

Everything you need to know about your herd but were afraid to ask - Ask Guide

Many dairy farms collect lots of data from their animals and enter this into a computer program such as DairyComp 305. Information such as calving dates, reproduction information, milk production, somatic cell count, disease, treatment information, and culling goes into a large database and often just sits there.

True, data is typically used to manage the herd day to day: which cows to dry-off, which cows to treat and keep in the sick pen, which cows are ready to calve, and which cows should be ready to inseminate. For all these reasons, a computerized management program is very useful for managing the herd. When everything goes according to plan this may be enough and you may not have any additional questions.

What if things don't go according to plan? Pregnancy rates may get lower, somatic cell counts may go up, there may be more mastitis cases than what you really like or even milk production is not as high as you had envisioned. There are lots of good ways to approach such herd problems, but in virtually all cases it is advisable to start with asking a few questions and trying to get the answers from all the data that you have collected. So how do you get the answers to some of the key questions on herd performance? Any dairy or consultant using DC305 will find a function called "GUIDE" that can help answers these questions by "Guiding" us to ask the right questions. **Ask GUIDE !**

When you type GUIDE in the command line of DC305, the screen shown in Figure 1 appears:

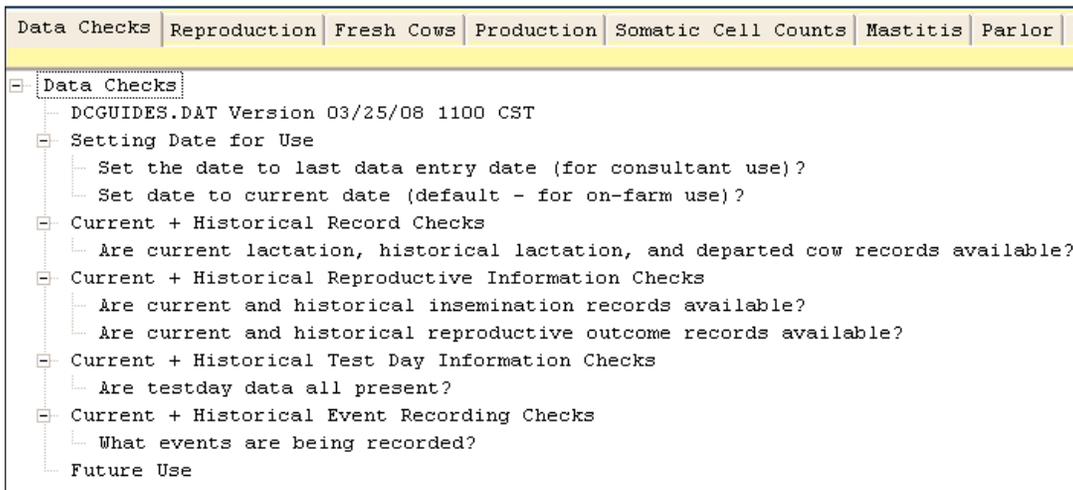


Figure 1

Along the top are 10 tabs with 10 different topics for further investigation. The first tab takes a look at the data that we are keeping. The following tabs include performance parameters like Reproduction, Fresh cows, Production, Somatic Cell Count, Mastitis, Parlor, Replacements and Miscellaneous. The last tab is a user tab where experienced users can add their own questions and commands. For the majority user the first nine tabs are the most important ones.

Let's look at a herd where the owner is concerned about a recent increase in somatic cell counts. In the case of such a somatic cell count problem, it would make sense to go to the 'Somatic Cell Count' tab. Clicking on the tab will bring up a screen that is shown in Figure 2:

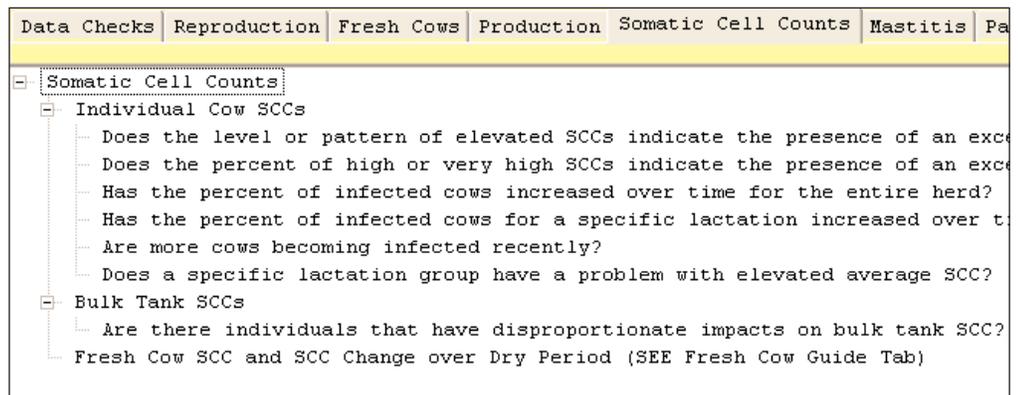


Figure 2

Guide provides a number of key questions and by clicking the question, it will also provide the answer. For example when double-clicking the question “Has the percent of infected cows increased over time for the entire herd?” the graph shown in Figure 3 shows up:

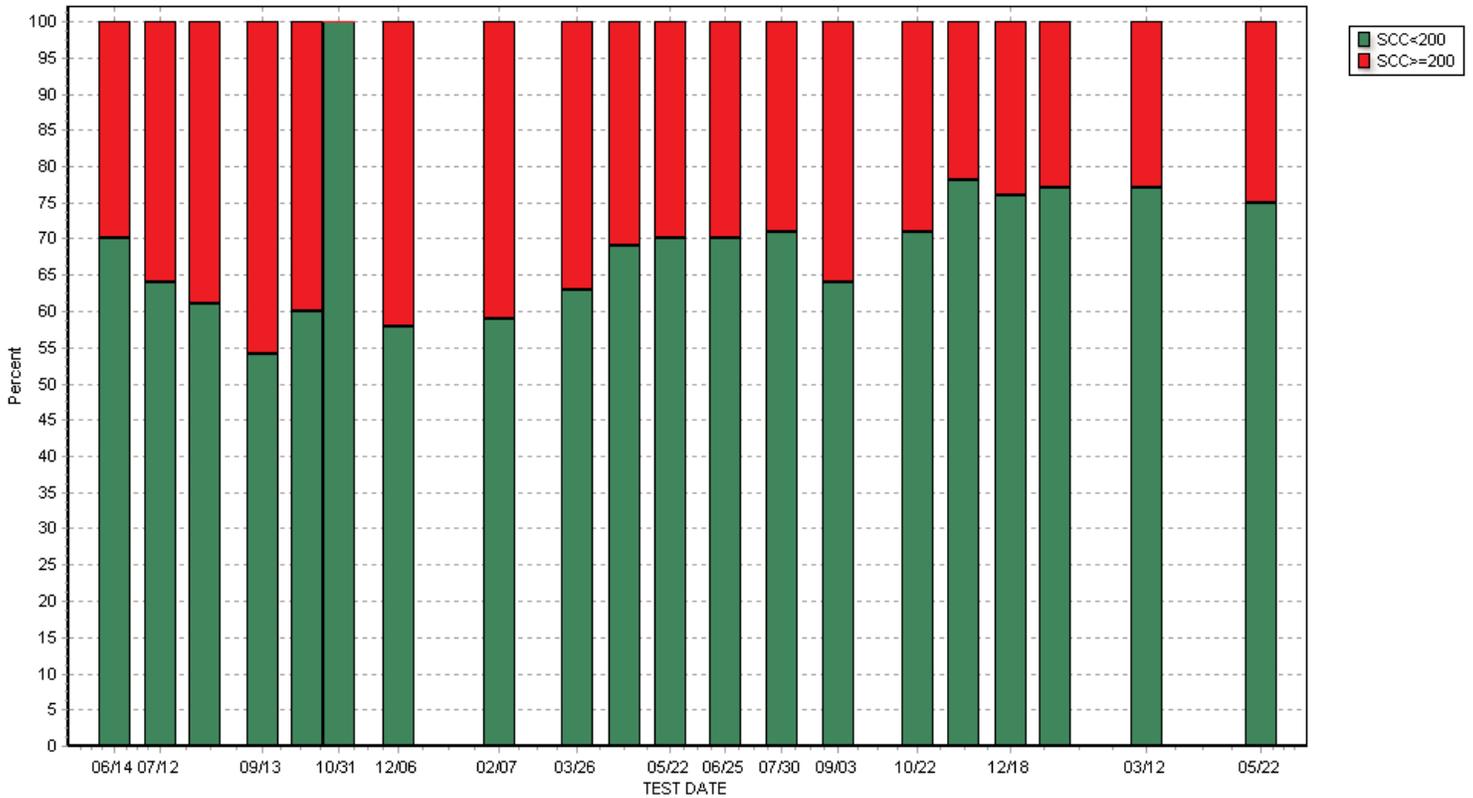


Figure 3

As we look graphically at this herd the percent of cows with high SCC (200,000 and greater) as shown in the top part of each column was actually decreasing until November of last year (5th column from the right), and is now in increasing over the last 4 test-days. The next question is asking “Does a specific lactation group have an elevated average SCC”. The answer to this question is shown in Figure 4.

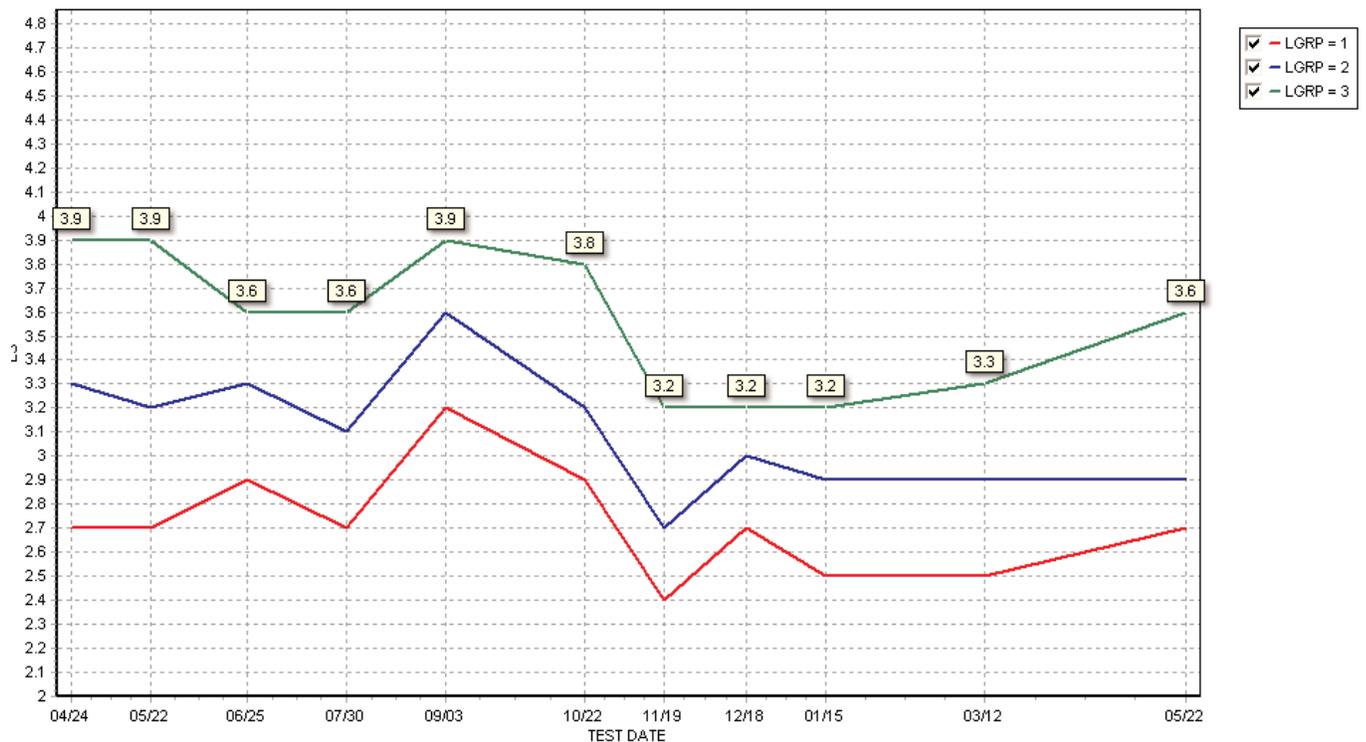


Figure 4

Clearly, the recent increase in cell counts is mostly due to older lactation animals and not due to heifers or second lactation cows. The final question to evaluate would be “*Are more cows becoming infected recently*”. When this question is double-clicked, the program will ask the user to identify the group of interest. In this example the interest was in lactation group 3 and higher. The GUIDE will then present a graph of cows with chronic infections, cures, high fresh SCC and new infection risk. In the graph shown in Figure 5, only the HiFresh and New Risk of infection are shown. Both these categories address the risk of new infection, either from the dry period (in HiFresh) or during lactation (in New Risk). The graph shown in Figure 5 does indeed show that in the last 4 test days the risk of infection has increased. Particularly dramatic is the increased risk of infection in fresh cows (HiFresh). This was in January at about 8% but is currently at about 24%. Clearly, management and hygiene in the dry period needs further investigation. Also the new infection risk in lactation is high and requires attention.

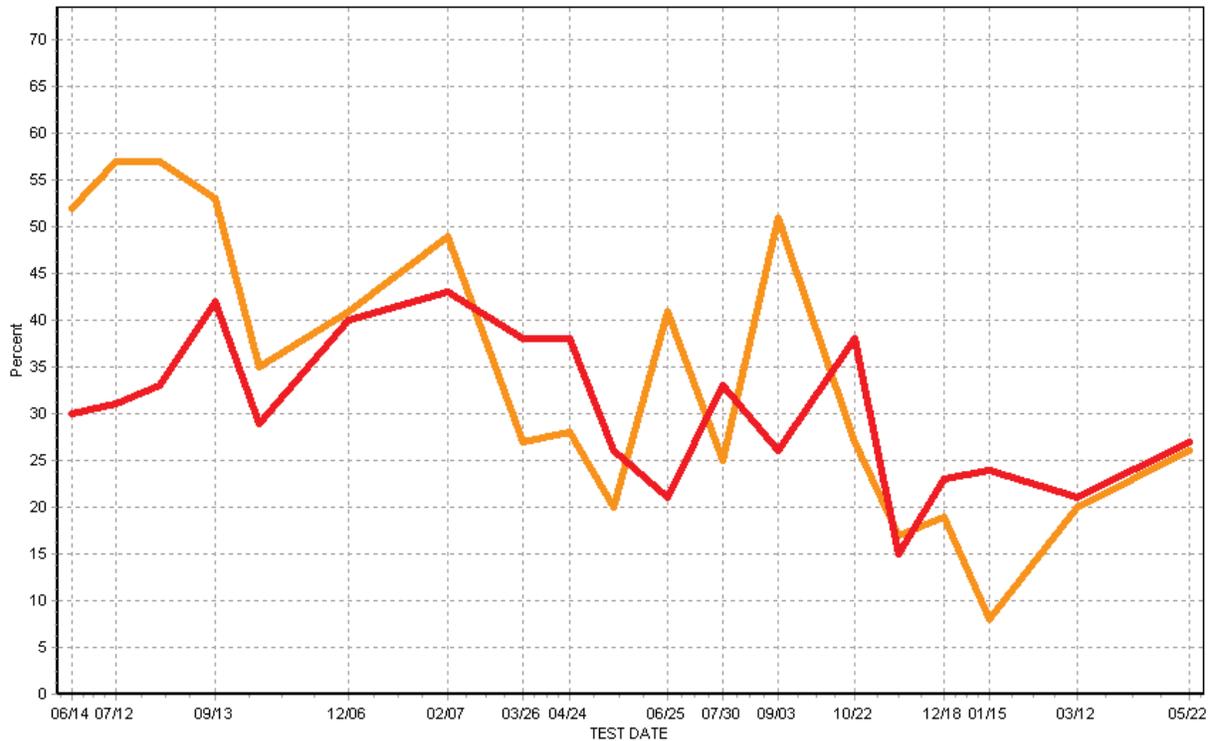


Figure 5

Each of the tabs is asking a series of relevant questions and is providing the answer to the question. As shown with the somatic cell count example above, the questions are starting at herd level and then dig deeper into the particular problem that is identified by the user of **GUIDE**.

The first tab allows a check of all the data in the cowfile and the archive files. This is a good starting point as it is checking whether data are present in the current cowfile and whether data have been collected over time. Once this has been checked, it is time to go to the most relevant tab for further analysis.

Often consultants have their favorite ways of analyzing farm data. What the GUIDE tool tries to do is bring these more advanced analyses to the average user of the database. The herd staff and management have collected all this data over time, and it is of enormous value to be able to use this data not only for management purposes, but for analysis as well. The GUIDE tool provides a step by step method for asking the right questions and getting herd specific answers. Those individuals wanting to expand the use of Guide as a tool by customizing away from the default settings have that option in editing the questions and the commands that run as a result.

After all the hard work that has gone into collecting and recording the data, it is important to find out “**EVERYTHING YOU NEED TO KNOW ABOUT YOUR HERD BUT WERE AFRAID TO ASK**”.