



Australian Government

**Rural Industries Research and
Development Corporation**

Upgrade of Deer QAMA Software

**A report for the Rural Industries
Research and Development
Corporation**

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Rural Industry Developments

March 2005

**RIRDC Publication No 04/172
RIRDC Project No DIP-11A**

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ISBN 1 74151 081 3
ISSN 1440-6845

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Published in March 2005
Printed on environmentally friendly paper by Canprint

Foreword

More than 80% of venison and velvet antler produced by Australian Deer Industry is sold directly into export markets. This makes the industry especially vulnerable to international market forces over which it has no control, particularly international import requirements, and to international competition from the world's largest industry in New Zealand.

Producer commitment to programs that overtly demonstrate industry's collective commitment to meeting market specifications of product quality, animal welfare, disease status and absence of contaminants is essential for the immediate and long term future of the industry.

The Industry must continue to promote its commitment to quality assurance both domestically and internationally to strengthen consumer confidence in its products and attempt to minimise price and demand risks associated with its products.

This project was funded from Industry revenue which is matched by funds provided by the Australian Government.

This report, a new addition to RIRDC's diverse range of over 1200 research publications, forms part of our Deer R&D program, which aims to foster an Australian Deer Industry as a profitable and efficient mainstream agricultural enterprise.

Most of our publications are available for viewing, downloading or purchasing online through our website:

- downloads at www.rircd.gov.au/fullreports/index.html
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Peter O'Brien

Managing Director

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Acknowledgments

I wish to acknowledge Deer Farmers who contributed to planning the specifications for this new version of the Deer QAMA program and those who contributed to its development by testing the program. In particular Mr Mark Huisman, Mr Marc and Amanda Reinbott, Mr Henry and Mrs Solange Shapiro and Mr Jim Moir.

I also wish to express my acknowledgement to the RIRDC Deer Research Advisory Committee for their consideration and patience with the particular and unfortunate difficulties related to the illness of the original computer programmer enlisted at the beginning of this project.

Executive Summary

The Australian Deer Industry Quality Assurance (QA) program is designed and planned to help guarantee market access for products produced by the industry and to meet traceability requirements of Australian governments.

Although Quality Assurance may not yet guarantee a premium price for Australian deer industry products, in the UK a major venison processor is paying a premium of about 15% above their standard price for venison sourced from properties with quality assurance accreditation.

Not only is there an opportunity for price premiums, but in the near future quality assurance accreditation may well be a minimum requirement for market access for products, particularly food products.

This upgrade of the Deer QAMA software will help ensure the credibility and acceptability, by the marketplace, of the Australian Deer Industry QA program, and provide a reasonable guarantee of food safety and commitment to animal welfare.

Australian Deer farmers must be continually encouraged to adopt the industry QA program to help guarantee markets access for their products. Guaranteed market access, particularly as the largest percentage of its output is sold on export markets, is vital to ensuring the Australian industry's sustainable and profitable future.

1. Introduction

Industry commitment to its Quality Assurance is evidenced by its commitment to ongoing amending and updating of its programs. In 1999-2000 the then existing manuals were rewritten to recognise and include HACCP requirements and a computer record-keeping program (Deer QAMA) for farmers who adopt the program was developed (the 1999-2000 RIRDC-funded project “Development of niche venison markets - Part B”).

However, to meet broad market and individual client expectations, the Australian Deer Industry must actively continue its amendment of its Quality Assurance programs that guarantee clients consistently receive product that meets all of their specifications.

The first version of the Deer QAMA program provided deer farmers with an ability to record all information required by the Australian Deer Industry Quality Assurance program and allows user to meet all reporting and data storage requirements of the program.

Despite its usefulness, the program does not allow users to record data related to body weights and velvet weights not specifically required by the Quality Assurance program. Many of Australia’s leading deer farmers already use farm management software that provides an ability to maintain records of body weight and velvet weight and these people are unlikely to use two software programs to maintain property data.

Farmer comments suggested that although Deer QAMA is a good program, live weight and antler weight information is very important so they would continue to use existing software and were unlikely to use Deer QAMA. General sentiment suggested that if the Deer QAMA program did allow recording, reporting and analysis of body and velvet weight data it would be used in preference to other software.

Deer QAMA already complements the National Velvet Accreditation Scheme (NVAS) because it provides a practical method of storing information about drugs used for velvet antler removal. The software will complement the NVAS further when improvements allow recoding of information about animal live weight and velvet weight.

Suggested improvements will assist enterprise management and are also likely to make the program more attractive to international markets.

2. Objectives

To continue the improvement of the Australian Deer industry Quality Assurance program by upgrading the existing Deer QAMA software program that will improve the capability of the software and in particular provide deer farmers with a previously unavailable ability to:

1. Record, store, report and analyse data related to animal body weights
2. Record, store, report and analyse data related to velvet antler production
3. Undertake some statistical analyses of body weight and velvet weight data, particularly related to pedigree assessment

A bridging program will be developed to allow current users to upgrade their existing program without losing any data. The project will briefly look at how DeerQAMA can be integrated with other programs. However it is important to firstly ensure that DeerQAMA operates as required before considering how it may integrate with other programs and which other programs should be considered for integration and possible costs of integration have not been considered in this application.

3. Methodology

Project methodology included:

1. To ensure the proposed upgrading of Deer QAMA meets industry requirements, arranging meetings to discuss and negotiate the requirements for the upgrading of the software between two or three key industry representatives with the project's principal researcher and a computer-programming specialist.
2. Engaging a computer-programming specialist to design and produce an upgraded version of the Deer QAMA software program, under the direction of the Principal researcher. The company initially responsible for the software development was the same company responsible for the production of the existing version of Deer QAMA. The programmer has a strong working knowledge of the existing program and a growing understanding of the Australian Deer industry.
3. Asking selected industry representatives to help assess and test the software during its development. Six members of the Australian deer industry tested the existing version of Deer QAMA to help ensure bugs were removed from the program and that it functioned correctly before it was made available to the industry at large. A similar testing program was undertaken for the upgraded program.
4. To design the program to allow for future upgrading or amendment should that become necessary. The project briefly looked at how DeerQAMA can be integrated with other programs. However it was more important to firstly ensure that DeerQAMA operates as required before considering how it may integrate with other programs and which other programs should be considered for integration.
5. Seeking to register the DeerQAMA name as a Trademark owned by the Deer Industry Company on behalf of the Deer Industry Association of Australia

4. Results

Until December 2002 the project appeared to be developing as planned with reports from the computer-programming specialist indicating that good progress was being achieved. After December 2002 the programmer, because of an undiagnosed illness, deferred my requests for updated reports.

He did advise that he would catch up the work when he was well again. However in May 2003 he advised that because of his illness he would be unable to complete the project work within the agreed time and requested an extension for the work. After due consideration the RIRDC Deer Research Advisory committee granted an extension until August 22003 to complete the work.

However in July 2003 Mr Kennington advised that his illness had finally been diagnosed as Multiple Sclerosis (MS), that it was likely that he has had the disease since about 1995 and that he did not know when he could finish the project but that he was keen to try to continue.

At a meeting with the programmer in August 2003 he advised that his condition had deteriorated further and that his prognosis was that his condition would continue to deteriorate. He could not give any indication of when or if he could finish the project. Further he was unable to provide any meaning full 'hard' programming for use by another programmer.

In consideration of the above, a request for an extension to the project completion time and for extra project funding was made to the RIRDC Deer Research Advisory committee. The request was agreed in February 2004 and in March 2004 a new programmer was engaged to produce the version of Deer QAMA.

To allow the new programmer to complete the Deer QAMA upgrade more quickly than would otherwise be the case, an amendment was made to the original programming brief. In particular, the requirement for recording, storing, calculation and reporting of pedigree data was removed. That information is not included with this new version of Deer QAMA.

Deer QAMA version2

The 'Deer Quality Assurance Management and Analysis' (Deer QAMA) has been rewritten to allow easier recording, storing and reporting of all information that must be maintained by all businesses accredited by the Deer Industry QA program.

An operating manual has been written for the program and will be provided to users as a Microsoft Word ® file and as hard copy document.

Industry members in each state who helped identify minor problems in the operation of the program have tested the program over several months.

Trade Mark Registration

An application has been made to Trade Marks Office to register the Deer QAMA name as a Trademark owned by the Deer Industry Company on behalf of the Deer Industry Association of Australia.

5. Discussion

Producers are continually encouraged to consider that in the near future, it is likely that unless a product meets a minimum (externally audited) quality standard, market access will be limited. Deer farmers are also likely to be included in requirements for National Livestock Identification Systems (NLIS) in the near future.

Deer QAMA, the name of the Deer industry quality assurance software, is an acronym for *Deer Quality Assurance Management and Analysis*. This software upgrade has been produced for deer farmers in Australia who participate in the quality assurance program and provides facilities for future recording of NLIS information as well as other information required by the Deer Industry Quality Assurance programs.

As positive support for Deer QAMA and the Deer Industry's QA program generally, most industry groups who adopt quality assurance programs notice an improvement in profitability through an improvement in management control.

The updated Deer QAMA program will be supplied at no cost to all those who seek quality assurance accreditation.

6. Implications

The Australian Deer Industry's QA program is one of the programs designed and planned to help guarantee market access for industry products. Increasingly international and domestic markets for all manner of products and services expect suppliers to take full responsibility for the goods or services they supply.

To be credible and accepted by the marketplace as a reasonable guarantee of food safety and commitments to animal welfare, QA programs must be open to regular audit by both program administrators and the market place.

The upgraded Deer QAMA program helps provide credibility and an improved ability to audit the Australian Deer industry QA programs that are required by the marketplace, while simplifying the requirements of data entry by users.

7. Recommendations

- (i) *The DIAA actively encourage adoption of and active participation in its Quality Assurance program for the benefit of individual farmers as well as the industry as a whole.*
- (ii) *The DIAA continues to actively encourage interest in the Deer QAMA program from other international deer industries and in particular the British Deer Farmers Association.*

8. Communications Strategy

Information generated by this project has been made available to industry directly and advice of the new Deer QAMA program will be presented through reports in the RIRDC Deer Industry Newsletter and in the Australian Deer Farming Magazine.

9. Bibliography/References

Tuckwell, C.D. (2001) *Venison Quality Assurance*. RIRDC Publication No. 01/94 ISBN: 0 642 58316 1