

Included Inside:

- Dairy Fair
- Dairy Farming After MTR
- Benchmarking And Business Challenge
- Dairy Herd Fertility Challenge
- Selecting AI bulls
- Make The Most Of Silage This Winter.
- New TB And BR Control Measures
- Purchasing A Farm Computer For Christmas

RUAS WINTER FAIR 16th December 2004

A visit to the RUAS Winter Fair at Balmoral is a “must” for many producers and the show has now firmly established itself as the premier local event for dairy farmers. It provides an excellent opportunity to keep abreast of the latest developments in production technology and systems as well as a showpiece for the cream of the province’s dairystock.

The DARD exhibit at the show has always highlighted new and topical issues in the industry with a view to providing guidance and direction to farmers seeking to develop their farm businesses. This year the implications of the Mid Term Review of the CAP and issues around imminent environmental legislation on Nitrates and Farm Wastes will obviously be a focus for the exhibit. Visitors to the stand, with details of their stock numbers, land area, and slurry storage facilities, will be able to have the Nitrates loading and slurry storage capacity calculated for their business.

In addition there will be displays highlighting the recent changes in TB and Brucellosis testing and key findings from local agri-environment research projects. The wide range of training and development opportunities available to producers to support either development of existing enterprises, or diversification, in order to achieve a sustainable farm business will also be displayed. Most importantly DARD staff from a broad range of specialisms and expertise will be on hand to discuss the issues of most concern to you.

Make it a date to visit the DARD stand at the Winter Fair on 16th December 2004.

DAIRY FARMING AFTER MID TERM REVIEW

Dairy farmers have not been accustomed to receiving direct subsidy payments. This is set to change in Northern Ireland from 1st January 2005. The amount of Single Farm Payment (SFP) that a dairy farmer will receive in future will be made up of 3 separate elements:-

- 1) An historic amount based on the farming activities carried out in the reference years 2000 – 2002. DARD has already notified farmers of their individual amount. If a farmers' claims were adversely affected in the reference period due to exceptional circumstances, a "force majeure" application can be submitted to DARD by 1st December 2004.
- 2) A "flat-rate" amount based on the land submitted on the 2005 IACS and used to establish entitlements. This will be approximately £48/Ha based on current exchange rates. It is important to stress that the 2005 IACS is the only opportunity to establish the area-based portion of the SFP. Additional land submitted on the 2006 IACS will not attract any flat rate payment.
- 3) The dairy premium will be the most significant element of the SFP on most dairy farms. Dairy premium is to be de-coupled in 2005 with the amount of quota held on 31st March 2005 setting the payment for the future. Quota owned or quota leased in will attract the same rate of premium. This payment will be amalgamated into the SFP and thus the same rules that apply to other farmers receiving the SFP will be in place. The rates of premium on the quota held in 2005 will be approximately 1.6 pence per litre for the 2005 payment and 2.5 pence thereafter. These payments will be subject to exchange rate fluctuations and reductions are to modulation, national reserve and financial discipline.

Example Calculation

Using the example of a mixed dairy farm which was entitled to a historic reference amount of £10,000 and a total dairy premium in 2006 of £10,000. If this farm submitted an IACS in 2005 for 100 hectares and chose to establish entitlements on all 100 hectares, what would the SFP be for this farm? The calculation would be as follows:-

Historic portion (£10,000) + Dairy premium (£10,000) + Flat rate (100 X £48) = £24,800.

This farm would be allocated 100 entitlements each with a value of £248. Each entitlement can only be activated (paid) by submitting one eligible hectare on an IACS form annually. If in 2006,

this farm submitted an IACS for 50 hectares, the SFP received would be 50 times £248. If 150 hectares were submitted on IACS in 2006 the payment would still only be 100 times £248.

The payments that dairy farmers will receive are intended to compensate for an anticipated fall in milk price arising from cuts in intervention price for milk products.

Changing costs of milk production

Cross Compliance is likely to bring further challenges to dairy farmers. Stocking rate and slurry capacity will have to be adjusted on some farms and this is likely to alter the costs of milk production on these farms. How should dairy farmers react to this new situation with more volatile milk prices likely?

Greenmount Dairy Benchmarking indicates a large range in the costs of milk production on dairy farms. The top 25% of farms can produce milk for 8 pence per litre less than the bottom 25% (after including an allowance for family labour on the farm). The top 25% of dairy farms will be able to face the future with confidence, as a number of options will be available to them. Their SFP is unlikely to be required to subsidise milk production on the farm as a profit will be left even with a reduced milk price. The more inefficient farms will need to become more efficient or else their entire Single Farm Payment will be required to subsidise milk production.

Further information

Every individual farm situation will be different. Dairy farmers will be able to gain more detailed information on all aspects of the Mid Term Review at a series of workshops organised by DARD during the coming winter. Dairy farmers and their families will be able to discuss various options for their business with other farmers and their local Dairying Development Adviser.

Farmers can enrol for their local workshops by contacting Greenmount Campus on 028 9442 6880.

BENCHMARKING AND BUSINESS CHALLENGE

Given the forthcoming changes as outlined in the previous section “ Dairy Farming After Mid Term Review” dairy farmers need to take time and review their present position and plan for the future. Benchmarking the physical and financial performance of the dairy business can provide essential information to help make decisions about the future direction of the farm business.

What is benchmarking?

Benchmarking is “comparing your farm business performance to other similar types of farms” It provides farmers with an opportunity to identify strengths and weaknesses within their farm business and to make the necessary changes so that farm profit can be improved.

To carry out benchmarking, the farmer collects farm information including milk and calf sales, concentrate and fertiliser purchases, and overhead costs. These figures are entered into a computer program which calculates the costs of production per unit. A report is generated showing the dairy herd performance on a per litre, cow and hectare basis. In addition the average results for all other dairy business that have also benchmarked are provided for comparison and further analysis can be carried out on different systems of production e.g. spring calving or diet feeding etc.

Results

By presenting results on a pence per litre basis, dairy farmers are able to identify how much it costs to produce a litre of milk on their farm. Having this information available helps decision making regarding leasing or purchasing milk quota, levels of meal feeding and optimum herd size and also when making decisions about capital expenditure on quota, land, buildings or machinery.

Overall benchmarking results have revealed that over 50% of total production costs can be attributed to overhead costs which includes machinery running and repairs, contractor charges, and other miscellaneous overhead costs.

Business Challenge Course

To complement benchmarking there is a specifically tailored business course for dairy farmers called the Business Challenge. The course is delivered one evening per week over a ten week period and will be held in the local area. The course covers all aspects of benchmarking and looks at each area of income and expenditure covered in benchmarking to see where improvements can be made to improve farm profitability.

To benchmark your dairy business or to take part in the Business Challenge contact your local Dairying Development Adviser or access the benchmarking program on the internet on www.ruralni.gov.uk.

DAIRY HERD FERTILITY CHALLENGE

Many dairy farmers have found that the calving pattern for their herd has slipped and now the majority of cows calve Dec/Jan rather than in Sept/Oct. This results in more milk being produced in the spring months when prices are usually lower, and it is harder to take advantage of the higher early winter prices. It also costs you money in terms of vet costs, culling rates and lost production. Some of the questions which need to be asked as to why calving pattern has slipped are:-

- Do you find it difficult to see cows in heat?
- Do cows hold to service but then repeat 6 weeks later?
- Do you find it difficult to get heifers in calf?
- What simple improvements can be made to your housing system to assist heat detection?

The Dairy Herd Fertility Challenge Course will cover all the necessary topics related to improving the fertility of the dairy herd and will include contribution from private vets and AI specialists.

The Dairy Herd Fertility Challenge is taking place in your local area, to book a place contact your local Dairying Development Adviser.

SELECTING AI BULLS

Dairy farmers are currently choosing AI bulls to use this winter. Bull selection is an important component of an overall herd breeding strategy. The selected bulls should compliment the type and production traits that need improvement. These traits can be compiled from milk recording information and a critical visual inspection of the herd. Potential improvements should fit into your production system and be part of your business plan. For example repeated selection of bulls for litres of milk quickly requires additional quota, changes in feeding system and other management factors.

In Northern Ireland over 85% of milk is processed with the end product dependent on milk compositional quality. Selecting bulls that have positive percentages for both butterfat and milk protein is vital to maximise returns.

Traits for improvement

Selected bulls must compliment the cows being mated. Information on cows weak and strong points must be assessed. Analyse all available production and health records. Cows most suitable for selection as replacement dams are high in milk with good components. They should be sound healthy cows that breed regularly. A break up of the herd into groups will ease dam and bull selection. Groups will be cows for culling, cows for beef mating and the main breeding herd. A critical inspection of the main breeding group will enable you to list characteristics that need improvement. A bull to improve the required aspects of type or production should be selected.

- To maintain a herd average of 7,000 litres you need to select a bull +200kg for milk.
- Northern Ireland milk quality is vital for a competitive industry so select bulls with +% deviation for fat and protein
- Strike the right balance between high milk yield and compositional quality.
- Aim to improve the genetic potential for butterfat as well as protein avoiding significant negative butterfat deviatons.
- Good functional conformation is very important and, in particular breeding for good udder attachment and legs and feet is a priority.

- If the herd has a high somatic cell count (SCC) avoid sires with a PTA for SCC of +10%.
- Reliability indicates the confidence that can be given to a PTA. In general only use bulls with a reliability of 75%+.

Total Overall Performance Index

Direct comparisons of bulls are available through the various indexes. Last year the Total Overall Performance (TOP) breeding index appeared in AI brochures. Under TOP bulls are ranked on a points scale derived:

- 50% on production, based on PIN but with increased emphasis on milk fat.
- 40% on functional type conformation (made up from 20% body composite, 35% feet and legs, 45% mammary system).
- 10% on health and lifespan (made up from 8% Somatic Cell Count and 2% lifespan).

Highest ranking bulls under TOP will have indices of 700+.

Summary

Set goals for improvement - list the traits for improvement from milk recording data and the herd inspection. Choose bulls that will improve herd conformation and performance in relation to the resources on your farm. Improving the genetic potential for butterfat and protein is a priority.

MAKE THE MOST OF SILAGE THIS WINTER

Assessing silage quality

The most accurate way to assess the quality of silage on your farm is to carry out an analysis. A silage analysis will give an indication of how well the silage has been fermented by measuring the pH and ammonia N levels. It will also provide information on the digestibility, metabolisable energy, crude protein, intake and dry matter content. These are all indicators of the feeding value and performance potential of the silage.

The fermentation quality is an indication of how well the silage is preserved. The values in Table 1 can be used to assess the fermentation quality.

Table 1 - Assessing silage fermentation quality (grass silage)

Value	Indicates	Range value	Well fermented silage	Moderately fermented silage	Poorly fermented silage
Ph	Acidity of silage	3.5 - 5.0	3.8 - 4.2	4.2 - 4.5	>4.5
Ammonia N (% of total N)	Protein breakdown during ensilage	5 - 20	<10	10 - 15	>15

The feeding value of silage can be assessed using the nutritive and the intake values. Factors for consideration are digestibility; metabolisable energy (ME); crude protein; dry matter and intake value and ranges are given in Table 2.

Table 2 - Assessing silage feeding value (grass silage)

Value	Indicates	Range values	Good quality silage	Average quality silage	Poor quality silage
<i>Digestibility (D-Value) (%)</i>	How much energy can be obtained from silage	50 - 75	>70	65 - 70	<65
<i>Metabolisable energy (ME) (MJ/kg DM)</i>	Measure of the energy content of the silage.	10 - 12	>11.5	10.5 - 11.5	<10
<i>Crude protein (CP%)</i>	Measure of the silage crude protein content	8 - 18	>14	10 - 14	<10
<i>Intake value</i>	Potential intake of the silage	60- 130	>100	80 - 100	<80

Target dry matter (DM %) should be in the range 24-28%

Supplementation of Grass Silage

In a recent publication, Dr. Rosemary Agnew from the Agricultural Research Institute of Northern Ireland stated that silages made in 2004 compared to 2003 have a predicted intake, dry matter and ME contents nine, three and 0.5 units higher respectively. This would sustain an extra three litres per day if silage was offered as a sole feed. *While average results indicate good silage there is also a great variation in silages made during 2004.*

Last winter the emphasis was on digestible fibre in the concentrate in an effort to improve silage intakes. This year, there is the potential to increase, the energy content through increasing the cereal portion of the ration which should have a positive effect on milk protein.

A typical ration last winter for a cow yielding 35 litres per day was low quality grass silage plus 14kgs of a 21% protein concentrate. In many cases this level of concentrate feeding required a midday feed. This winter, high quality silage supplemented with 10 kgs of an 18 / 19%

compound should sustain 35 litres of milk. Table 3 below will give an indication of the amount of concentrate supplementation required for grass silages of different quality.

Your local Dairying Development Adviser has access to the SAC FeedByte programme and is available to assist you plan your winter feeding.

Table 3 – Concentrate supplementation for grass silages of different quality

Cow Performance		Silage feed value		
Target herd yield (litres/cow)	Peak yield (litres/day)	(DM-25%, CP-15.8, ME -11.5)	(DM-20%, CP-14, ME – 10)	(DM-17.5%, CP – 9, ME – 9)
6,500	32.5	8.0	10.0	12.0
7,500	37.5	10.0	12.0	14.0
8,500	42.5	12.0	14.0	16.0

Source ARINI.

Feeding Arrangements

There is no point in having top quality silage if the cows have limited access to it. Many dairy farms have experienced rapid increases in herd size and in some cases no provision has been made for extra feeding space.

Easy feed passages should allow at least 380mm (15”) feeding space per cow. Self feed systems should allow at least 450mm (18”) per cow. If good quality forage is limited or concentrates are fed on top of the silage, feed space should be increased to 900mm(36”). Where feeding space is restricted, consider using ring feeders or feed trailers.

Ideally the feed passage should be 150mm(6”) higher than where the cows are standing. The stub wall should be 600mm (24”) high with 600mm (24”) between the wall and neck rail.

Remember always be prepared to remove up to 10% of the silage offered to the fresh calvers and high yielders, to the stale cows or dry stock.

NEW TUBERCULOSIS AND BRUCELLOSIS CONTROL MEASURES

New TB and Brucellosis disease control measures were announced recently and there are two changes in particular that will have a significant impact on the way that herd keepers approach the testing and movement of their animals.

These changes are the introduction of tighter restrictions for overdue TB tests and Brucellosis Pre-Movement Testing.

They are being introduced as part of a package of measures designed to reduce the incidence of both diseases.

Tighter restrictions for overdue TB tests

The tighter restrictions for overdue TB tests came into effect on 1 November 2004. From that date TB herd tests must be completed by the due date or else animals will be prohibited from moving out of the herd, except to slaughter. If the test goes a month overdue moves into and out of the herd will be prohibited. This includes moves to slaughter. Further sanctions apply if the test goes three months overdue.

Herd keepers should make sure that they know when their annual TB test is due and they should make arrangements well in advance to ensure that the test can be done in time. Tests can be completed up to a month before the due date. Herd keepers will be advised of risk tests due on their herd by the DVO. The same procedures will also apply to these tests.

Brucellosis Pre-Movement Testing

Brucellosis pre-movement testing becomes compulsory from 1 December 2004. From that date females and bulls aged over 12 months of age must have a clear Brucellosis test on a sample taken within the 30 days prior to movement.

The pre-movement test is required for moves to markets, farms, over-wintering premises and shows. Moves to slaughter do not require a pre-movement test.

In general only one move per test is allowed, although there are some exceptions. The exceptions are explained in the leaflet mentioned below.

Samples will be taken by DARD approved private veterinary practitioners and lay samplers. A herd test carried out by DARD staff can also serve as a pre-movement test if it is done within 30 days of the date of movement and a result is available.

It is recommended that herd keepers allow a minimum of one week from the date of sampling for results to be available and should allow two weeks to be safe. Therefore anyone planning to move animals early in December will have to have the animals sampled during November.

The herd keeper pays the sampler for taking the samples and DARD pays for the testing of the samples at the laboratory. If the samples were taken by DARD as part of a herd test there is no charge.

A letter will be issued listing animals that have been sampled and had a clear test. Herd keepers buying animals should ask for this letter, or a copy, from the person selling the animals. If animals move onto a premises without the necessary tests they will be restricted and the herd keeper will have to pay to get them tested.

Full details of the new measures are contained in the leaflet entitled New Tuberculosis and Brucellosis Controls which has been issued to every herd keeper. Herd keepers who have not received a leaflet, or who need more information, should contact their local Divisional Veterinary Office.

PURCHASING A FARM COMPUTER FOR CHRISTMAS

With Christmas rapidly approaching, now may be an appropriate time to consider acquiring a computer that can be of use both in the home and for the farm business. The following are a few pointers that should be kept in mind when setting out to purchase a new computer.

Machine life

The best advice is to buy as high a specification computer as you can afford. At all times avoid purchasing a second-hand machine but rather buy a lower specification new machine.

Computer specification

The specification of a computer is largely determined by the type of processor and the amount of memory that it contains. Random Access Memory (RAM) relates to the ability of a computer to hold information in the memory whilst it processes other information. Computers with RAM in excess of 256Gb will allow the computer to run more powerful and sophisticated programs.

Generally, it is games and communications programs that require a powerful processor and lots of memory. Farm accounts and herd-recording packages do not require high specification computers for them to run successfully.

A typical specification for an entry-level computer would be as follows;

- 2.6 GHZ Intel Pentium or Intel Celeron processor
- 256 Megabytes (MB) Random Access Memory (RAM) (up to 1024 MB)
- 40 Gigabyte (GB) hard disk (up to 80 GB)
- DVD / CDRW Combo Drive
- 15-inch analogue or 15-inch flat panel monitor

Buying a computer with at least the above specification will provide you with a system which will be sufficient for running office and farm management software whilst providing Internet and E-mail access. Expect to pay from £550 upwards for such a set-up. Adding on extras such as printers and scanners will increase the price further. At the top end of the market, a computer with a Pentium 4[®] processor running at 3.4 GHZ will cost in excess of £1,000. However, they are the best choice where children will use the computer to play the latest video games. Table 1 provides a comparison of computer specification according to purchase price.

Table1: Computer specifications

Specification	Entry level	Mid range	Top level
Price range inc. VAT (£)	£450-£650	£650-£900	£1,000 +
Processor (typical)	Intel Celeron [®] 2.6GHz	Intel Pentium 4 [®] 2.8GHz	Intel Pentium 4 [®] 3.4GHz
Memory (RAM)	256	512	1024
Hard Disk Capacity	40Gb	80Gb	120GB
Monitor	15 inch CRT	17 inch CRT or 15 inch flat panel	17 or 19 inch CRT or 17 inch Flat Panel
CD-RW, DVD	DVD/CDRW Combo Drive	DVD/CDRW Combo Drive	16x max. DVD+/-RW and 48 x CDROM
Modem	Yes	Yes	Yes

Software

All computers should come supplied with operating software such as Windows XP. To make best use of your computer, it will be necessary to purchase office software such as Microsoft Office[®], which includes word-processing and spreadsheets. Dedicated software for keeping farm accounts and herd records is available from a number of suppliers in Northern Ireland, expect to pay from £400 upwards for these types of packages.

Suppliers

Generally the cheapest deals are available from direct mail, on-line and computer supermarkets. However, when it comes to help and back-up service, these suppliers may 'fall short'. Local suppliers can help you with the process of purchasing the right computer, will deliver and set-up a new computer and should provide a good back-up service.

Warranties

It is essential when purchasing a computer to get a support package included in the deal. Most suppliers will offer an after sales support package of one year on-site repairs followed by a two-

year return to base for repairs. One-year warranties are insufficient as they do not provide good enough cover if something goes wrong with the computer.

Internet and E-mail

All new computers should come supplied with a modem that allows the computer to connect to the Internet. To connect to the Internet and to have E-mail facilities it is necessary to sign up with an Internet service provider such as BT Internet or Freeserve who charge no join-up fee. Phone call charges are usually at local call rates.

Broad-band provides a continuous connection to the internet at a fast connection speed which allows information and images to be downloaded a lot more quickly than is possible over a telephone line connection. A number of companies are now offering broadband for a fixed fee of £20 per month.

The Internet offers all users an access gateway to a huge amount of information and services. From a farming point of view it is possible to obtain information on weather forecasts, market prices, purchase and lease prices for milk quota; and to also buy farm supplies. Using the internet, farmers can now access APHIS from their home computer, allowing them to view their herd details, register calves and notify movements of bovine stock.

Remember

Before buying a computer, decide what you want the computer to do. Take advice from friends and colleagues who have experience in computing. Do not be tempted by sales gimmicks such as free games and digital cameras as part of the package. Newcomers to the world of computing will find it advantageous to attend a basic computer course that are now offered by many local training institutions to learn how to make best use of the machine.

Contributions from:

- Alan Hopps
- Sam Thompson
- Irene Downey
- Alan Agnew
- Patrick Donnelly
- Michael Garvey
- Albert Johnston
- Rolly Harwood

Compiled and edited by:

- Olwen Gormley
- Technical Promotions Branch