPL 11-Aug-99 2:00:00 AM VCLJPG50.BPL 16-Oct-03 3:06:34 AM DCSIRE.S.DAT 20-Aug-03 7:57:50 AM				
<input type="button" value="Update"/>									
You have 4 file(s) that are not the latest version. Press the Update button to download the new versions. Estimated time to download via modem is 283 seconds.									

In "Help" on the pull down menus in Dairy Comp, you can select "Check VAS web site for updates" to automatically download and install the most current version of the program. To use this you will need Internet access on your PC. The program will connect to the internet, check your account status, determine what updates you need on your computer, and then download and install them. If a new DC305 program is downloaded, the program is shutdown and the new program installed. You will need to restart DC305 when this happens. The updating program will look for DC305 program up-dates, new USDA quarterly sireproofs, and some program utilities. Just click the "Update" button.

Windows 95 - limits abilities

There are a number of operating systems in the "family" of recent Windows operating systems. These are Win95, Win98, Win2000, Windows ME and Windows XP. There are differences between each system and smaller differences - usually called editions - within each operating system. DC305 for Windows will run in all these operating systems.

Accessing the Internet for updates or Tank Watch using DC305 is no longer possible when using the Win95 operating system. Due to Windows improvements, it is impossible to write programs for this purpose that will work with both Win95 and Windows XP systems. Valley Ag. Software takes a middle of the road approach by adapting new technology that they think will be around for awhile, while staying compatible with older machines. However, there comes a time when compatibility has its limits and this is one of them.

AOL 7 or higher

If you connect to the Internet using AOL®, neither the upload or program update features will work unless you use AOL version 7 or higher. Also be aware that, some Internet connections will not allow the transfer of large files. This is probably due to limitations of some local Internet Service Providers (ISP).

UPCOMING EVENTS



TIME: Each session will begin promptly at 10:00 AM and adjourn by 3:00 PM. Registration and setup begins at 9:30 AM.

PRICE: Pre-Registration: \$95/person/day
At the door: \$125/person/day (space permitting)

To register by phone call Jyll Strothmann at 1.800.3442697, ext 121 or email: jyll.strothmann@dairyone.com

Locations Sites and Dates

January 21-22
Storrs, CT - UCONN Ratcliffe
Hicks Building, Room 108

January 29-30
Chazy, NY - Miner Institute

FEBRUARY
February 4-5
Lowville, NY - Lowville Extension Center

February 13 & 16
Batavia, NY - Genesee Valley BOCES

February 17-18
Vergennes, VT - Vergennes High School

MARCH
March 2-3
Greenwich, NY - Greenwich First Pioneer Farm
Credit Office

March 16-17
Waterville, ME - The Governor's Restaurant

March 17-18
Van Wert, Ohio - Van Wert County Fair Grounds

March 22-23
Ithaca, NY - Dairy One Main Office

March 24-25
Syracuse, NY - Dairy One Main Office

March 24-25
Jamestown, NY - Chautauqua County Extension
Office

March 31 - April 1
Altoona, PA - Ramada Inn (Altoona)

APRIL
April 6-7
Kennette Square, PA - New Bolten Center

April 8-9
Hagerstown, MD - Dairy One Milk Analysis
Laboratory, 1040 Frederick St.

Contact us for more information about any Dairy One products or services.

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