Foreword

The impetus for developing a training manual to assist in accrediting toe-trimmers was a recommendation from previous projects examining the behaviour and claw anatomy of ratites subjected to toe-trimming. Toe-trimming also improves safety of farm workers by reducing potential for injuries suffered by workers during handling of birds. The toe-trimming manual will support the Ratite industry’s commitment to maintaining high standards of toe-trimming and improving skin quality.

This project was funded by RIRDC Core Funds provided by the Australian Government and is an addition to RIRDC’s diverse range of over 1700 research publications. It forms part of our New Animal Products program, which aims to accelerate the development of new animal industries.

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

Downloads at www.rirdc.gov.au/reports/Index.htm
Purchases at www.rirdc.gov.au/eshop

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Acknowledgements

The author would like to acknowledge the valuable contributions made to this training manual by Dr. Doug Black, Michael Hastings, Bert Rayner, Anel Meyer, Dr. Deborah Kelly, Dr. Peter McInnes and Michael Bourke.
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Executive Summary

What the report is about?

This report is about ratite toe-trimming. It includes a training manual for the Australian Ratite Industry to support the industry’s commitment to maintaining high standards of toe-trimming. Development by the Ratite Industry of documentation that recommends best practice procedures and training courses to accredit toe-trimmers will raise the toe-trimming standards in Industry and help to improve the profitability of ratite farming. Utilisation of the training manual will give confidence to operators when undertaking toe-trimming and result in improved standards of toe-trimming. A toe-trimming manual was prepared by the researchers with the following information;

- Key issues relating to each part of the toe-trimming process. Critical issues were identified. These were the processes in the toe-trimming protocol that if they go wrong will cause permanent damage to the toe resulting in poor bird health, production and welfare.
- Record keeping checklists.
- List of targets to be achieved.
- Score sheets for auditors to monitor, evaluate and verify toe-trim standards.

Who is the report targeted at?

This report is targeted at Australian and overseas ratite farmers and ratite toe-trimmers.

Background:

Toe-trimming of ratites is a common management tool that can be used to improve skin quality and worker safety and reduce bird stress (Glatz, 2001a; b; 2002). Approximately one-third of ostrich skins and one-half of ostrich skins are downgraded because of the presence of scars on the hide. Some of these scars are caused by claw abrasions (Glatz and Bradley, 2000). In ostriches toe-trimming modifies chick ostrich behaviour and reduces the potential for skin damage in the first two weeks after hatching. However the toe-trimmed ostriches tend to slip on wet ground. The evidence indicates that toe-trimming does not compromise the welfare of yearling ostriches and improves the % of A grade skins by 25% (Glatz et al., 2000). Toe-trimming is practised to minimise the incidence of scars and to reduce the risk for handlers suffering injuries. Toe-trimming also reduced aggressive behaviours of emus.

Consultation with toe-trim operators in Australia and South Africa revealed that the main problems being faced with the practice are achieving the appropriate position and angle of the cut to minimise regrowth of the claw. Operators report variations in claw regrowth and bleeding of the claw following toe-trimming and a lack of experienced, well-trained personnel to conduct the operation. Proper toe-trimming can result in greatly improved skin quality but improper toe-trimming can result in claw regrowth and welfare issues for the flock. It was necessary to prepare appropriate training documentation to standardise toe-trim training in Australia and satisfactorily resolve the most urgent welfare issues of achieving consistency and high standards of toe-trimming.
Aims/Objectives:

- To develop quality assurance documentation to improve emu and ostrich toe-trimming
- To prepare a best practice toe-trimming manual for ratites

Methods:

The methodology used included collecting information/suggestions from beak trimmers, farmers, researchers and RIRDC representatives and toe-trimmers to develop a relevant training manual to meet their needs and farm visits by key researcher to view first hand jobs being conducted by toe-trimmers and to discuss with toe-trimmers their requirements in a training manual. The visits reinforced the need to prepare a manual in plain English and to keep documentation to a minimum.

Results/Key findings:

A toe-trimming training manual was developed for ratite industry. This manual was developed based on the suggestion from beak trimmers, farmers, researchers and RIRDC representatives and toe-trimmers and information from farm visits. Proper procedures are recommended for toe-trimming as follows:

- Accredited toe-trimmers training should be competency-based and delivered in the workplace.
- Toe-trim assessors should be associated with a Registered Training Organisation (RTO) and use the proposed national competency standards to assess toe-trimmers in the workplace.
- A central database should be maintained by industry with a profile of the training that has occurred.
- Develop a communications strategy to inform the whole of industry of the need to have only accredited toe-trimmers being allowed to toe-trim birds.

Implications for relevant stakeholders:

Use of the training manual for accrediting toe-trimmers is likely to lead to improved standards of toe-trimming and bird welfare in the Australian ratite industries. The accreditation process will ensure that minimum standards are achieved and best practice is promoted.

Recommendations:

This project meets its objective of providing documentation for workplace training and accrediting of toe-trimmers. However, for the outcomes to be realised, it requires industry to develop the necessary protocols to ensure that only accredited toe-trimmers are allowed to practise in Industry.
1. Introduction

Approximately one-third of ostrich skins and one-half of ostrich skins are downgraded because of the presence of scars on the hide (Glatz et al., 2000; Glatz and Bradley, 2000). Some of these scars are caused by claw abrasions. This damage in ratites occurs throughout the growing cycle. To minimise the incidence of scars that may result from claw injuries, toe-trimming is routinely practised to blunt the claws enough so that they cannot damage the skin. In Australia toe-trimming is practiced on most emu farms and a number of ostrich farms (Anon., 2000).

Partial amputation of the toes of ratites has welfare implications (Glatz et al., 2000). It may cause ratites chronic pain and to become flatfooted and change their gait (Lunam et al., 1996). On the other hand the change in gait may reduce their ability to deliver effective kicks to other birds during aggressive encounters. In addition the potential for handlers suffering injuries from declawed birds is reduced. Previous studies with emus found that toe-trimming reduced aggressive behaviours. Neuromas were not observed in the toe stumps of year old emus indicating emus may not be suffering from chronic pain (Glatz and Lunam, 1993).

In ostriches toe-trimming modifies chick ostrich behaviour and reduces the potential for skin damage in the first two weeks after hatching. Year old ostriches show no differences in behaviour when trimmed at day-old (Glatz, 2002). However the toe-trimmed ostriches tend to slip on wet ground. The evidence indicates that toe-trimming does not compromise the welfare of yearling ostriches and improves the % of A grade skins by 25% (Glatz et al., 2000).

2. Objectives

- To develop quality assurance documentation to improve emu and ostrich toe-trimming
- To prepare a best practice toe-trimming manual for ratites
3. Methodology

Corresponding Group

A toe-trimming corresponding group was formed comprised of researchers, RIRDC, toe-trimmers and ratite producers. This group included Dr. Doug Black, Michael Hastings, Bert Rayner, Anel Meyer, Dr. Deborah Kelly, Dr. Peter McInnes and Michael Bourke

Training Manual

A toe-trimming manual was prepared by the researchers with the following information;

- Key issues relating to each part of the toe-trimming process. Critical issues were identified. These were the processes in the toe-trimming protocol that if they go wrong will cause permanent damage to the toe resulting in poor bird health, production and welfare.
- Record keeping checklists.
- List of targets to be achieved.
- Score sheets for auditors to monitor, evaluate and verify toe-trim standards.

Comments from Corresponding Group

A number of drafts of the toe-trimming training manual were prepared and circulated to the corresponding group. Key issues that were taken into consideration from comments received were:

- terminology (toe-trimming preferred instead of declawing)
- developing a qualitative assessment of toe-trimming rather than quantitative measures
- emphasising OH & S issues for bird handlers
- using toe-trimming to rectify the curled toe syndrome
- linking record keeping with national farm recording guidelines
- sealing bleeding claws with temporary bandages before re-cauterisation
Toe-trimming competencies developed for consideration by RTCA

Toe-trim Ratites

This competency standard covers the functions involved in toe-trimming of ratites. Competency in this standard includes setting up equipment so that accurate trims are achieved and stress on the birds is minimised. This standard applies to all ratite species and breeds used for meat, skin or feather production. Work is likely to be under routine supervision with intermittent checking. Responsibility for some roles and coordination within a team may be required. Toe-trimming of ratites is usually performed within established routines, methods and procedures.

### Element Performance Criteria

#### Prepare to toe-trim birds

1.1 Entry biosecurity procedures as specified by the farm are followed
1.2 Toe-trimming instructions are sought and confirmed
1.3 Discussions are held with other workers to ensure smooth operation of the toe-trimming process
1.4 Equipment and tools suitable for toe-trimming are selected, checked, and maintained
1.5 Occupational health and safety hazards are identified, risk assessed and suitable controls implemented

#### Toe-trim birds

2.1 Birds are handled according to relevant Codes of Practice (Anon., 2000) to facilitate accurate toe-trimming, which reduces damage of skins, decreases the risk of injury to personnel handling the birds and reduces stereotypic aggression in flocks
2.2 Toe-trimming is assessed regularly
2.3 Birds are toe-trimmed according to instructions
2.4 Industry standards for accuracy are achieved
2.5 Standards of toe-trimming is in accordance with industry guidelines
2.6 Birds with bleeding claws are re-cauterised
2.7 Bird welfare is assessed regularly
2.8 Birds are culled according to instructions

#### Complete toe-trimming procedures

3.1 The welfare of toe-trimmed birds is checked and adjustments made where necessary
3.2 Qualitative assessment is made on samples of 100 birds
3.3 Relevant information is recorded and reported
3.4 Exit biosecurity procedures are completed in line with farm procedures
3.5 Equipment and tools are cleaned, sanitised and maintained according to procedures

### Range of Variables

The Range of Variables explains the contexts within which the performance and knowledge requirements of this toe-trimming standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.
| What Occupational Health and Safety requirements may be relevant to this standard? | Safe systems and procedures for:  
- Handling livestock  
- Using handling equipment  
- Hazard and risk control  
- Manual handling  
- Handling, application and storage of hazardous substances  
- Protection from solar radiation, dust and noise  
- The appropriate use and maintenance of personal protective equipment. |
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<tbody>
<tr>
<td>What existing and potential hazards may be encountered in the workplace?</td>
<td>Burning from toe-trimming bars, electrocution from electrical cords, injuries from livestock movement and handling, sunburn from solar radiation, respiratory problems from organic and other dusts and injury from moving machinery and vehicles.</td>
</tr>
<tr>
<td>What personal protective equipment may be relevant to this standard?</td>
<td>This may include boots, hats, overalls, gloves, protective eyewear, respirator or facemask, and sun protection (sun hat, sunscreen).</td>
</tr>
<tr>
<td>How are ratite chicks toe-trimmed?</td>
<td>A toe-trimmer uses a heated blade to remove a portion of claws. This is an animal husbandry practice commonly carried out to limit the skin damage that birds cause to each other and to protect farm workers.</td>
</tr>
</tbody>
</table>
| What toe-trimming methods might be used? | Toe-trimming methods vary according to the way the trimming machine is set up. The main choices are:  
- Blade movement – this may be done manually where a foot pedal is pressed or automatically where the blade is moved by a cam on the machine.  
- Guides – the cut may be judged manually by the operator or automatically using guides on a gauge plate. The claw is inserted into the appropriate guide so that the blade cuts a set amount at the required angle. |
<p>| What organisational work procedures or requirements apply to this standard? | Work procedures will be based on sound agricultural principles and practices and may include oral or written instructions, organisational standard operating procedures, specifications, routine maintenance schedules, work notes, product labels and Material Safety Data Sheets, manufacturers’ service specifications and operators’ manuals and occupational health and safety procedures. |
| When and to what stock is toe-trimming performed? | Toe-trimming is usually performed on day old birds. |
| What tools and equipment may be used in the conduct of this unit? | Equipment including toe-trimming machines, electrical cords, electrical safety switches, nets, surrounds, baskets, boxes and service tools. |
| How may a clean and safe area be maintained? | Tasks may include keeping access areas clear of tools and equipment, removing feeder and drinker equipment, keeping electrical leads dry and undamaged, maximising air quality and providing adequate light at the trimming machine. |</p>
<table>
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<tr>
<th>What relevant information may be recorded and reported?</th>
<th>Bird numbers, accuracy results, details of administered preventative health treatments and any observed abnormalities.</th>
</tr>
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<tr>
<td>How might information be documented?</td>
<td>Record keeping systems used are paper-based with information recorded into a diary or onto record sheets.</td>
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**Evidence Guide**

**What evidence is required to demonstrate competence for this standard as a whole?**

Competence in toe-trimming ratites requires evidence that the birds are accurately toe-trimmed strictly in observance of the relevant Code of Practice. The skills and knowledge required to toe-trim chickens must be transferable to a different work environment.

<table>
<thead>
<tr>
<th>What specific knowledge is needed to achieve the performance criteria?</th>
<th>Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:</th>
</tr>
</thead>
</table>
|                                                                        | - Welfare implications of poor toe-trimming  
- Welfare implications of poor handling  
- The need to maintain farm biosecurity  
- Relevant occupational health and safety legislation, regulations and codes of practice.  
- Specifications required for equipment set up  
- Quality measures suitable for toe-trimming  
- The need for records |

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<tr>
<th>What specific skills are needed to achieve the performance criteria?</th>
<th>To achieve the performance criteria, appropriate literacy and numeracy levels as well as specific skills are required. These include the ability to:</th>
</tr>
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</table>
|                                                                     | - Interpret instructions prepared by the organisation, industry bodies, and/or manufacturers.  
- Handle birds  
- Operate toe-trimming equipment  
- Trim ratites claws  
- Re-cauterise a bleeding claw  
- Perform routine maintenance as required  
- Count toe-trimmed birds  
- Qualitative assessment of toe-trimming quality  
- Record relevant information  
- Observe, identify and react appropriately to environmental implications and occupational health and safety hazards  
- Share information and observations with fellow workers and supervisors |
What processes should be applied to this competency standard?
There are a number of processes that are learnt throughout work and life which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

1. How can communication of ideas & information be applied? (1)
   By clarifying the specifications required for a particular trimming job.

2. How can information be collected, analysed & organised? (2)
   By gathering information about the accuracy of a particular trimming job. Providing farm managers with a summary report on the toe-trimming job.

3. How are activities planned & organised? (1)
   By sequencing the activities to be undertaken within a given period. Eg. taking biosecurity into account when moving from farm to farm, setting up equipment to optimise throughput and maximise safety while minimising bird stress.

4. How can teamwork be applied? (1)
   By working alongside others in the shed to consistently achieve the desired trim.

5. How can the use of mathematical ideas & techniques be applied? (2)
   By counting birds and calculating accuracy percentages.

6. How can problem-solving skills be applied? (2)
   By making adjustments to equipment to maximise accuracy and minimise bird stress.

7. How can the use of technology be applied? (1)
   By making calculations and providing reports.

Are there other competency standards that could be assessed with this one?
This competency standard could be assessed on its own or in combination with other competencies relevant to the job function, for example:

- Handle livestock using basic techniques (TAFE training competency, qualifications in Agriculture, code RUAAM2NEWA).

When staff are undergoing TAFE qualifications for the competency of being able to handle livestock, information is available from TAFE in how trainers can assess this competency standard. The booklet available for trainers is titled Assessment Guidelines for Training Packages. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
4. Results and Discussion

Corresponding Group Involvement

The participation by beak trimmers, farmers, researchers and RIRDC representatives on the management committee proved to be successful. The toe-trimmers in particular were active participants and provided the practical input required enabling the researchers to develop a relevant training manual to meet their needs. In particular some of the issues the toe-trimmers highlighted were:

- terminology (toe-trimming preferred instead of declawing) – It was considered that declawing does not accurately depict the process. Hence it was decided to use the term toe-trimming.
- developing a qualitative assessment of toe-trimming rather than quantitative measures. Initially it was proposed that qualitative measures of toe length remaining after trimming and angle of the cut could be recorded. However a number of farmers suggested a scoring system to make this process easier.
- emphasising OH & S issues for bird handlers. Farmers reported a number of cases where significant injuries to handlers had been caused by claws and hence the need to toe-trim birds to blunt the claws.
- using toe-trimming to rectify the curled toe syndrome. A small % of ostriches hatch with a curled toe. These birds cannot walk and need to be culled. Toe-trimming can overcome this problem.
- linking record keeping with national farm recording guidelines. Due to the threat of exotic disease it was considered essential to adopt a record keeping process in line with biosecurity standards.
- sealing bleeding claws with temporary bandages before re-cauterisation. Veterinary advice suggested the bleeding claws could be bandaged before re-cauterising.

Farm Visits

Phil Glatz made two visits to Emu and Ostrich Farms in SA and Victoria to view first hand jobs being conducted by toe-trimmers and to discuss with toe-trimmers their requirements in a training manual. The visits reinforced the need to prepare a manual in plain English and to keep documentation to a minimum.

Toe-Trim Training Manual

In conclusion, this project meets its objective of providing documentation for workplace training and accrediting of toe-trimmers. However, for the outcomes to be realised, it requires industry to develop the necessary protocols to ensure that only accredited toe-trimmers are allowed to practice in industry.

5. Implications

Use of the training manual for accrediting toe-trimmers is likely to lead to improved standards of toe-trimming and bird welfare in the Australian ratite industries. The accreditation process will ensure that minimum standards are achieved and best practice is promoted.
6. Recommendations

Training

• Accredited toe-trimmers training should be competency-based and delivered in the workplace.
• Toe-trim assessors must have recent industry experience and must be employed by a Registered Training Organisation (RTO) or have a partnership agreement with an RTO and use the proposed national competency standards to assess toe-trimmers in the workplace (Bourke et al., 2002a,b).
• A central database should be maintained by industry with a profile of the training that has occurred.
• Develop a communications strategy to inform the whole of industry of the need to have only accredited toe-trimmers being allowed to toe-trim birds.

7. Communication Strategy

The findings from this project have been communicated to Industry as follows:

Papers presented on toe-trimming accreditation to;

- World Ostrich Congress in Madrid in October 2005

It is recommended that RIRDC publish 50 copies of the manual and make it available on the RIRDC website for industry personal in Australian and overseas to purchase. To market the book it is suggested that details of the manual be circulated to a ratite email list of over 500 ostrich industry representatives worldwide and also to an Ostrich Resources Newsletter which is published monthly in Spain.

8. Publications


9. References


Ratite Declawing
Training Manual
INSTRUCTIONS

a. Coursework
Follow your instructor’s directions in how to use this manual if you are attending a short course or are undertaking this as part of a Certificate course.

b. Workplace Training
Workplace training occurs on-the-job. Your supervisor will instruct you in how to toe-trim ratites. You should discuss how your training will take place with them and what will be expected from you.

Your main tasks are to:
• Read through the manual. You might do a chapter or two at a time or the whole manual in one go
• Think about the information and how it applies to you
• Complete the activities at the end of each chapter
• Get your instructor to demonstrate correct techniques
• Practice the required skills
• Ask questions when you are not sure about something
• Get feedback about your performance
• Practice being assessed so that you will be ready when the real assessment occurs.

Work at your own pace so that you have time to grasp what is required. Observe carefully so that you pick up the “tricks of the trade” – those skills that make the job easier and more accurate.

It is also important to think about how you learn best and try to use the methods that best suit you. Do you prefer to see a task done or have it described to you? Do you pick up a task quickly or need time to think about it and practice? Try to use your preferred learning style wherever possible.

Aim

For participants to be able to toe-trim chicks, according to ratite industry standards.

Learning Outcomes

After completing this course you will be able to:

1. Describe the role of toe-trimming in the ratite industry
2. Conform to biosecurity requirements
3. Handle birds for toe-trimming
4. Set-up toe-trimming equipment
5. Cut the claw of emus and ostriches
6. Assess the quality of the toe-trimming job

7. Maintain records of toe-trimming activities

You may have some other outcomes you and/or your trainer wish to gain from working through this booklet. If so, list these below.

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Time Required
The time required to work through this manual will vary according to your experience and the level of assistance you get. As a guide you will need to allow approximately ten to fourteen hours.

Assessment
Assessment is used to determine if you have reached the standard required to toe-trim birds. Assessment is optional, but you must be assessed in the workplace if you wish to become an accredited toe-trimmer.

Assessment is competency based. This means that you are assessed to see whether you can do the job to the required standard. If you can then you are “competent”. If you can’t then you are “not yet competent” and require further training.

Your assessor will require you to provide evidence of your ability. This may include watching you perform tasks, asking you questions, or looking at photos or a video of you working. The assessor will judge you against the learning outcomes and assessment criteria of the course.

The learning outcomes and assessment criteria can be found in a box at the start of each chapter. The learning outcome describes what you are required to do, eg. to hold birds correctly for toe-trimming. The assessment criteria are tasks that the assessor will look for to make sure that you can do this, eg. to achieve this learning outcome you need to be able to:

1. Pen birds prior to toe-trimming
2. Hold birds while toe-trimming
3. Care for birds after toe-trimming.

Assessment is nothing to be scared of. If you can do your job well then assessment just confirms this.
Chapter 1. Background

Toe-trimming reduces skin damage in emus and ostriches

Learning Outcome
After completing this chapter you will be able to describe the role of toe-trimming in the ratite industry.

To achieve this learning outcome you need to be able to:
1. Describe what toe-trimming is and how it is carried out
2. Describe the relationship between toe-trimming and bird welfare
3. Describe why quality assurance is important for toe-trimmers.
1.1 What is Toe-trimming?

Toe-trimming is the removal of the terminal joint of the toe on an emu or ostrich (Fig 1). It is an animal husbandry practice commonly carried out in the ratite industry to limit the skin damage and injuries that birds cause to each other.

The claw can regrow after it is cut. It is important that birds are toe-trimmed correctly to avoid this problem.

![Intact claw vs toe trimmed](image)

**Fig 1. Toe-trimmed and intact claw of ostrich**

1.2 Why is Toe-trimming Carried Out?

Aggression arises from birds interacting with each other to work out where they fit into the flock.

Toe-trimming is performed early in the life of commercial emus and ostriches to decrease skin injuries caused by claws and to reduce aggression. In emus it can also help to reduce the risk of birds being trapped by their claws in fences. Chick scars on hides can also be prevented by toe-trimming ostriches and emus soon after hatch.

Birds are naturally aggressive toward each other and use their feet to kick at each other. This behaviour can become a problem in commercial situations with 30% of skin damage in flocks with intact claws. Farm managers have their flocks’ toe-trimmed to blunt the claws enough so that kicking cannot do any great damage.

Toe-trimming also improves safety of farm workers by reducing the potential for injuries suffered by workers during handling of birds. Some ostriches hatch with a curled toe problem. Toe-trimming prevents the need to cull these birds and allows the bird to walk and forage normally.

1.3 How is Toe-trimming Carried Out?

Toe-trimming is carried out with day-old birds using a heated blade that cuts and cauterises the terminal segment of each toe. The toe-trimmer holds the bird gently and securely with its claw resting on the cutting plate. A foot pedal is then operated to bring the heated blade down onto the claw.

The blade cuts quickly and smoothly through the claw in one motion. The heat of the blade seals off the cut thus preventing bleeding and infection. Pain to the bird is minimised when the procedure is done correctly (see Chapter 5 for details).
1.4 When is Toe-trimming Carried Out?

Many years of experience have shown that toe-trimming birds soon after hatch is best practice.

Toe-trimming is carried out in the first few days of life depending on the preference of the farm manager. The most common age for birds to be toe-trimmed is soon after hatch.

Toe-trimming at this age results in fewer claw problems later in the birds’ life. Claw regrowth is also reduced.

1.5 Who Carries Out Toe-trimming?

Individual farmers carry out toe-trimming, but specialist toe-trimmers may become common in industry. The majority of birds are toe-trimmed by individual farmers or their staff.

An accredited toe-trimmer should toe-trim birds. This ensures that the welfare of the birds is maximised.

CASE STUDY Bird Welfare

John was a new stockperson working on an emu farm with five paddocks of juvenile birds. Four of the paddocks had birds that had been toe-trimmed in the usual manner while one paddock had birds that were not toe-trimmed.

John observed that some birds that had not been toe-trimmed were kicking aggressively and were more agitated than those in the other paddocks. After discussion with the farm manager it was decided that all the subsequent birds hatched on the farm would need to be toe-trimmed to reduce the kicking problem.

The manager explained that it is routine practice on the farm to toe-trim birds so that any aggression problems were minimised. He indicated that the welfare of the birds is enhanced in commercial situations by toe-trimming as it dramatically reduces injuries and skin damage caused by kicking.

John questioned the welfare aspects of toe-trimming as he thought that it might cause suffering. The manager’s reply suggested that chronic pain is minimised when toe-trimming is done correctly. He indicated that skin damage and injuries could reach 30% of the flock without toe-trimming – something that was unacceptable.
1.6 Quality Assurance

It is essential to ensure that toe-trimming is done correctly. Always doing the job right benefits birds, the farmer, the safety of farm workers and improves the welfare of birds with the curled toe syndrome.

How do people know this and how can you prove it? You can make sure quality is maintained by monitoring the job you are doing and taking action if something is not what it should be.

Toe-trimming quality involves all steps in the process including:

- Personal cleanliness
- Your contact with birds outside of work
- Catching birds
- Holding birds
- Equipment maintenance
- Toe-trimming
- Care of birds after toe-trimming
- Keeping records.

It is this process of doing a job correctly and providing a quality product that is called Quality Assurance or QA. Quality assurance involves producing a product that satisfies the customer’s requirements. For toe-trimmers this means birds that have the correct amount of toe trimmed so that welfare is maximised and kicking problems are minimised and skin quality improved.

1.7 Summary

- Toe-trimming is the removal of part of a bird’s toe
- Toe-trimming is carried out with a heated blade that cuts and cauterises the claw
- Toe-trimming decreases skin injuries caused by kicking and improves worker safety
- Toe-trimming birds with curled toes avoids the need to cull these birds
- Toe-trimming is carried out when the birds are young
- Most toe-trimming is carried out by individual farmers
- Quality Assurance is a process used to maintain toe-trimming standards
1.8 Learning Activities

1. Find out:

a) Industry attitudes to bird welfare.

b) The quality assurance process in industry.

Talk to a farm manager/stockperson about kicking and injuries in emus and ostriches, worker safety and incidence of curled toes. How much of an issue can it be?

Briefly describe your thoughts on toe-trimming and bird welfare.
Chapter 2. Biosecurity

Biosecurity is all about preventing infectious disease

Learning Outcome
After completing this chapter you will be able to conform to biosecurity requirements.

To achieve this learning outcome you need to be able to:
1. Describe why biosecurity is important in the ratite industry
2. Describe personal situations that may compromise biosecurity
3. Describe procedures for farm visits.
2.1 What is Biosecurity?

Biosecurity is the system used on a farm to prevent and control the introduction of infectious diseases and pests. The aim of biosecurity is to stop the introduction of infectious diseases to ratites and prevent the spread of diseases from an infected area to an uninfected area.

Biosecurity involves:

- Setting the farm up as a quarantine area
- Personal hygiene, including wearing clean clothes
- Not having any contact with disease carrying animals
- Ensuring vehicles are cleaned before entering the farm
- Ensuring all equipment is properly cleaned and sanitised
- Using correct methods of transferring birds from farm to farm
- Correct methods of disposing dead birds.

Biosecurity is especially important for some farmers and staff who regularly move from farm to farm. This movement has the potential to transmit disease unless biosecurity systems are maintained.

2.2 The Importance of Communication

It is essential that the farm manager and staff communicate prior to starting the job. An experienced contract toe-trimmer (if used) will confirm the following:

- Location of farm
- Person to contact on arrival at the farm
- How to contact the person
- Quantity and age of birds to be toe-trimmed
- Location of birds to be toe-trimmed
- Any other issues.

Regular communication should be maintained during the job. This ensures that there are no misunderstandings and that changes can be made if required.

Some form of report should be completed after the job. This lets the farm manager and staff know about any problems and will help them better manage their birds. If the farm manager conducts the toe-trimming then they should follow the protocols suggested.
2.3 Personal Status

Diseases that affect emus and ostriches can easily be spread by human contact. Because of this it is very important that staff working with birds make sure that they do not do things that will increase the risk of picking up or carrying a disease that affects emus and ostriches.

Persons working with birds should:

- Maintain personnel hygiene
- Sign Quarantine Declarations when required
- Follow the local biosecurity rules of any farms entered.

Person working in the industry should NOT:

- Keep domestic birds at home
- Come into contact with other birds such as poultry, ducks, geese, pet birds and pigeons
- Keep pigs.

Any person visiting a farm should sign the visitor’s book when arriving at and leaving the farm and keep a diary of visits. This provides a trail that can be investigated in the case of a disease outbreak.

Note: Biosecurity requirements will increase on farms with serious disease outbreaks.

2.4 Cleaning and Sanitising

It is essential to clean and sanitise all equipment associated with toe-trimming between jobs. This is part of biosecurity and helps to ensure that if a person toe-trims birds on a number of farms they do not spread infectious disease from one farm to another.

Cleaning and sanitising are both necessary. Cleaning is the removal of dirt from a surface but it does not kill germs and bacteria. Sanitising (sometimes called disinfecting) involves killing the bacteria and other organisms left on a surface.

A typical routine used to clean and sanitise is:

- **Vehicles**
  Sweep, and vacuum the inside of the vehicle to remove any dirt and dust. Wash the inside and outside with a sanitiser to kill any germs. Pay particular attention to cleaning the tyres.

- **Equipment**
  Brush off any loose dirt and dust from toe-trimming machines, electrical cords, surrounds and tools. Pull the toe-trimming machine apart and clean to ensure all foreign matter is removed. Sanitise all equipment to kill germs.

The label on a chemical product used should always be read and followed. Your supplier should be consulted if you are unsure about any recommendations.
2.5 Daily Routines

Biosecurity starts with the way you do your job. You should plan your daily routine to make sure you:

- Only visit one farm per day. Jobs on two different farms on one day are to be avoided
- Wear clean clothes and boots
- Clean and sanitise equipment when required
- Clean and sanitise vehicle before entering another farm
- Do not take any insects (especially flies) from one property onto another
- Do not take animals (pet dogs) with you when you visit a farm.

When you visit a farm you should always contact other farm staff before entering and follow any biosecurity rules. Use designated parking and change areas where these are available. Portable footbaths may be provided and should be used where required. Dispose of over-boots in appropriate bins.

2.6 Summary

- Biosecurity is used to minimise the spread of diseases from an infected area to an uninfected area
- Keeping in touch with all staff is an important part of the job
- Clear instructions are required to minimise problems
- Biosecurity depends on you and how you do your job
- Personal hygiene is important
- Minimise contact with backyard poultry, other birds and pigs
- Equipment and vehicles must be thoroughly cleaned and sanitised between jobs
- Always read the label on any chemical you use
- Visit only one farm each day

2.7 Key Skills

Make sure you practice:

- Communicating clearly with farm staff
- Cleaning vehicles and equipment
- Sanitising vehicles and equipment.
2.8 Learning Activities

Find out the biosecurity procedures. List your answers below:

a. Before going to a new farm
   ………………………………………………………………………...
   ………………………………………………………………………...
   ………………………………………………………………………...
   ………………………………………………………………………...

b. When entering the farm premises
   ………………………………………………………………………...
   ………………………………………………………………………...
   ………………………………………………………………………...
   ………………………………………………………………………...

c. During the work day
   ………………………………………………………………………...
   ………………………………………………………………………...
   ………………………………………………………………………...
   ………………………………………………………………………...

d. When leaving the farm each day
   ………………………………………………………………………...
   ………………………………………………………………………...
   ………………………………………………………………………...


e. When leaving the farm before going to the next farm
   ………………………………………………………………………...
   ………………………………………………………………………...
   ………………………………………………………………………...

2. Check your home situation. Do you:
   a. Keep birds at home? ………….
   b. Come into contact with wild or domestic birds? ………
   c. Come into contact with pigs? ………….
   Have family members who have contact with pigs, birds or poultry farms? ………

What should you do if you answered yes to any of these questions?
   ………………………………………………………………………...
   ………………………………………………………………………...
   ………………………………………………………………………...

3. What could happen if you do not follow biosecurity rules?
   a. To the birds on the farms you visit
      ………………………………………………………………………...
      ………………………………………………………………………...
      ………………………………………………………………………...
b. To you
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c. To your business or the business you work for
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Chapter 3. Handling Birds

A good stockperson minimises stress on the bird

Learning Outcome
After completing this chapter you will be able to handle birds for toe-trimming.

To achieve this learning outcome you need to be able to:
1. Place birds in appropriate container prior to toe-trimming
2. Hold birds while toe-trimming
3. Care for birds after toe-trimming.
3.1 Stockpersonship

Stockpersonship is an essential skill for all toe-trimmers. A good stockperson is fully aware of the well being of the birds they are working with. They aim to maximise the welfare of the birds at all times.

Birds are easily injured if they are not handled correctly. You must handle and treat them in such a way that they will not be injured.

Different people have different ideas about how the birds should be handled. Because of this a Domestic Emu and Ostrich Code of Practice (COP) has been written that tells people throughout the ratite industry how the birds are to be handled.

The Code of Practice says “the importance of good stockpersonship in animal welfare cannot be over-emphasised. Persons responsible for the care of emus and ostriches should be well trained, experienced and dedicated.” You should attempt to achieve and maintain this description.

3.2 Containers for Birds

Containers for birds must be appropriate for day olds and have sides that prevent the birds from escaping.

Chicks are usually held in plastic baskets or wooden boxes (Fig 2). The baskets or boxes should not be tilted or jolted as this scares the chicks. The temperature is usually kept between 30-32°C for day old birds.
3.3 Picking up Birds

You should always use smooth, unhurried movements when picking up birds so that you minimise stress. Birds will sometimes struggle so it is important that you keep a secure hold at all times.

Pick up the chick gently with one hand and hold it with your fingers wrapped around chest and abdomen.

Regardless of the birds age never:

- Handle the birds roughly
- Lift the bird by the neck, head, wing or tail
- Use containers that are not designed for handling birds
- Hold birds in containers for more than 24 hours before toe-trimming
- Tilt a container when birds are in it.

Fig 3. Method for holding ostrich in preparation for toe-trimming

3.4 Holding Birds

It is essential that you hold the bird correctly before, during and after the toe-trimming operation. The most important thing is to support the bird well so that it feels secure and cannot struggle.

Gently pick up the chick from the holding crate. Hold the bird in the palm of one hand and place the thumb of the other hand on the shin of the bird (Fig 3). Use the forefinger to guide one claw at a time of each foot onto the cutting bar (Fig 4).

Do not push too hard on the body of the bird or the shin of the leg as this may causes a fracture. Use light pressure on the claw to slightly angle it downward

Once a chick has been toe-trimmed, it should be placed into another container.
Advice Handling Problems

Bone and wing breakage is a serious problem in emus and ostriches. The major risk to birds is broken bones during handling both before and after toe-trimming. Some people have a tendency to rush handling to get the job done quickly. This can compromise bird welfare. Handlers should always work methodically so that birds are not unduly scared. Correct handling will minimise broken bones.

Birds can easily be bumped on objects when they are picked up for toe-trimming. Catchers should use both hands to carefully remove a bird for a confined position making sure that support under the bird is maintained at all times.

A problem associated with handling is smothering. Smothering occurs when birds pack into a corner of a container or holding area and cannot breathe. It is essential that someone watches for this at all times as it can happen quickly with disastrous results.

3.5 Summary

A good stockperson maximises the birds welfare at all times
Birds are easily injured if they are not handled correctly
Birds must be handled gently but firmly during penning, catching and holding
When placing birds in a container make sure that they do not panic by making the conditions appear as safe as possible
Never overcrowd a container. Constantly check for suffocation
Use the correct holding technique
Birds should not be held in a container for any time longer than that stated in the Code of Practice
3.6  Key Skills

Make sure you practice catching, holding and releasing birds under various circumstances. Concentrate on minimising stress and injuries to the birds.

3.7  Learning Activities

1. What are the most important things you should do when:

a. Placing birds in a container?

b. Picking up birds?

c. Holding birds?

d. You see birds packing into a corner?
Chapter 4. Set up

A good set-up minimises stress and injury to the bird and the operator

Learning Outcome
After completing this chapter you will be able to set-up toe-trimming equipment.

To achieve this learning outcome you need to be able to:
1. Adjust the toe-trimming machine
2. Arrange working conditions to minimise injury to self and assistants
3. Carry out routine daily equipment maintenance.
4.1 Why is Set-up Important?

Set up for the equipment and the operator is essential to achieve a quality job. Toe-trimming is a repetitive task that requires everything to run smoothly if consistency is to be maintained.

Correct setting-up involves:
- The position of the toe-trimming machine
- Adjusting the toe-trimming machine
- The location of extension cords
- The location of containers
- Adequate lighting

The correct set-up ensures that you will be comfortable and safe while working. The aim should be to minimise stress to the birds and to you.

The set-up used may need to be changed according to bird behaviour, the weather, shed conditions and how tired you are. Regular monitoring of these variables will help you when small adjustments are needed.

4.2 Choosing a Position

You will need to make a decision about the position of the toe-trimming machines. This will vary according to the birds and the facilities.

Containers to hold the birds should be set up to minimise the time required for the job and bird stress. The toe-trimming machine should be close to the birds so that bird handling time is reduced. Choose a stable level position on dry litter or concrete (Fig 5.).

Stability of the toe-trimming machine is essential to minimise movement and vibration. Any form of instability will reduce the accuracy of your toe-trimming.

Electrical cords on the floor can be dangerous. You need to place the cords so they are not in the way of people.

The amount of light is also important. Choose a well-lit position or use a light on the machine to make sure you can clearly see the claw.

Fig. 5 Set up for toe-trimming machine
4.3 Blade Adjustment

Always use the recommended blade. The usual blade for toe-trimming is the Lyon K blade.

Another way to measure blade temperature is to use a thermocouple. The temperature should be between 700 and 750°C.

It is essential that the blade is correctly adjusted. This needs to be regularly checked. A poorly adjusted blade results in an inconsistent toe-trimming job.

Check the following before you start:

- The correct blade is fitted
- The blade edges are sharp
- The blade is not bent or deformed. Throw it away if it is
- The sharp edge of the blade is facing you
- The blade sits flush on the cutting bar with no gap.

The blade has two sharp edges and should be turned over before it gets blunt (a maximum of approximately 500 birds). Regular blade changes are essential for clean cuts to maximise bird welfare.

The temperature of the blade during toe-trimming is also very important. Too little or too much heat can injure the bird. Temperatures that are too high can cause blisters on the toe stump while temperatures that are too low do not seal the stump wound properly. The blade should be set at a temperature appropriate to job requirements and conditions. Operators can avoid being burnt by the hot blade by following the correct protocols during toe-trimming. Protective gloves can be worn to prevent fingers being burnt.

Blade temperature is usually measured by looking at the blade colour. The blade should be a dull red to cut the toe properly. Remember, however, that the blade colour will vary according to the amount of light in the shed.

4.4 Backup Equipment

It is important you maintain your toe-trimming machines

Backup equipment is essential as breakages and failures will often occur. Make sure you have the necessary equipment to replace any problems quickly. Usual backup equipment should include:

- Spare toe-trimming machines
- Blades
- Appropriate service tools
- Spare leads (safety checked by an electrician)
- Light globes if used.

It is usually best to replace the whole toe-trimming machine if it is giving trouble through the day. This lets toe-trimming carry on so that minimum time is wasted. A thorough inspection of the machine can then be done at the end of the day.

Problems with power such as blackouts and voltage drops can be a problem when toe-trimming. A portable generator is useful if the power fails.
4.5 Operator Comfort

Operator comfort is essential to providing a quality toe-trimming job. Some operators sit and some stand - depending on personal preference.

The important thing is for you to be in a comfortable position to address the toe-trimming machine. This along with appropriate breaks ensures that fatigue will have a minimal effect on the quality of the operation.

You must be comfortable while you are doing the job or the result will be poorly toe-trimmed birds. Your ability to do a good job depends on your position - seated or standing, the temperature, ventilation, air quality and rest breaks.

All of these factors have an effect on your performance. You will need to decrease your toe-trimming rate at times to maintain quality. Do not be tempted to keep on toe-trimming if you cannot maintain quality.

Some of the things you should consider include:

- **Position**
  Set up so your line of vision is over your right shoulder if you are a right handed person (or left shoulder if you are left handed). Place the container holding the birds at waist height so you do not have to bend over and make sure that nothing clutters your work area.

- **Temperature**
  It is increasingly difficult to maintain quality for long periods of time as temperatures rise above 33°C. You should reduce your toe-trimming rate and/or take more breaks so that you can maintain concentration.

- **Ventilation and Air Quality**
  Always try to have enough ventilation around your work area so that air quality is maximised. When you are toe-trimming the air around you could include strong unpleasant smells, smoke from the toe-trimming operation, ammonia gas and dust from feed, dried faeces, feathers and skin. To reduce the effects of these you should locate your machine so that the smoke is either being blown or drawn away from your face. An appropriate dust mask should be used.

- **Rest Breaks**
  Toe-trimming requires full concentration to make sure a good job is done. Take breaks appropriate to the conditions to minimise getting tired.

- **Handling Methods**
  You can reduce being injured by wearing clothes that cover all your arms and legs and handling the birds carefully and gently so you don’t panic them.
4.6 Maintenance

Your toe-trimming machine should be pulled apart for a full service and cleaned between jobs. This includes:

- Thoroughly cleaning and sanitising the whole machine
- Checking that the machine is electrically sound
- Cleaning electrical contacts
- Replacing blades
- Aligning blades.

Daily maintenance should include checking to make sure the machine is electrically sound and that the blades are aligned and changed as required. All electrical cords should also be checked to ensure they are safe.

During the day check that the blade temperature is suitable, that the blade is making a snug fit against the cutting bar and that all claw residue is regularly cleaned off the blades. Make sure that the speed of the auto cam (if used) provides the correct cutting and cauterising time if you are using an automatic machine.

4.7 Key Skills

Make sure you practice:

- Setting up equipment
- Choosing a position for your equipment
- Adjusting the blade
- Positioning yourself to properly address the toe-trimming machine
- Maintaining your equipment.

4.8 Summary

- Your equipment set-up determines how well you can do your job
- The toe-trimming machine must be adjusted correctly and the blade must be sharp
- Position the machine so that it is stable and allows a good work flow
- Set the blade at an appropriate temperature according to job requirements and conditions (approximately 700°C)
- The blade must sit flush on the cutting bar
- Backup equipment should include spare machines, blades, leads and appropriate service tools
- Operator comfort depends on choosing a comfortable position to address the machine - this may be seated or standing
• Appropriate breaks are essential to maintain concentration
• Essential maintenance includes checking to make sure the machine is electrically sound, blades are aligned and changed as required
• You need to make sure your machine is in good order and regularly maintained.

4.9 Learning Activities

1. Watch an experienced toe-trimmer set up a machine. What do you notice?

2. Practice setting up your toe-trimming machine. Check stability, your position, blade adjustment and blade temperature. Get an experienced toe-trimmer to check your set up for various situations.

3. Briefly describe how you maintain your equipment.

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Chapter 5. Toe-trimming

Accurate toe-trimming minimises problems later in the bird’s life

Learning Outcome
After completing this chapter you will be able to toe-trim emus and ostriches:

To achieve this learning outcome you need to be able to
1. Describe the factors that can influence toe-trimming
2. Carry out toe-trimming procedures
3. Carry out procedures to seal a bleeding claw.
5.1 Initial Assessment

Correct toe-trimming will allow the birds to return to normal walking behaviour. There is considerable variation between flocks and the birds within a flock. This variation will include the flightiness of the birds, the length of the terminal digit and claw hardness. These factors are taken into consideration by successful toe-trimmers.

The flightiness will be quickly apparent when the birds are placed in containers. Quiet birds can be relatively easily toe-trimmed because bird handling does not cause any great problems. Excited birds, however, require greater concentration and will be more difficult to do.

Length of the terminal digit and hardness must be assessed. When you start you will quickly get a feel for the range of claw length and hardness. This will give you a base from which you can judge each bird to be toe-trimmed. Your decision for each bird will be made quickly so it is essential that you can quickly adjust your toe-trimming according to your assessment.

For soft claws you may need to reduce cauterisation time (by about half a second) or reduce blade temperature slightly to a dull red colour (about 50°C). Harder claws require the opposite adjustments – increased cauterisation time or blade temperature.

The location where to cut the terminal digit is the most critical factor to assess. Failing to cut the terminal digits at the correct location could result in either the claw regrowing or removal of too much of the digit makes it difficult for the bird to walk.

Other things to look for include claw deformities (particularly curled toes). Birds with these problems need extra care to ensure that toe-trimming does not make the claw worse.

Advice A Good Toe-trimming Job

When the toe-trimming set up is correct, a clean angled cut will be achieved with a characteristic click as the blade cuts the claw and cauterisation is performed. The cauterised section will have a light brown colour on the outer edge of the cut and darker brown colour in the centre of the claw where the blood vessels and bone have been cauterised.

There should be no bleeding if the job is done correctly. Bleeding can occur, however, if the claw has not been cauterised properly or if the blade is too hot.
5.2 Toe-trim Birds at Day Old

Day olds are usually toe-trimmed using a K blade.

Specific things to do when toe-trimming:
- Place the claw on the cutting bar-squarely (Fig 6.).
- Angle the claw downward.
- Make the cut at the first joint of the toe. This is the point where the claw can be moved up or down (Fig 7.).
- Fit an attachment to cutting bar to assist in achieving correct angle of cut.
- Ensure the cutting bar is water cooled to prevent burning of footpad when placed on cutting bar.

Fig 6. Placing the claw on cutting bar

Cross Sectional Diagram of an Emu Toe

Fig 7. Angle of cut for toe-trimming
(Illustration from RIRDC Report No 99/143-Part B by P. O’Malley and J. M. Snowden)
5.3 Sealing a Bleeding Claw

Some birds will bleed from the claw after it has been cut. There are a number of reasons why this occurs but the important thing is to reseal the claw so that it stops bleeding.

To reseal the claw it must be cauterised again. To do this successfully you must let the claw cool down. This means putting the bird down for a minimum of five minutes before placing the claw against the blade for a second time.

Do not continue to try to reseal the claw by pushing against the blade if it continues to bleed. Let the claw cool again for a longer period of time then re-cauterise.

Some birds’ claws may be difficult to seal. After two attempts at re-cauterising you should isolate the bird. If bleeding is excessive it can be temporarily controlled using pressure tape or a bandage.

5.4 Summary

- Follow the instructions provided
- Each bird’s claw must be assessed before toe-trimming. This happens very quickly
- Adjustments to the cut should be made according to the initial assessment made
- Cutting the claw at the junction of the terminal digit is the most critical factor to identify in ostriches and emus
- Day olds are usually toe-trimmed at day old with a K blade
- You must be in command of the bird so that you can present the bird accurately to the machine
- The claw must be angled downwards on the cutting blade or placed precisely in attachment
- Always let a bleeding claw cool before resealing.

5.5 Key Skills

Make sure you practice:
- Assessing each bird
- Toe-trimming birds
- Sealing bleeding claws.
5.6 Learning Activities

1. Watch an experienced toe-trimmer work. Note the smooth actions used, the speed achieved and the consistency maintained.

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2. Practice toe-trimming yourself. Concentrate on:
   - Holding the bird securely
   - Cutting at the correct position
   - Being consistent.

3. What areas can you improve?

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Feedback on the quality of toe-trimming helps to improve performance

Learning Outcome
After completing this chapter you will be able to assess the quality of the toe-trimming.

To achieve this learning outcome you need to be able to:
1. Describe measures of quality and how these can be used
2. Measure the quality of the toe-trimming job
3. Describe the adjustments required to rectify problems.
6.1 Bird Behaviour

An important part of being a good stockperson is the ability to identify both normal and abnormal behaviour. You must be able to detect problems by the way the birds are behaving. This is made more difficult by the great variability between birds.

It is vital that you assess the birds before, during and after toe-trimming. You should be constantly using all your senses to pick up any changes from normal. When a change is detected you will need to find out what the problem is and fix it where possible.

Normal behaviour during toe-trimming includes birds being active or being very quiet. They will naturally group together for safety and try to move away from the catcher. The birds should return to feeding and drinking shortly after toe-trimming.

Abnormal behaviour can vary greatly and includes the birds being extra noisy, extra flighty, panicking, packing into corners, shivering, not eating and drinking. These behaviours are all signs of stress.

6.2 Checking Birds

The toe-trimmer is responsible for the birds’ welfare during the toe-trimming process. The toe-trimmer must work to ensure that problems are minimised so that the birds’ behaviour returns to normal after the job.

Chicks will pick at their own toes or other chicks’ toes shortly or immediately after the toe-trimming procedure. If the claws are still bleeding it will be necessary to separate the bird and reseal the claw with a hot blade. If this doesn’t work use a pressure bandage.

It is especially important that someone watches the birds after they are toe-trimmed to see if their behaviour is normal. Stop toe-trimming and check what is going wrong if the birds show any signs of undue stress (eg. immobility or flightiness).

Things to check for include:

- Bleeding
- Injuries
- Smothering.

The toe-trimmer should check each bird before releasing it. Some toe-trimmers will isolate birds with problems immediately while others will pick them out later on. The important thing is that birds with problems such as bleeding are treated.

Bleeding is one of the major things to check for. It occurs when the claw is not sealed properly. Check your machine set-up (especially blade temperature) if the number of bleeders increases.

Birds will naturally pack to some extent. You should be watching this at all times and spread the birds if necessary to stop smothering. This is especially
Birds with bleeding claws are often called “bleeders.”

The final thing to check is that birds are provided water and feed quickly. This is essential to minimise stress. Make sure that it has been done.

6.3 Checking the Quality of the Job

The quality of a toe-trim is determined by:

- Cutting consistently at the first joint
- Minimising bleeding and other injuries.

A good toe-trimmer will maintain quality throughout the day. This means that the required cuts can be consistently achieved after many hours of work. Toe-trim variation will occur, however, as claws differ greatly and the birds may struggle. The important thing is to quickly assess the bird then make the positioning adjustments to achieve the desired result.

It is important to check the quality of your toe-trimming. Each bird should be quickly assessed by eye to see if the desired toe-trimming has been achieved. Adjustments to your technique or the machine will need to be made if this is not the case.

Qualitative scoring can be done after toe-trimming. The process involves observing 100 cut claws and recording if the cut was made correctly by giving a score as follows:

- Score 1 = cut at joint of first digit; correct angle (30°)
- Score 2 = cut showing some claw remaining on terminal digit, or slight excess of digit removed; inappropriate angle (40° or 20°); or stump wound bleeding slightly
- Score 3 = excessive claw remaining on first digit or excess of digit removed; gross errors with the angle of cutting (50° or 10°) or stump wound bleeding excessively.

The quality of your work is permanent as both good and poor toe-trimming will be obvious throughout the birds’ life (ie. appearance, growth and subsequent performance).

A toe-trimmer’s reputation comes solely from the quality of their work. Poor results usually means that the toe-trimmer will not be asked to do the job again.

Advice: A Quality job

Good toe-trimmers get a feel for when toe-trimming is going well. They can determine this from the ease of handling and the way the claws are being cut. The toe-trimmer can judge the stress on the birds and how the operation is going to the way the birds react. If the birds are struggling excessively this can be an indicator of problems and the toe-trimmer needs to make some adjustment to the process.
6.4 Summary

- The toe-trimmer is responsible for the birds’ welfare during toe-trimming
- Assess the flock before, during and after toe-trimming
- Both normal and abnormal behaviour should be identified
- Check regularly for bleeding, injuries and smothering
- Check the quality of your work regularly
- Qualitatively assess 100 toe-trimmed stumps
- Both good and poor toe-trimming will be obvious throughout the birds’ life

6.5 Key Skills

Make sure you practice:

- Recognising normal and abnormal behaviour
- Recognising bleeders and injured birds
- Recognising the signs of smothering
- Checking job quality.

6.6 Learning Activities

1. Get an experienced toe-trimmer to check some of the birds you have toe-trimmed. What feedback did you get? Repeat this exercise with birds that have been toe-trimmed in previous batches.

2. Check your own performance. Select 100 birds you have toe-trimmed. What percentage of cuts were not given a score 1?
Chapter 7. Records

Records are an essential part of the job

Learning Outcome
After completing this chapter you will be able to maintain records of toe-trimming activities

To achieve this learning outcome you need to be able to:
1.  Describe the records required for toe-trimming
2.  Capture data and maintain records ready for an audit
3.  Use records to improve performance.
7.1 Why are Records Needed?

Records are needed so that you can show what happened in a previous toe-trimming job. This is an important part of quality assurance because your records may be audited to see that you have achieved the required standards.

Auditing is a process where an independent auditor looks at your records to see that standards have been reached. The auditor may double check your records by observing birds.

Records can also help you to improve your own performance. They can show up trends that you may not be aware of and help you to identify the effect of small improvements.

Another reason to keep records is to help protect yourself if there is a dispute some time after the toe-trimming. A written record provides far better evidence than what you can remember.

7.2 What Records are Needed?

There is no set records that need to be kept but some things that should be included for each job are:

- A full job report - either using a form, a diary or a combination of both
- A job summary that you can keep for your records.

Essential information to record includes details of the farm, the number of birds, age, tag number, hatch date, job specifications, your performance and any problems you encounter. See the appendices at the back of this manual for some examples.

Other information that suits your needs could also be recorded. The main thing is to have a reason to keep the record – either for your own use or for someone else such as an auditor. It is recommended that records required for the Australian Ratite Industry on-farm surveillance plan be kept (see appendix H).
7.3 How can Records be used?

Records should be used to help you maintain the desired quality of toe-trimming. They also allow you to provide accurate answers when asked questions - you don’t have to rely on memory when asked about something.

Keeping records is only the first step of the improvement process. The second step is to analyse the records looking for trends and anything that does not look normal. This is much the same as checking the birds for abnormal behaviour – in one situation you are looking at birds while in the other you are looking at words and numbers.

The third step is to act on what you find in your records so that an actual improvement occurs. Changes should be made one at a time to see if it has the desired effect. Changing too many things at once makes it hard to determine which one has been beneficial.

The accuracy of your work is an important record to keep. This will show if your toe-trimming is getting better, worse or staying constant. Use the records to look for trends such as your performance with various batches of birds.

7.4 Summary

- Records are an important part of quality assurance
- Records show what happened in previous toe-trimming jobs
- Records can help you to improve your own performance
- Records can help protect you if there is a dispute
- Essential information to record includes details of the farm, the birds, the job specifications, your performance and any problems you encounter
- Records should be made of claw quality achieved, injuries and number of bleeders
- Records should be analysed then acted upon to make the desired change
- Independent auditors may look at your records to see that standards have been reached.
7.5  **Key Skills**

Make sure you practice:

- Keeping records
- Analysing records.

7.6  **Learning Activities**

1. Ask an experienced toe-trimmer to explain the records that you should keep. Briefly list these.

2. Practice completing the records you need to keep.

3. Briefly describe how you could use your records to improve your performance.
Appendices

Appendix A  Targets
Appendix B  Self Assessment
Appendix C  Job Summary
Appendix D  Toe-trimming Job Record
Appendix E  Toe-trimming Uniformity Sheet
Appendix F  No Toe-trimming Policy
Appendix G  Sanitisers
Appendix H  Biosecurity records
Appendix A  Targets

The following pages highlight targets that toe-trimmers should achieve. These targets have been developed as the benchmarks required for a professional job.
## Toe-trimmers Targets

(List of targets toe-trimmers should be aiming to achieve)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIOSECURITY</strong></td>
<td></td>
</tr>
<tr>
<td>Arrival at farm</td>
<td>Toe-trimmers should notify the farmer on arrival</td>
</tr>
<tr>
<td>Farm Biosecurity</td>
<td>Toe-trimmers should check farm biosecurity policy and follow instructions</td>
</tr>
<tr>
<td>Personal Biosecurity</td>
<td>Toe-trimmers should not keep backyard domestic hens or other avian species at home or have contact with pigs</td>
</tr>
<tr>
<td>Diary</td>
<td>Toe-trimmers should keep a diary of all their farm visits</td>
</tr>
<tr>
<td>Vehicles and equipment</td>
<td>Cleaned and sanitised inside and out after each toe-trimming job</td>
</tr>
<tr>
<td><strong>EQUIPMENT SET UP</strong></td>
<td></td>
</tr>
<tr>
<td>Stable equipment</td>
<td>Toe-trimming equipment should be set up on a secure table or the legs of the machine placed on a firm base to prevent vibrations and errors when cutting claws</td>
</tr>
<tr>
<td>Levelling</td>
<td>The toe-trimming equipment should be level to ensure that claws are cut consistently</td>
</tr>
<tr>
<td>Lighting</td>
<td>Lighting should be consistent for each toe-trimming job so that desired blade colour is achieved consistently. The claw should be well lit (at least 150 200 lux) to enable the operator to clearly see where the cut needs to be made</td>
</tr>
<tr>
<td>Correct blades</td>
<td>The blades used must be designed for toe-trimming. The specific blade to use is the K blade</td>
</tr>
<tr>
<td>Sharp blades</td>
<td>The blade should be sharp and able to cut a strip of paper when cold. The sharp edge of the blade should be facing the operator</td>
</tr>
<tr>
<td>Change blades</td>
<td>Blades should be changed when required. Maximum usage for a blade is 500 birds</td>
</tr>
<tr>
<td>Blade temperature</td>
<td>Blade temperature should be appropriate to the conditions. This will vary with the environmental temperature and claw hardness. A dull red blade (700°C measured with a thermocouple) is usual</td>
</tr>
<tr>
<td>Cutting bar</td>
<td>The cutting bar must be straight and clean</td>
</tr>
<tr>
<td><strong>OCCUPATIONAL HEALTH AND SAFETY</strong></td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Target</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Operator position</td>
<td>A seated or standing position to address the machine should be used according to operator preference. The position used should minimise fatigue, aching limbs and assist the operators to maintain full concentration while toe-trimming</td>
</tr>
<tr>
<td>Ventilation</td>
<td>Equipment should be set up in a position where ventilation directs poor air quality away from the operator</td>
</tr>
<tr>
<td>Temperature</td>
<td>When environmental temperature reaches 33°C toe-trimming rate should be stopped</td>
</tr>
<tr>
<td>Dust mask</td>
<td>A personalised dust mask with air supply is recommended</td>
</tr>
<tr>
<td>Air quality</td>
<td>Adequate ventilation is required to vent poor air quality away from toe-trimmer to improve working conditions</td>
</tr>
<tr>
<td>Regular breaks</td>
<td>Rests breaks should be taken every hour to ensure that the toe-trimmer can recuperate and help to maintain concentration</td>
</tr>
<tr>
<td>Injuries/First Aid kit</td>
<td>Toe-trimmers should handle birds carefully to prevent injuries. First aid kit is recommended to enable injuries particularly burns to be treated immediately</td>
</tr>
<tr>
<td>Equipment safety</td>
<td>Toe-trimming equipment should be regularly checked for electrical faults to prevent injuries (electrical shock) and equipment breakdown</td>
</tr>
</tbody>
</table>

**YARDING BIRDS**

| Chick containers       | Chicks should be held at appropriate stocking density to prevent overcrowding and improve response to toe-trimming                      |
| Dim lighting           | Dimming the lighting (where possible) reduces the stress in birds when handling                                                        |
| Flightiness            | Persons handling birds can reduce stress by not shouting, clapping or waving hands                                                    |
| Staff movement         | Staff should move quietly and smoothly without rushing to reduce stress on birds                                                        |
| Crates                 | Containers for holding birds should not be overstocked, adequately ventilated and free of abrasive objects                              |
| Smothering             | Forcing birds into corners of containers should be avoided to prevent excessive packing and smothering                                  |
| Injuries               | Containers for holding birds should be free of any objects which might cause injury                                                      |
| Catching               | Birds should be picked up by both legs only as injuries will occur if picked up by the wings, head, neck or tail                          |

**HOLDING BIRDS FOR TOE-TRIMMING**

<p>| Holding                | Chicks should be held gently in the palm of the one hand with the thumb of the other hand placed down the shin of the leg with the forefinger used to manoeuvre the claw onto the cutting bar |
| Gentle handling        | Avoid handling birds by head, wing, neck or tail                                                                                       |
| Injuries               | Injuries should be minimised particularly to head and body                                                                            |
| Position of the bird   | Claws should be placed squarely on the cutting bar and held at angle of 30° so that an angled cut can be achieved                        |</p>
<table>
<thead>
<tr>
<th><strong>TOE-TRIMMING</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Claw hardness</strong></td>
</tr>
<tr>
<td><strong>Temperature while toe-trimming</strong></td>
</tr>
<tr>
<td><strong>Lighting source</strong></td>
</tr>
<tr>
<td><strong>Edge of terminal segment</strong></td>
</tr>
<tr>
<td><strong>Cauterisation</strong></td>
</tr>
<tr>
<td><strong>Bleeders</strong></td>
</tr>
<tr>
<td><strong>Rounding claws</strong></td>
</tr>
<tr>
<td><strong>Angle of cut</strong></td>
</tr>
<tr>
<td><strong>Correct settings</strong></td>
</tr>
<tr>
<td><strong>Blade cleaning</strong></td>
</tr>
<tr>
<td><strong>Vocalisation</strong></td>
</tr>
</tbody>
</table>
Appendix B  Self Assessment

The following pages give a series of questions that you can use to assess your performance.
## SELF ASSESSMENT

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIOSECURITY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you contact the person on farm responsible for biosecurity?</td>
<td></td>
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<tr>
<td>Farm biosecurity policy checked and followed?</td>
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<tr>
<td>Personal quarantine status checked?</td>
<td></td>
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<tr>
<td>Did you wash and sanitise your vehicle inside and out between jobs?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you sanitise equipment between jobs?</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>EQUIPMENT SET UP</strong></td>
<td></td>
<td></td>
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<tr>
<td>Did you ensure the toe-trimming equipment was set up in a stable, vibration free environment?</td>
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<tr>
<td>Did you ensure that the toe-trimming equipment was level?</td>
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<tr>
<td>Did you ensure that there was sufficient lighting in the working area?</td>
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<tr>
<td>Were the correct blades installed for the toe-trimming job?</td>
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<tr>
<td>Did you ensure that blades were sharp?</td>
<td></td>
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<tr>
<td>Was the blade temperature assessed?</td>
<td></td>
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<tr>
<td><strong>OCCUPATIONAL HEALTH AND SAFETY</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Do you use comfortable seating while toe-trimming?</td>
<td></td>
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<tr>
<td>Was there adequate ventilation in the toe-trimming area?</td>
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<tr>
<td>Did you reduce the rate of toe-trimming when you became hot and uncomfortable?</td>
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<tr>
<td>Did you use a dust mask while toe-trimming?</td>
<td></td>
<td></td>
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<tr>
<td>Did you make any attempts to improve air quality in the toe-trimming area?</td>
<td></td>
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<tr>
<td>Did you take regular rest breaks?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you take adequate precautions to protect yourself from injuries from birds and toe-trimming equipment?</td>
<td></td>
<td></td>
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<tr>
<td>Did you have an electrical safety check on toe-trimming equipment?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have a first aid kit?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BIRDS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were chicks held in suitable containers?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Was the lighting dimmed before the birds were handled?</td>
<td></td>
<td></td>
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<tr>
<td>Was every attempt made to reduce stress in birds?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did staff move quietly and slowly while handling birds?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was every attempt made to reduce packing or smothering of birds?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were birds handled in the appropriate manner?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### HOLDING BIRDS FOR TOE-TRIMMING

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were chicks held gently in the palm of one hand with forefinger of the other hand placed along the shin of the leg to guide the claw onto the cutting bar?</td>
<td></td>
</tr>
<tr>
<td>Were chicks handled gently at all times?</td>
<td></td>
</tr>
<tr>
<td>Did staff use appropriate measures to reduce any injuries on birds while holding them?</td>
<td></td>
</tr>
<tr>
<td>Were birds held appropriately so that claw could be inserted onto the cutting bar?</td>
<td></td>
</tr>
<tr>
<td>Were the claws placed at angle of 30° onto the cutting bar?</td>
<td></td>
</tr>
<tr>
<td>Did you use an attachment on the cutting bar to assist in achieving an angled cut?</td>
<td></td>
</tr>
</tbody>
</table>

### TOE-TRIMMING

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was the claw hardness determined before toe-trimming commenced?</td>
<td></td>
</tr>
<tr>
<td>Was toe-trimming stopped if environmental temperature reached 33°C?</td>
<td></td>
</tr>
<tr>
<td>Was the lighting source sufficient for the toe-trimmer to clearly see where the claw should be cut?</td>
<td></td>
</tr>
<tr>
<td>Was cauterisation time at least 2 seconds?</td>
<td></td>
</tr>
<tr>
<td>Were the claw re-cauterised for 0.5 secs if the wound continued to bleed?</td>
<td></td>
</tr>
<tr>
<td>Was toe-trimming rate and cauterisation time reviewed if there was a high % of bleeders?</td>
<td></td>
</tr>
<tr>
<td>Was the claw angled at 30° (or placed in cutting bar attachment) to the horizontal on the cutting blade during cutting and cauterisation?</td>
<td></td>
</tr>
<tr>
<td>Was the claw residue scraped from the cutting blade every 15-30 mins?</td>
<td></td>
</tr>
<tr>
<td>Was the correct set up for equipment maintained?</td>
<td></td>
</tr>
<tr>
<td>Was the vocalisation of bird normal after toe-trimming?</td>
<td></td>
</tr>
<tr>
<td>Was the feeding, drinking and walking behaviour of birds normal after toe-trimming?</td>
<td></td>
</tr>
<tr>
<td>Were strategies in place to care for birds showing excessive bleeding after toe-trimming?</td>
<td></td>
</tr>
<tr>
<td>Was the % of bleeders less than 1%?</td>
<td></td>
</tr>
</tbody>
</table>

### RECORDS - Do you maintain records of:

<table>
<thead>
<tr>
<th>Record Type</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication with other staff or farmer</td>
<td></td>
</tr>
<tr>
<td>Light levels</td>
<td></td>
</tr>
<tr>
<td>Blade type</td>
<td></td>
</tr>
<tr>
<td>Changing blades</td>
<td></td>
</tr>
<tr>
<td>No of times blade cleaned</td>
<td></td>
</tr>
<tr>
<td>Ventilation near toe-trim area</td>
<td></td>
</tr>
<tr>
<td>Rest breaks</td>
<td></td>
</tr>
<tr>
<td>Operator injuries</td>
<td></td>
</tr>
<tr>
<td>Safety checks</td>
<td></td>
</tr>
<tr>
<td>Stress on birds</td>
<td></td>
</tr>
<tr>
<td>Flightiness</td>
<td></td>
</tr>
<tr>
<td>% Injuries and deaths</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td></td>
</tr>
<tr>
<td>Hatch date of birds and age of toe-trimming</td>
<td></td>
</tr>
<tr>
<td>Claw hardness</td>
<td></td>
</tr>
<tr>
<td>Qualitative assessment of stump condition</td>
<td></td>
</tr>
<tr>
<td>Angle of cut</td>
<td></td>
</tr>
<tr>
<td>Cauterisation time (secs)</td>
<td></td>
</tr>
<tr>
<td>Toe-trimming rate</td>
<td></td>
</tr>
<tr>
<td>Toe-trimming outside specification</td>
<td></td>
</tr>
<tr>
<td>% Bleeders</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C   Job Summary

A suggested job summary form is shown on the following page. It specifies what has happened during a toe-trimming job. The job summary form should be signed by both the toe-trimmer and the farm manager to show that both agree on what has happened. Both parties should keep a copy for their records. If the farm manager is the person who has done the toe-trimming, maintaining records is important for self assessment, clients and auditors.
Job Summary

Farm: ___________________________      Job Dates: _____________

Flock details (age): ___________________________________________

Instructions: ___________________________________________________________________________

Number of birds toe-trimmed: ___________    Toe-trimmer: ____________________

Biosecurity

Farm biosecurity policy observed   Yes  No  N/A
Farm manager contacted before job
Sanitation procedures for equipment and vehicles carried out

Set-up

Equipment set-up correctly   Yes  No  N/A
Equipment regularly adjusted according to conditions

Bird Handling

Bird stress minimised   Yes  No  N/A

Toe-trimming

Birds toe-trimmed correctly   Yes  No  N/A
Quality of toe-trimming regularly assessed
Bleeders less than 1%

Records

Job details recorded and maintained   Yes  No  N/A

Weather Conditions

……………………………………………………………………………………………………...
……………………………………………………………………………………………………...

OTHER Comments

……………………………………………………………………………………………………...
……………………………………………………………………………………………………...
……………………………………………………………………………………………………...

Toe-trimmer: .........................    Farm Manager: .................    Date:.............
Appendix D  Toe-trimming Job Record

The following three pages show a suggested record form that could be used to keep records of each job performed. The job record form could be used in place of or in conjunction with a job diary. The important thing is to keep some form of records of each job.
Toe-trimming Job Record

1. Job Number: ...........................................  Job Dates: ...........................................

2. Farm Details
   Farm: ............................................................................................
   Address: ............................................................................................
   Phone Number: ...................................................................................
   Farm Manager: ....................................................................................
   Flock details:  
     • .................................................................................................
     • .................................................................................................
     • .................................................................................................
   Comments: ..........................................................................................

3. Job Details
   Number of birds to be toe-trimmed: .................................................................
   Type of facility: .............................................................................................
   Quality assessment: Ave. Score achieved .........................................................
   Other instructions: .........................................................................................
   Instructions provided by: ................................................................................
   Communication with farm contact(s)  
     Before Toe-trimming  During Toe-trimming  After Toe-trimming
   Comments: .................................................................................................

4. Conditions
   Temperature(s): ...............° C or ............... to ...............° C
   Humidity  
     low  medium  high
   Ventilation:  
     nil  poor  good  very good
Dust levels
- slight
- medium
- high

Odour:
- nil
- slight
- strong
- very strong

Comments:
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

5. Bird Handling

Flightiness of flock:
- low
- medium
- high

Type of facility used:
........................................................................................................................................
........................................................................................................................................

Catching method:
........................................................................................................................................
........................................................................................................................................

Comments:
........................................................................................................................................
........................................................................................................................................

6. Toe-trimming

Machine:
- Lyon
- Other

Blade:
- Lyon K
- Other

Blade changes:
Every …………..birds (average) or …………..hours

Blade cleaning:
Every …………..birds (average) or …………..hours

Claw hardness:
- soft
- normal
- hard

Birds toe-trimmed according to instructions:
- Yes
- No

Method of quality assessment:
........................................................................................................................................

Rate:
…………….. birds per minute

Cauterisation time:
…………….. seconds (average)

Angle of cut:
…………….. degrees

Injuries to birds:
…………….smothers …….. broken limbs

Other ........................................................................................................................................

Bird deaths:
…………..

Bleeders:
…………….. or …………..%

Uniformity
…………….. % (see uniformity sheet)
7. Operators
Number of toe-trimmers: .................................................................
Working hours: .................................................................
Rest breaks: .................................................................
Injuries: .................................................................
Comments: .................................................................

8. Biosecurity
Compliance with farm biosecurity: full part none

Equipment - daily: cleaned sanitised other ............... 
Equipment – job end: cleaned sanitised other ............... 
Cars - daily cleaned sanitised other ............... 
Cars – job end: cleaned sanitised other ............... 
Comments: ................................................................

Team Leader: ......................... Date: .............
Appendix E  Toe-trimming Uniformity Sheet

The following page shows a uniformity sheet that could be used to demonstrate the quality of your work.

Instructions
1. Randomly select 100 birds to measure
2. Complete job details including the farm, the batch number, date and instructions.
3. Score the quality of toe-trimming of each bird (1, 2 or 3)
4. Mark each score on the table.
5. Indicate the percentage of birds within acceptable limits. Acceptable accuracy is 90%.
### Toe-trimming Uniformity Sheet

**Farm:** ……………………………… **Shed:** …………………

**Toe-trimmer:** …………………………… **Date:** …………………

**Instructions:**

Qualitative scoring can be done after toe-trimming. The process involves observing 100 cut claws and recording if the cut was made correctly by giving a score as follows;

- Score 1 = cut at joint of digit; correct angle (30°)
- Score 2 = cut showing some claw remaining or slight excess of digit removed or inappropriate angle (40° or 20°) or stump wound bleeding slightly.
- Score 3 = excess claw remaining or excess of digit removed; gross errors with the angle of cutting (50° or 10°) or stump wound bleeding excessively.

Tick score for 100 birds assessed as 1, 2 or 3

<table>
<thead>
<tr>
<th>Bird No</th>
<th>Score 1</th>
<th>Score 2</th>
<th>Score 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
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<td>4</td>
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<td>5</td>
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<td>10</td>
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Toe-trimmer                       Farm Manager
Appendix F  No Toe-trimming Policy

The majority of commercial ratites (especially emus) are toe-trimmed because birds can injure each other by using their sharp claws. Some producers, however, do not toe-trim their birds.

Aggression and injuries are seen more when:

- Birds are not able to obtain their fair share of food and water and they start attacks on other birds
- High humidity and temperature causes bad tempers in the flock and leads to aggression
- Excessive stocking density increases the stress on birds. This encourages more competition and aggressive attacks between birds.

Farmers who use a no-cut policy need manage their birds more carefully to ensure that aggression is minimised. They:

- Cull birds that start aggressive behaviour in the flock
- Cull weak birds from the flock
- Provide enough foraging material for birds to reduce aggressive attacks on other birds
- Do not buy birds with a reputation for aggression
- Employ staff who are gentle with birds and have a positive attitude to their job. This results in a flock which has lower stress and less liable to engage in aggression
- Provide surroundings for birds that are free of sharp materials that may cause injury to birds.
Appendix G  Sanitisers

There are a number of chemical products that can be used for disinfecting and sanitising. Most of these chemicals have different uses and they work in different ways. It is important to use the correct chemical for the job. The main chemical types are explained below:

Alcohols
Alcohols used as disinfectants are usually Isopropyl Alcohol and Ethyl Alcohol. They are used to disinfect smaller objects such as instruments and vaccinating needles. Because alcohols are flammable and evaporate quickly they are not used for large objects or large surfaces.

Chlorine compounds
Chlorine compounds work well on clean surfaces but are neutralised where the surface is dirty. Care needs to be taken when using these chemicals, as the fumes are toxic to humans and ratites. If you do not handle chlorine compounds properly they can irritate the skin and corrode metals.

Chlorine compounds should be used with water from the town supply. They are not as effective in tank or dam water. Maximum effectiveness is obtained when used with warm water.

Synthetic Phenols
Synthetic Phenols are fast acting and are used to disinfect footpaths, floors and equipment. These types of disinfectants can be corrosive, so it is important to read the label. If you still have questions obtain a copy of the Material Safety Data Sheet (MSDS) for the product from the supplier.

Phenols can be made to work more efficiently when formulated with ionics in an alkaline environment. They work longer than other types of disinfectants and do a better job than iodine of chlorine based disinfectants if you are disinfecting a surface with organic material (such as blood) on it.

Quaternary Ammonium compounds (Quats)
Quats are good at disinfecting surfaces such as floors, walls and equipment that have been previously cleaned. These compounds are usually colourless, do not irritate, do not smell and can be used for removing unpleasant smells.

It is important to select Quats carefully, as some cannot be used where soap or soap residue is left after cleaning. The effectiveness can also be reduced if organic material (such as blood) has being left after cleaning. Check with your supplier to get the right compound.
Appendix H    Biosecurity records

Model Ratite Identification/Movement/Death Register

An example of the minimum level of information that must be available at all times at the farm:

Tag number

Hatch date/arrival at farm

Farm of origin

PIC and RFA code

On-farm transporter

On farm location

Category

Comments

Death date/movement date

Current age in months

Age at death in months

Destination

Off-farm transporter

Notes:

• Tag Number: details of introduced ratite tag numbers, replacement tags issued, tag numbers of destocked ratites etc.

• PIC and RFC code: details of the farm of origin of introduced ratites, property identification number and ratite farm accreditation code.

• Category: eg, breeder, dead, slaughter and grower.

• Comments: this provides an area to record probable cause of death, outcomes of veterinary advice or investigations, reasons for movement etc.
Model Agricultural and veterinary chemical use register

This register should identify all veterinary and agricultural chemicals stored on the farm, the date they were received, the supplier, the chemical name, the quantity purchased and currently on farm, the batch numbers and the expiry dates.

**Chemical register:**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Date received</th>
<th>Supplier</th>
<th>Quantity purchased</th>
<th>Quantity on farm</th>
<th>On farm storage location</th>
<th>Batch number</th>
<th>Expiry date</th>
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</table>

There should also be a record of all treatments given to the ratites, identifying the ratites that were treated, the drug used, the dose, the treatment date, any withholding period (WHP) or export slaughter interval (ESI) and the date upon which the meat would subsequently be suitable for human consumption.

**Treatment register**

<table>
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<tr>
<th>Tag number</th>
<th>Date</th>
<th>Drug</th>
<th>WHP</th>
<th>ESI</th>
<th>Date suitable for human consumption</th>
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AUSTRALIAN RATITE INDUSTRY ON-FARM SURVEILLANCE PLAN

Report of Pre-accreditation veterinary audit and declaration of compliance with the Australian Ratite Industry On-Farm Surveillance Plan.

Owner

Name, Address of Property

Property Identification Code

Management (type of enterprise)

Boundary fences - description

Subdivision fences - description

Yards and facilities for handling ratites -

Neighbouring properties and enterprise type

Proximity (and details) of other ratite and/or poultry enterprises, including backyard poultry

.................................
Number and type of ratites (i.e. age structure)

Movement Records:
Has a satisfactory flock Ratite Identification/Movement/Death Register for the farm been developed and implemented?

YES   NO

Comments:

Biosecurity:
Has a satisfactory Biosecurity plan (as detailed in the ARIOFSP) for the farm been developed and implemented?

YES   NO

Comments:

Veterinary monitoring and disease surveillance
Has the guidelines for the routine veterinary supervision of an accredited ratite farm been explained to the manager/owner?

YES   NO

Comments:
Declaration of Compliance with the Australian Ratite Industry Surveillance Plan:

I (name) ....... hereby declare that (farm) complies with the requirements for Pre-accreditation under the ARIOFSP.

Signed: .................................................................
Date:.................................................................

Address:.................................................................................................................................

I understand that this information is being provided to a Commonwealth entity.
I further understand that giving false or misleading information is a serious offence.
AUSTRALIAN RATITE INDUSTRY ON-FARM SURVEILLANCE PLAN
PRODUCER DECLARATION (MANDATORY)

Some or all of the information supplied on this declaration may be used as required to obtain the necessary export clearances from various Government departments.

Supplier name:...........................................................................

Property identification code:........................................Ratite Farm Accreditation Code:........

Date of Expiry of Accreditation under the Australian Ratite Industry On-Farm Surveillance Plan:........................................................................................................

Postal Address:
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Property Address:
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Telephone:........................................Fax:................................................

Number of birds being supplied:
.................................................................................................

Proposed slaughter date:.................................................................

For processing at ........................................abattoir

Please circle your answers to the following questions.

Has the property on which the birds have been reared, ever been quarantined?

Yes    No

If yes please provide details:
.................................................................................................
.................................................................................................
.................................................................................................

73
Has there been an outbreak of a notifiable disease, including Newcastle disease and Avian Influenza within a 20km radius of the farm in the last 12 months?
   Yes* No

If medications etc. were used, do the birds comply with the stipulated withholding periods?
   Yes No

To the best of your knowledge, are the birds free of chemical residues?
   Yes No

Have Hormonal Growth Promotants been used?
   Yes No

Were the birds hatched and reared on the farm?
   Yes No

If No, is the supplying farm fully accredited under the Australian Ratite Industry On-Farm Surveillance Plan (EU approved)?
   Yes No

Was the Load Out truck clean on arrival?
   Yes No

If No, where was it washed?

Are microchips used?
   Yes No

Location of microchips:
   Neck Thigh Other (please specify)

NB. The following birds can not be accepted –
   • Birds with a “notifiable” disease such as Newcastle disease, Avian Influenza etc.
   • Birds from within a 20km radius of a quarantine zone.
   • Birds that are still within the prescribed withholding periods of medications, anthelmintics, insecticide sprays etc.
   • Birds suspected of chemical residue contamination.
   • Birds on which HGPs (Hormonal Growth Promotants) have been used.
The attached “Schedule of Birds for Slaughter” forms part of this “Suppliers Declaration”.

I, .................................................., do hereby solemnly declare that the information given is true and accurate.

Signature:..............................................
Date..................................................

Witness

Signature:..............................................
Date..................................................

Name:........................................................................................................

...........

Position:........................................................................................................

......
## Schedule of Birds for Slaughter – to be attached to the Producer Declaration

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<th>Number of Birds</th>
<th>Tag ID of birds</th>
<th>Age Months</th>
<th>Sex</th>
<th>Live weight (kg)</th>
<th>EU eligible</th>
<th>Months on property</th>
<th>Owner if different to producer</th>
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