

ON FARM ELECTRONICS PTY LTD
LEVEL 1, 54 MALOP STREET
GEELONG, VICTORIA, 3220

**MOBILE HERD IMPROVEMENT (MHI)
SCANNING SYSTEM FOR DAIRY FARMERS
ON HERD TEST DAY**

A participating venture

Department of National Resources and Environment

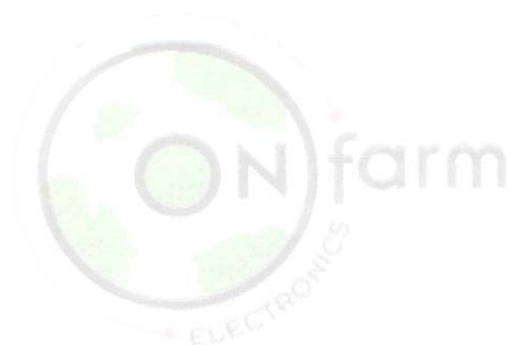
Bovine Inseminations

Maffra Herd Improvement Co-operative

Northern Herd Development Co-operative

Timboon Herd Improvement Co-operative

Dairy Herd Improvement Fund



CONTENTS

1. Executive Summary

2. Project Aim

3. Method

4. Results

5. Conclusion

6. Appendices

1. Executive Summary

The Mobile Scanning System (MSS) Project has been an overwhelming success and has proved to be a good demonstration of how well Dairy Farmers adapt to, and adopt, new technology.

The product being offered was a combination of both software and hardware, which was applied to the cows in the form of microchips, the antenna system the farmer installed in his dairy, and also the hardware purchased by the HI Centre.

Consequently, there were numerous areas where the “product” could potentially fail. Most of the problems encountered during the project could not have been foreseen as the unique way in which every farmer operates his enterprise leads to farm-specific issues which require individual attention. The effort put into addressing these issues is the main reason for the project’s success.

Unlike most other procedures in a dairy, herd test occurs on either a monthly or bimonthly basis, and as such does not offer the opportunity for a routine to be established. This fact combined with the stresses which herd test has traditionally placed on the farmer, meant that the MSS had to be a significant improvement over the “normal” way of doing things before the farmer would give it his endorsement.

On a technology level, largely “off-the-shelf” products were combined with proprietary software and antennas to come up with a product which would perform a specific function - namely that of printing labels automatically as cows passed by an antenna.

Farmers have shown a positive involvement throughout this project with suggestions and feedback forthcoming right throughout the project. Many of these suggestions were implemented in quick time into the system. The end result is a product which is extremely “fit for purpose” and widely accepted by all the stakeholders.

Further developments are possible with the product, eg.

- Printing bar codes on the labels
- Voice messaging of the cow/sample number
- Sequential placement of samples in the crates
- Identification of transponders not read

A groundswell of interest in EHID has been generated with a common question being asked, “what is the next step I can take to use this technology (EHID) every day?”

Another spin-off effect is that farmers with permanently installed EHID systems are now using the HI Centre’s thermal label printer on herd test day in order to obtain greater accuracy in their sampling.

The fact that so many successful installations are operating is testament to the fact that farmers CAN adapt to new technology, that they ARE prepared to work with it, and they WILL tolerate problems provided they can see that effort is being put into resolving these.

Again let me reiterate, the Mobile Scanning System Project has been an overwhelming success, and with the interest and goodwill generated through its implementation, this augers well for a dynamic and progressive herd testing industry into the future.

2. Project Aim

The aim of this project was to identify the benefits to the dairy farmer or operator, of Electronic Identification Transponders and a form of Mobile Scanning System which can be moved from dairy to dairy (by an HI Technician) to facilitate the actual cow identity being linked electronically to a sample flask and a crate position.

3. Method

Four HI Centres were selected for the project. These Centres are strategically located in the four geographical quadrants of Victoria and consist of:

Bovine Inseminations in the North East at Tongala,
Maffra HI in the South East located at Maffra,
Timboon HI in the South West, and
Northern Herd Development in the North West at Cohuna.

Both Herringbone and Rotary Dairies were included in the project.

4. Results

Bovine Inseminations

Seven dairies took part in the project, conducting a total of 22 tests in all. Comments received from farmers indicated that 71% felt the herd tests went well.

Maffra Herd Improvement Co-operative

Seven dairies took part in the project, four of these had conducted tests, with a total of 17 tests in all. Comments received from farmers indicated that 75% felt the herd tests went well.

Northern Herd Development Co-operative

Eleven dairies took part in the project, with ten of these having conducted tests, a total of 47 tests in all. Comments received from farmers indicated that 100% felt the herd tests went well.

Timboon Herd Improvement Co-operative

Nineteen dairies took part in the project, with fifteen of these having conducted tests, a total of 67 tests in all. Comments received from farmers indicated that 93% felt the herd tests went well.

5. Conclusion

44 dairies took part in the project, with 36 of these having run tests. A total of 153 tests were run in all. The comments received from those dairies having run tests indicated that 88% felt the herd tests went well with comments such as “more accurate testing” and “almost a pleasure to test” among those received.

This project has raised the level of awareness of Dairy Farmers in Victoria, to the use(s) of Electronic Herd Identification in the Dairy operations of Herd Testing. Additionally, it has alerted Dairy operators to the benefits of technology in assisting them in tedious, and often boring, tasks which are necessary to the success of milk harvesting. The spread of knowledge in this area can only add to the overall benefits to the Victorian Dairy Industry.

From the above results it can be seen that this project has conclusively demonstrated the benefits of Electronic Identification in making herd test day easy for the Dairy Farmer.

6. Appendices

Technical Report