

# Information as a catalyst for contact between farmer and veterinarian: Examples of the use of InterHerd and Herd Companion

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## INTRODUCTION

Information on herd health and fertility has always had enormous potential for stimulating and focusing discussion between dairy farmers and their veterinarian. In recent years, the bottleneck of inadequate information for dairy herds has diminished. As described in earlier articles, information sources, such as monthly milk recording data, analysed with software such as InterHerd and Herd Companion are providing practical means for veterinarians to monitor, benchmark and analyse their clients' herds.

Since the release in 2003 of Herd Companion by National Milk Records (NMR) there has been a dramatic increase in the use of information by veterinarians working with dairy producers. Over 200 veterinary practices and consultancy companies now make regular use of milk recording and InterHerd data to analyse and monitor key aspects of herd performance.

With wide variation in the attitudes, resources and skills of dairy farmers (and veterinarians), there is no blueprint for the correct use of livestock information. A wide range of different techniques, all of which have information at their centre, is emerging. Many veterinarians are increasingly adept at using information to identify problems and quantify their impact.

## FOCUSING OUTPUT AND REPORTS ON AREAS OF KEY CONCERN

Information systems are capable of producing huge volumes of reports and printed output. The majority of these outputs are in need of further professional interpretation so that the farmer is presented with concise and relevant information that pinpoint where performance could be improved, enabling discussion to focus on the technical options available.

More veterinarians are developing the necessary IT skills to compose personalised reports or PowerPoint presentations for farmers. A combination of text, key screenshots and further analyses of data in spreadsheets can provide a very effective statement as the basis for review of activities with the farmer.

The examples below show aspects of how Herd Companion and InterHerd are being used in this way by different vet practices. The aim is not to recommend or approve but to highlight their key common feature, namely improved communication between farmer and veterinarian.

## I. Somatic Cell Counts - annotated reports

The Vale Veterinary Group at Tiverton was closely involved in the development of the somatic cell count (SCC) analyses in Herd Companion. This included the definition of the four key categories of cows with raised cell counts (New, First, Repeat and Chronic) as displayed in Fig. 1.

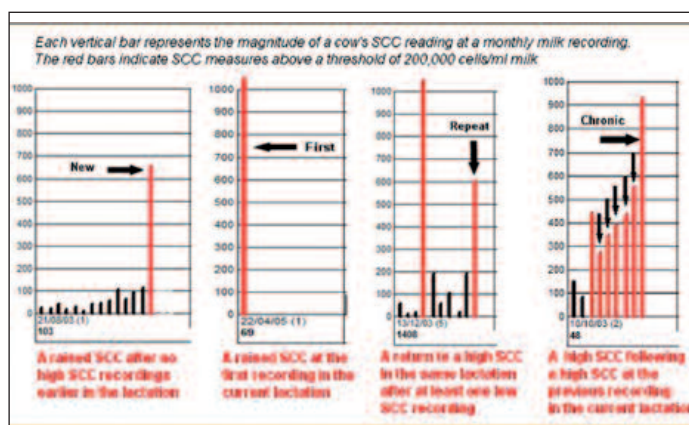


Fig. 1: Definition of four categories of high cell count cows, based on the somatic cell counts at the current and previous lactation.

Since 2003 the practice has offered monthly reports that are sent to clients via e-mail. While the reports are largely generated automatically by Herd Companion, the veterinarian adds value through interpretation and highlighting animals that require attention. As shown in Fig. 2, advice is written on to the reports prior to transmission to the farmer.

This approach provides flexibility for farmers with different skills and resources. While some farmers stay with this service, it has stimulated others to take on InterHerd/Herd Companion themselves and adopt a more active role in the routine assessment of performance.

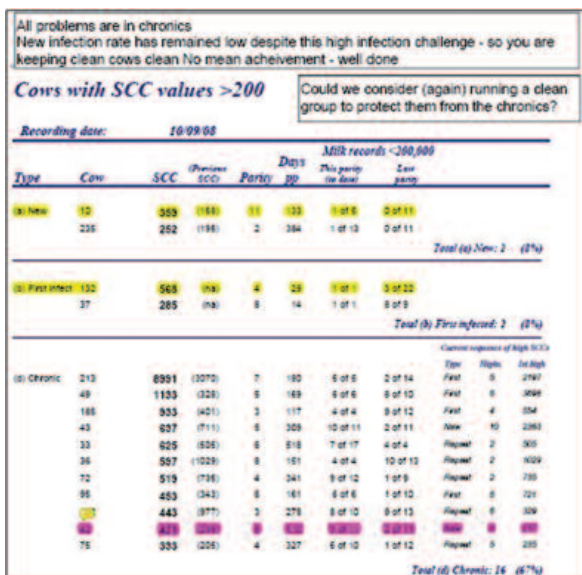


Fig. 2: Annotated report to farmers detailing action required.

These monthly checks are combined with periodic reviews of performance, also based on SCC data from milk recording. Fig. 3 shows the SCC key performance indicator (12 month rolling average SCC) for a farm over four years. The marked progress and its link to monthly monitoring are important to maintain momentum and enthusiasm of all involved.

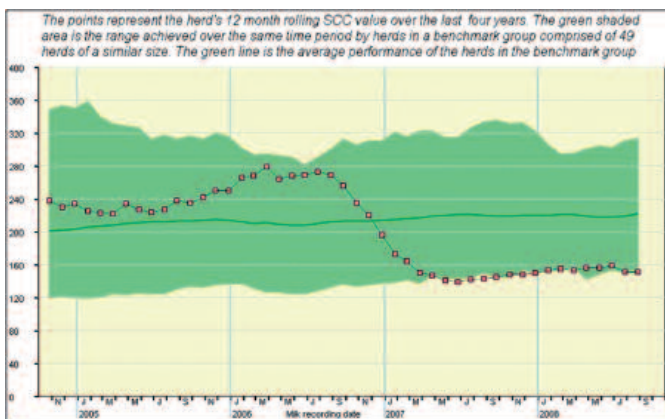


Fig. 3: Graph demonstrating the sustained reduction in herd SCC for a herd and how this relates to other herds of a similar size.

## 2. Fertility monitoring

The Wood Vet Group in Gloucester has developed a series of tables that summarise performance in key areas of production and health. These exemplify the value of preparation and analysis before routine meetings every 4-6 months to monitor progress and discuss any need for adjustment.

Table 1 presents eight parameters all relating to the fertility performance of the herd. The right-hand column is the agreed long-term target that the farmer and veterinarian aim to achieve. Each column represents the latest performance for each parameter over a 12-month period. The May 08 value will reflect the 12 months ending on 31<sup>st</sup> May 2008. The

use of 12-month rolling means that it dampens down any large seasonal or monthly fluctuations to give a clear indicator of that parameter over time.

Parameter	2005	2006	2007	May 08	Target
<b>Herd Performance</b>					
Ca to Conception - days	143	166	110	107	90 days
Ca to First Service - days	74	77	78	74	65 days
<b>2nd Stage</b>					
Conception Rate	30%	25%	29%	31%	>40%
Heat Detection Returns between 18-24 days	28%	31%	36%	47%	>60%
Submission Rate day 42 - day 66	62%	45%	49%	48%	>60%
<b>Qualifying</b>					
% Served by 70 days	70	60	65	64%	>80%
% In Calf @100days	30	25	38	40%	55%
% Not in calf @ 200 days	37	46			22%
PD positive at Routine visit	60%	47%	58%	59%	>70%
<b>Calvings</b>	<b>118</b>	<b>144</b>	<b>126</b>	<b>(103)</b>	
( ) indicate data not complete					

The values in Table 1 are all calculated from InterHerd data files. The range of parameters gives a very concise and finite summary of the current state of fertility, which forms the basis for discussion between farmer and veterinarian at the routine review of progress. In Table 1 it is clear that there have been significant improvements in calving to conception, heat detection and % in calf @100 days, while calving to first service and conception rate have remained largely unchanged.

The Wood Veterinary Group also copy data from the Key Performance Indicators generated by Herd Companion and paste them into spreadsheets for further analysis. In this way the veterinarian is able to develop his or her own graphs and analyses as appropriate. Fig. 4 uses data obtained from Herd Companion to demonstrate that improved fertility has resulted in a reduction in both lactation length and yield. The consequence of this is a dramatic increase in the volume of milk/cow/year showing that the herd is significantly more productive per cow place. This type of analysis lets the veterinarian use his/her knowledge of the activities on the farm to show the clear benefits that have resulted.

### 3a. Benchmarking - Somatic Cell Counts

The Lambert, Leonard and May Veterinary Practice in Cheshire have developed a service that uses parameters generated by Herd Companion to benchmark against other clients in the same practice over time.

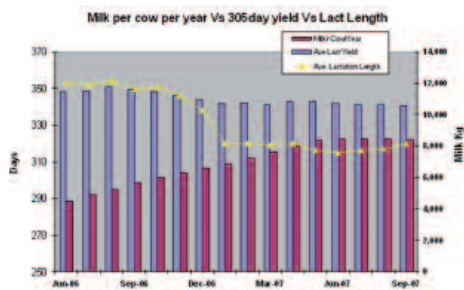


Fig. 4: Comparison of lactation length, yield and milk/cow/year.

The two right hand columns in Table 2 show the levels achieved in the herd currently and when compared to performance at the same time 12 months ago. These parameters include the percentage of cows in the new, repeat, first and chronic categories, as well as ‘protection’ and ‘cure’ rates achieved in recent dry periods. The colours indicate clearly which parameters are **worse** than the intervention level (**red**), **between** the target and intervention levels (**orange**), and **better** than the target level (**green**).

Clover Cell Check	Target	Inter-vention	August 2008				Aug 2007
			Best	Worst	Mean	Now	
% herd infected	<20%	30%	9%	39%	27%	29.6%	38.7%
'New'	<4%	6%	3%	7%	5%	5.8%	6.9%
'First'	<15%	30%	8%	42%	24%	20.2%	35.7%
'Repeat'	<5%	7%	1%	8%	5%	4.1%	6.0%
'Chronic'	<15%	18%	2%	26%	15%	17.6%	25.8%
% heifers infected at 1 <sup>st</sup> recording	<10%	20%	5%	38%	17%	14.8%	19.2%
Dry period 'cure' (High to Low)	80%	70%	89%	52%	70%	70.6%	71.1%
DP 'protection' (Low to Low)	>90%	80%	92%	69%	81%	81.3%	69.1%

Table 2 Analysis of Herd Companion parameters against target and intervention levels.

The best, worst and mean values for each parameter refer to the other client herds so represent local herds, known to the veterinarian. This provides clear

satisfaction to the owners of the top performing herds while encouraging improvement from those who discover their herds are at or near the worst levels in the locality.

### 3b Benchmarking - Fertility and nutrition

Market Vets in South Molton make extensive use of benchmarking the performance of clients' herds. In order to ensure anonymity of those involved, while maximising peer pressure, each participating farm is represented by the name of a football team.

League tables of the teams are published quarterly for a series of parameters from fertility to nutrition.

Table 3 shows the variation of in-calf at 100 days (12 month rolling average) across the participating clients.

While the use of aliases helps involvement, the league tables emphasise to the participants the very wide range that exists even within a relatively small geographical area. Individual reports use a combination of text and graphs to emphasise the performance of a herd (Fig. 5).

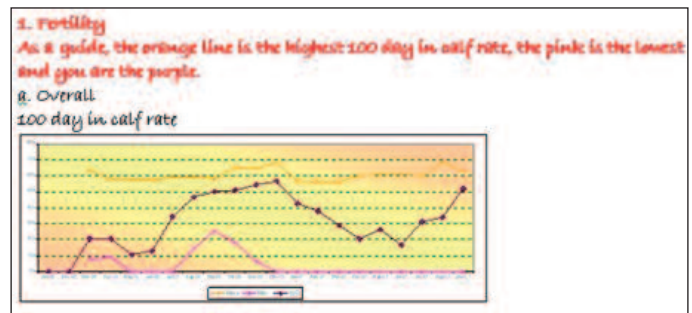


Fig. 5: Extract from a report emphasising a farm's fertility performance against other herds.

#### ACKNOWLEDGEMENTS

The author is grateful for the assistance of Andrew Biggs (Vale Vets), James Allcock (Lambert, Leonard & May), Chris Watson (Wood Veterinary Group) and Sophia Elworthy (Market Veterinary Centre).

Table 3: League table of in-calf@100 days for client farms with aliases to provide anonymity

100 DAY IN CALF RATE	Mar-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07
NORWICH	64	56	36	48	42	61	63
BARNSELY	8	25	27	0	0	31	63
QPR	25	57	55	64	56	59	57
WOLVERHAMPTON	21	13	50	57	29	17	52
PRESTON	27	0	31	33	43	14	43
CHARLTON	28	0	47	53	36	3	42
IPSWICH	36	28	25	15	31	3	41
BLACKPOOL	17	39	50	68	22	8	39
BURNLEY	30	32	34	45	26	40	38
CARDIFF	33	0	31	62	0	0	32
SHEFF UTD	25	58	38	24	40	17	24
PLYMOUTH	18	0	29	43	17	0	23
SOUTHAMPTON	62	45	58	8	38	25	0