

## INTRODUCTION

In October 1999 RIRDC, New Animal Products Program provided funds for a project to develop benchmarks to improve skin quality of ratites. The outcome of the project is skin documentation for use in the Ostrich and Emu industry. The documents will be useful in skin QA programs to support industry's commitment to produce high quality skins. The benchmark covers the farming, transport, lairage, slaughter, curing, tanning and skin marketing sectors of the industry.

In Australia nearly half the farm gate value of ostriches is in the skins. However, 58% of bird skins being processed are being downgraded by at least one grade because of damage on farm, during transport, in the lairage, during processing and tanning. In the Emu Industry 95% of skins are being downgraded with 35% having no commercial value.

Development by the Ratite Industry of documentation that recommends best practices will raise the standards in Industry and improve the profitability of ratite farming. Documentation to reduce skin damage covers best practice methods in all areas of the production chain to maintain skin quality of ratites. In addition, adoption of QA guidelines in producing ratite skins will give confidence to skin buyers that they are purchasing a quality product.

The project was coordinated by Phil Glatz (Senior Research Scientist, South Australian Research and Development Institute) with support from Warwick Hack (New Animal Industries Officer, Primary Industry and Resources SA), Belinda Rodda (Technical Officer, South Australian Research and Development Institute), Mark Bradley and Denise Galloway (IC Media) and Ian Dinning (Lecturer, Media, University of South Australia).

A Ratite Industry Committee comprising John Atkins (skin marketing), Trevor Jones (tanning), Wayne Hamood (ostrich farming), Robert Cavedon (abattoir), Wayne Pilz (emu farming), Bert Rayner (skin marketing), Ross Haebich (emu and ostrich transport) and Kevin Barry (ostrich transport) worked with the research team to develop the documentation. Other people in Industry were involved in reviewing the audit documentation. These included Dr. Doug Black, Dr. John Dingle, Chris Tuckwell, Bruce Makin, Geoff Lean, Peter Thompson, John Snowden and Peter O'Malley.

The approach used in this skin quality benchmarking was modelled on a current RIRDC project on broiler welfare audits coordinated by Dr John Barnett. His support is acknowledged.

- The project used the seven principles of the 'HACCP-based quality assurance systems approach to: i) identify potential risks that contribute to poor skin quality ii) identify the critical risks iii) establish appropriate targets for the risk area iv) establish a monitoring system v) establish contingencies to be used in association with deviations observed during monitoring vi) establish a verification program and vii) develop documentation that accurately depicts risk, critical limits and corrective action.
- The documentation is supported by a short CD Rom demonstrating events that lead to poor skin condition in emus and ostriches and simple strategies on how to minimise this problem.

The documentation provided for ratites examines the breeder, hatchery, rearing, growing, transport, lairage, slaughter, curing, tanning and skin marketing sectors. It is recognised that skin damage may be limited to a few key areas of the production chain. However, it was considered that all factors that might effect the numbers of hides produced, area of hide produced/bird and quality of hide be examined. Emphasis has been given to ensuring that there are high levels of bio-security and traceability of birds and their hides throughout the production chain. Each section of the document should be considered as stand-alone document. This has resulted in some repetition.

The documentation is set out as follows for each sector using the HACCP protocol:

- Audit questions and implications relating to the breeder, hatchery, rearing, growing, transport, lairage, curing and tanning sectors that can be completed by a yes/no answer.
- Record keeping check lists.
- List of targets to be achieved
- Audit Score Sheets for monitoring, evaluation and verification. Critical issues are indicated with shading
- Fact sheets that provide more detail on the questions and the implications.
- CD Rom script highlighting the key issues in each sector.

It is considered that the documents will fulfil the aim of demonstrating the standards required to achieve high quality skins.

### **Implementing the Audit in the Ratite Industries**

Audits can be either informal or formal. An informal audit could be conducted by the grower or a skin marketer and can be used to identify and solve weaknesses. An external auditor usually conducts a formal audit. These could be persons appointed by peak bodies such as the Australian Ostrich Association or the Emu Farmers Federation of Australia. Before an audit a farmer, transporter, abattoir or tanner would be informed in advance of audit so that their documentation can be made available. The auditor will require access to current records, diaries and recording sheets as well as visually inspecting birds, facilities and skins as well as taking measurements.

The auditor will go through each of the audit questions and decide whether it is relevant to their enterprise. In filling in the audit score sheets the auditor will score five points for critical issues and one point to non-critical issues if there is compliance. Depending on the approach taken by the auditor non-compliance with some critical issues may result in enterprises failing the audit. In most cases however, a score will be provided to the enterprise and area of the enterprise, which needs to be improved, will be indicated. An improvement in the overall score achieved on each subsequent audit will be an indicator of the improvement in practices aimed to achieve high quality skins.

It is expected that each person working in the production chain will read the documentation so that there is an understanding of the questions being asked and its impact on skin quality, records and evidence needed and targets to be reached. It is recommended that each sector conduct their own trial audit, keep a diary of activities, record measurements, identify problems and fix them.

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