



Benefits of NLIS on Dairy Farms

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The National Livestock Identification System (NLIS) is Australia's system for identifying and tracking dairy and beef cattle.

NLIS is protecting and enhancing Victoria's reputation as a supplier of safe wholesome dairy and beef products, as well as providing producers and processors with a competitive advantage in key domestic and export markets.

NLIS also provides opportunities for dairy producers to improve their management and profitability through the use of the Electronic Identification (EID) of their herd in conjunction with a range of technological applications on farm. By using the equipment and software currently available, many aspects of dairy herd management can be simplified and given greater accuracy, resulting in greater efficiency and bigger profits.

1. Accurate identification of cows

The NLIS tag contains a microchip that can be read electronically in a fraction of a second by producers who have a suitable reader.

By using electronic reading, transcription errors can be eliminated, saving both time and labor in the dairy shed.

Electronic identification can also be linked to pedigree, management events, treatment records, electronic milk meters, computer controlled feeding, automatic sorting and weighing etc. Herd test day is also made easier using this technology.

Producers are given the opportunity to specify cow management identification numbers when ordering NLIS tags to allow them to maintain the numbering system they already use for herd identification.

There is also the option of placing a large management tag in the left ear of the cattle, printed with a number matching the serial number on the NLIS Tag they have used. The NLIS Tag can then act as a back up if the management tag is lost.

2. Herd testing

One of the biggest advantages of NLIS technology is that herd testing days can now be made easier and less stressful for the dairy farmer. Many of the Herd Improvement Centres currently have portable readers that produce a bar-coded sticky label which links the individual cow's ear tag

number to the collected sample. This system enables accurate cow identification with her milk sample minimizing error on herd testing day. Herd testing results allow dairy farmers to better manage their cows through accurate identification of milk production, fat and protein content and somatic cell count.

Some larger operations have taken this a step further by installing electronic milk metering and sampling. This system replaces herd testing day altogether and offers 60 readings a month compared with one or two readings, giving a clearer picture of herd performance. It can also assist in the monitoring of cow health due to access to individual daily production.

3. Monitoring events

NLIS tags can be used to record animal events such as heat detection, treatments, days since calving, sire selection etc. This can result in increased production and profitability by allowing better management of an individual cow's performance through the analysis of the collected data. It can also assist in identifying animals that are under current withholding periods for antibiotic use etc., herd synchronization, monitoring for artificial insemination or embryo transfer – it is really only limited by your own needs and utilisation of the technology. There is a wide range of software packages available to assist with data collection, analysis and the generating of reports.

4. Computer controlled feeding

Another significant advantage of using NLIS tags is the ability to computer control feeding. Each, individual cow can be allocated her own ration according to her own production levels and requirements. This allows feeding to be more targeted, optimizing feed management and generating more milk from less feed – a necessary consideration, particularly in drought conditions where feed prices are high.

A link between software and a cows NLIS tag allows individual cows to be identified and fed an individual ration according to a range of factors such as milk production, days in milk or group feeding. Up to 6 different feed types can be controlled depending upon the software and feeding system in place.

Calf feeding can also be computer controlled. Systems are currently available that will allocate a certain milk ration to each calf as identified by their EID. The calf steps up to the teat, which has a reader along side for identification. This is linked to a computer controlled system which will allow the calf to drink a certain number of litres per day from a refrigerated milk storage unit. The age of the calf is also recorded and milk allocation can be automatically increased each day until weaning begins, then automatically decreased each day until the calf is ready to put out onto pasture. Again, this system can reduce labour, increase efficiency and maximise return on inputs

5. Automatic sorting/drafting

Cows with NLIS tags can be automatically sorted from the main herd reducing time and labor costs for the dairy farmer. Sorting options can be from 1 to 4 ways depending upon the software and equipment available. Cows can be automatically sorted in many ways including from reports as generated in a software package, as a selected group of animals, from alerts and through manual selection, such as

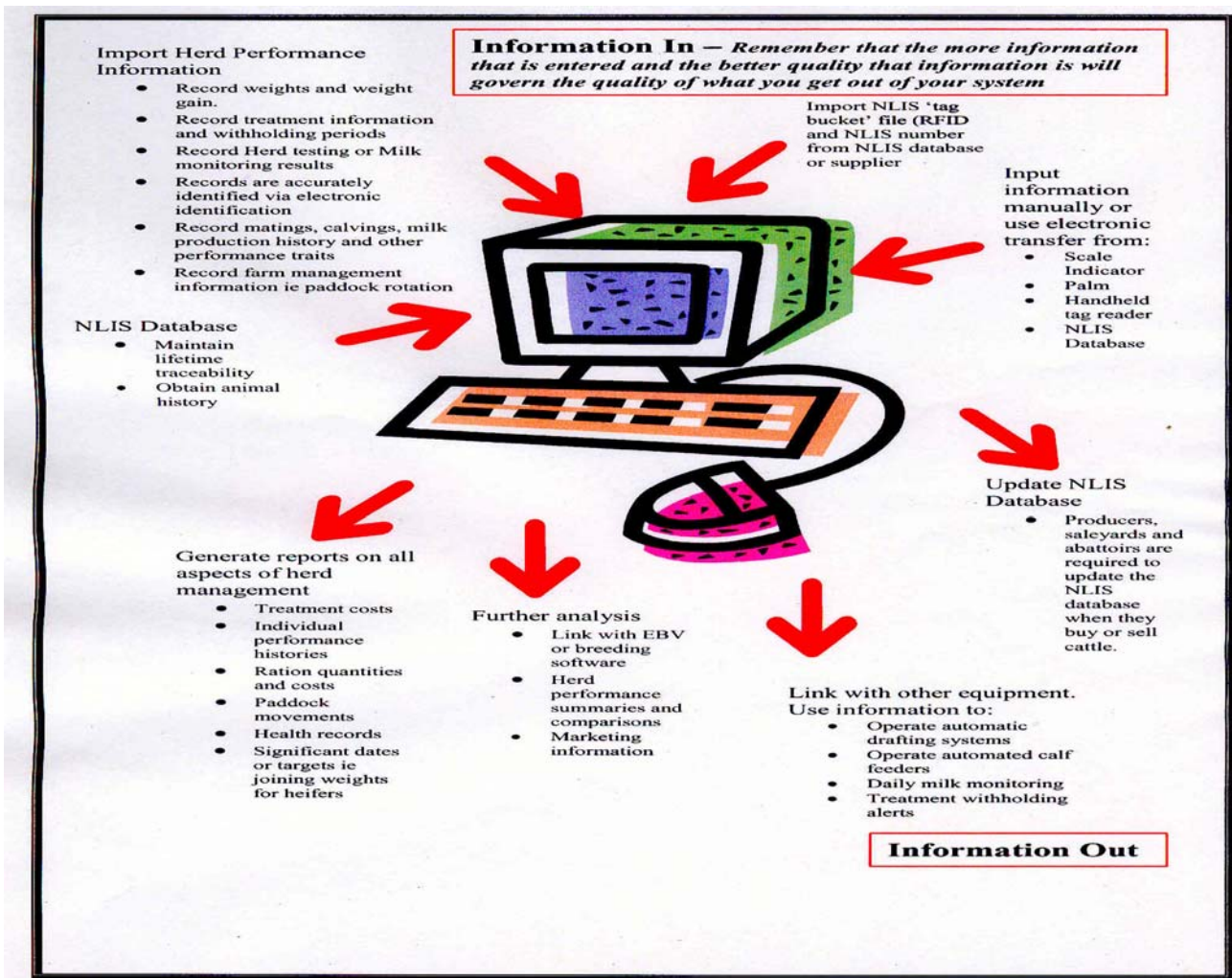
with a key pad located in the pit. This leaves staff free to concentrate on milking without having to draft cows as they leave the dairy, and without having to leave the pit. It also reduces stress on both the operators and the cows.

6. Automatic weighing

NLIS technology can be used on dairy properties in conjunction with a suitable scale, to accurately and quickly weigh cattle. This allows the dairy farmer to quickly identify poorly performing cows that can then be appropriately treated. In addition it can be used as a management tool to ensure heifers are close to their target weight prior to joining to maximise conception rates.

7. On-farm management

The following diagram illustrates the various ways that software and NLIS technology can be used for on-farm management.



Where can I find more information?

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General Information:

The following are useful contacts for further information:

Specific NLIS Database Queries for the MLA:

NLIS Hotline: 1800 NLIS ID (1800 654 743)

To access the NLIS database

visit www.nlis.mla.com.au

NLIS Queries in Victoria

For the NLIS in Victoria call DPI's toll-free NLIS Helpline on 1800 678 779 during business hours.

DPI Website:

www.dpi.vic.gov.au/nlis

NLIS Workshops

Workshops are conducted regularly around the State. To attend a workshop on NLIS contact one of the NLIS extension team.

Ordering NLIS Devices Online

You can now order NLIS devices on-line using a credit card by going to the DPI web site www.dpi.vic.gov.au/nlis and following the prompts to *Livestock Tags Online*.

This Information Note was previously developed by Erica Schelfhorst and was published in November 2005.

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