

final report

Project code: L.PDN.1601

Prepared by: Peter Smith
AgForce Queensland

Date published: 8 March 2017

PUBLISHED BY
Meat and Livestock Australia Limited
Locked Bag 991
NORTH SYDNEY NSW 2059

Development of lay spaying training program

Meat & Livestock Australia acknowledges the matching funds provided by the Australian Government to support the research and development detailed in this publication.

This publication is published by Meat & Livestock Australia Limited ABN 39 081 678 364 (MLA). Care is taken to ensure the accuracy of the information contained in this publication. However MLA cannot accept responsibility for the accuracy or completeness of the information or opinions contained in the publication. You should make your own enquiries before making decisions concerning your interests. Reproduction in whole or in part of this publication is prohibited without prior written consent of MLA.

Abstract

In 2012, with the proposed introduction of the Australian Animal Welfare Standards and Guidelines for Cattle, the Cattle Council of Australia (CCA) identified an industry need to introduce a National Accreditation Scheme for lay persons who spay cattle using the Dropped Ovary Technique (DOT). To address this need, CCA in conjunction with AgriFood Skills Australia and beef industry stakeholders initiated a project which gained endorsement for a nationally recognised Unit of Competency for spaying in June 2013, AHCLSK335 Conduct dropped ovary technique procedures for spaying cattle. This project was established to design, construct and pilot a training program and training materials based on this Unit of Competency.

The requirements for the training program included development of a training delivery guide for both trainer and learner, and assessment tools including a recognition of prior learning kit. The project also required associated documentation and registration actions for the Registered Training Organisation and the Animal Ethics Committee approval process.

Planning and delivery of the pilot program required participation by experienced cattle vets, use of cattle, good quality facilities for spaying and extensive documentation for quality and compliance purposes.

The 2-day pilot program tested the training and assessment tools with 4 experienced cattle spaying vets. The outcomes of the Pilot Program, the Training Delivery Guide, Assessment Guide and the RPL Kit were extensively reviewed and a Video Evidence Checklist was added. All final products of the project were reviewed and accepted by the Project Steering Committee. The training program can now serve as the basis for development of an accreditation process for DOT spaying by non-veterinarians.

Table of Contents

Abstract.....	2
1 Background	4
1.1 Project Brief	4
2 Projective objectives	4
Phase 1 RTO engagement and Animal Ethics approval	4
Phase 2: Resource development	5
Phase 3: Pilot delivery.....	5
3 Methodology.....	5
3.1 RTO requirements.....	5
3.2 Animal ethics approval.....	5
3.3 Training delivery guide.....	5
3.4 Assessment guide	6
3.5 Pilot program	6
3.6 Recognition of Prior Learning (RPL)	6
4 Results.....	6
4.1 Animal ethics.....	6
4.2 The delivery guide.....	7
4.3 Assessment guide	7
4.4 Pilot program	7
4.5 Recognition of Prior Learning	9
5 Discussion.....	10
5.1 Learning materials.....	10
5.2 RPL.....	11
6 Conclusions/recommendations	11
6.1 New learners and tailored training programs.....	11
6.2 Accreditation System- the final phase	11
6.3 Recommendations	12
7 Bibliography	13
Appendix 1	15

1 Background

Spaying is an important husbandry technique which prevents unwanted breeding in livestock. Spaying is largely restricted to cattle in northern and western Australia in situations where control of bulls is difficult. According to anecdotal feedback from a 2010 Australian Cattle Veterinarians Survey, there are approximately 700,000 cows and heifers spayed annually in Australia.

The Australian Animal Welfare Standards and Guidelines for Cattle were endorsed by State and Territory Governments in January 2016 and state that: 'A person spaying a cow must be a veterinarian or, if permitted in the jurisdiction, be accredited or be under the direct supervision of a veterinarian or a person who is accredited'. At the time the draft standards were proposed in 2012, there were no nationally recognised DOT training standards available to train and assess prospective lay cattle spayers and/or conduct recognition of prior learning (RPL) for current operators. Without nationally recognised training standards, there could not be an effective accreditation process.

To address this training standard shortfall, CCA in conjunction with AgriFood Skills Australia and beef industry stakeholders initiated a project which wrote and gained endorsement for a nationally recognised Unit of Competency for spaying in June 2013. The Unit of Competency 'AHCLSK335 Conduct dropped ovary technique procedures for spaying cattle' is packaged as an elective unit of the Certificate III in Agriculture from the Agriculture, Horticulture and Conservation and Land Management training package.

1.1 Project Brief

The development and endorsement of the spaying unit of competency has been the first step on the path to establishing a National Accreditation Scheme. The project brief requires working closely with the CCA, Australian Cattle Veterinarians and beef industry stakeholders to facilitate the training implementation process and assist with developing the requisite criteria for establishing a national accreditation scheme. In order to meet these requirements, the following needs to be achieved:

1. Development of training, assessment and guidance materials (including recognition of prior learning [RPL] processes)
2. Identification of potential/interested RTOs
Working with selected RTO/s to:
3. Establish the 'animal ethics in training' criteria and Animal Ethics Committee approval
4. Provide a 'train-the-trainer' pilot program to a group of RTOs and/or beef industry personnel involved in DOT spaying.

2 Projective objectives

Phase 1 RTO engagement and Animal Ethics approval

- establishing PSC, Project and Consultation Plan
- undertaking consultation and discussions to facilitate engagement of potential RTO/s
- working in consultation with RTO/s to establish required criteria for Animal Ethics Committee (AEC) approval
- liaising with industry, RTO/s and others to integrate AEC criteria into pilot delivery.

Phase 2: Resource development

- maintaining stakeholder consultation processes including collaboration with Project Steering Committee members, key state/territory stakeholders, industry stakeholders and RTO/s in particular targeting industry subject matter experts
- developing draft materials in conjunction with subject matter experts and technical writers in line with and referencing the Australian Cattle Veterinarians (ACV) lay spaying manual
- maintaining stakeholder and consultation activity database, feedback summation reports and issues registers
- delivering final agreed draft products in preparation for pilot delivery

Phase 3: Pilot delivery

- assisting with facilitating the organisation and delivery of pilot course using the draft training and assessment materials, in conjunction with selected trainer/s and CCA
- analysing outcomes of course delivery and revising materials in line with findings and course trainer and participant feedback
- securing final sign-off from PSC.

3 Methodology

3.1 RTO requirements

AgForce Qld was selected as the RTO for the project. AgForce Training developed and supplied the required documentation to the Australian Skills Quality Authority (ASQA) to have the unit added to the AgForce Training scope of registration. Development of these documents followed standard RTO practices and conforms with ASQA requirements. They form part of the deliverables marked as “RTO Documentation”. The documents are: Training and Assessment Strategy, Unit Assessment mapping, draft assessments.

3.2 Animal ethics approval

Application was made under the Animal Care and Protection Act 2011 Qld for registration as a scientific user of animals. Once approved, AgForce then met requirements for approval of the project from the Animal Ethics Committee operated by Department of Agriculture and Fisheries. This included undertaking a training program.

The project was granted approval and on completion AgForce submitted a completion report to the AEC.

3.3 Training delivery guide

This task presented a range of challenges. The DOT procedure is complex and requires significant associated skills in order to be performed safely and consistently. The unit of competency (AHCLSK335) specifies what must be included both as training and just as importantly, as assessment.

The unit content was analysed by element, performance criteria, performance evidence and knowledge evidence requirements. A total of 46 items were then cross referenced and rearranged or grouped to form the basis of both the delivery content and the training and assessment tasks. Attention was paid to practical delivery implications, existing skill levels of participants and expected progress during training.

3.4 Assessment guide

The assessments were mapped to the unit requirements for performance and knowledge evidence. A two-stage process for assessment was used. Learning activities were first developed to reinforce and test the learner's progress. Summative assessments then take a more holistic approach.

3.5 Pilot program

The Pilot program was designed to achieve the following objectives:

- Review the content of the Delivery Guide
- Review the content and structure of the Assessment Guide
- Conduct a train the trainer program including spaying of live animals
- Test the materials in a training environment
- Qualify the participants in the Unit AHCLSK335

Initially the pilot was proposed for AgForce's Belmont Station near Rockhampton but was moved to Brisbane to simplify travel arrangements for participants. The University of Queensland agreed to provide its facilities at Pinjarra Hills in Western Brisbane, formerly the site of the university vet school. The pilot was conducted on 13 and 14 December 2016.

3.6 Recognition of Prior Learning (RPL)

The standard assessment tools were developed prior to considering the RPL process. The Pilot Program then reviewed and tested these tools before addressing the question of what an RPL process could look like and how it might be implemented. This allowed all parties to have a thorough understanding of what and how the skills and knowledge were to be assessed before turning to the issue of RPL. It was agreed from the commencement of the project, that RPL was the most likely application for this unit.

Developing an RPL process focussed on describing the expected scenarios for obtaining evidence and what critical skills were needed to be assessed or challenge tested in that process. Once the likely scenarios for evidence collection were understood, the standard assessments could be selected and or adapted to fit a range of RPL situations. A video checklist can be used to assist applicants in providing comprehensive evidence.

4 Results

4.1 Animal ethics

The project was granted approval and on completion AgForce submitted a completion report to the AEC.

At present, each training program will require approval from the AEC. It may be possible to negotiate an ongoing agreement in this regard. Training programs will need to consider this issue when designing training and assessment schedules, resources and locations.

4.2 The delivery guide

All aspects of performance and knowledge must be delivered and assessed in some way and to the standard described in the unit. As a result, the Delivery Guide contains 100 pages and the Assessment Guide almost 70 pages.

The Delivery Guide contains training tasks for each section which are repeated in the assessment guide. On completion of all training tasks, the learner should be ready to undertake the formal assessment which follows.

The entire content was carefully reviewed by the project Steering Committee and the Pilot group and required changes were made to reflect accuracy and currency. There was regular discussion about the most appropriate level of instructional language to be used in the guide. This issue focussed on meeting demands for use of correct terminology while explaining content in a way that would be understandable by the learner. A related issue was establishing what were reasonable limits to the scope of training. As this is a learner guide for non-vet spayers there needed to be a balance between veterinary and non-veterinary expectations. The Pilot Group were able to achieve this balance over two days of detailed scrutiny.

The Delivery Guide is designed to be used by qualified instructors as part of a formal training process such as a workshop. It is not in any way designed for self-paced learning and should not be provided to anyone outside of an authorised training program. It should not be made available on websites or where it can be downloaded freely.

4.3 Assessment guide

The Assessment Guide draft was reviewed in detail by the project Steering Committee and the Pilot Group and required changes were made. The assessment guide contains 17 Training Tasks which prepare the learner for the final summative assessments. The Training Tasks must be completed prior to the seven final assessments. The fully completed Assessment Guide should be marked and signed off then retained by the RTO as evidence of completion and competency.

4.4 Pilot program

The cattle veterinarians who participated in the Pilot were:

- Dr Ed Butterworth - North West Vet Clinic, Mt Isa, Queensland.
- Dr Glenn Kenneally - Glenn Kenneally Vet Services, Townsville, Queensland.
- Dr Geoffry Fordyce - UQ - QAAFI, Charters Towers, Queensland.
- Dr Scott Parry – North-West Vets, Coonamble, New South Wales.

See Appendix 1 for the Participating Vets' Report by Dr Scott Parry

AgForce, Meat and Livestock Australia, Cattle Council of Australia

- Peter Smith, Training Manager AgForce Queensland
- Marine Empson, Meat and Livestock Australia
- Geoff Niethe, Vet Consultant, Meat and Livestock Australia
- Jeanette Hannah and Megan Ansley, AgForce Queensland Training and Assessment
- Justin Toohey, Cattle Council of Australia (member of the Steering Group but an apology for the Pilot)

The University of Queensland at its Pinjarra Hills facility were supportive of the project making available the following:

- Classroom, equipment, kitchen, parking
- Cattle yards and paddocks, loading and weighing facility
- Large shed with fully covered facilities on cement slab –crush and yards
- Farm manager for managing and caring for the cattle before and after spaying, feeding and watering

The facilities were convenient and suitable for all aspects of the pilot. The cattle were sourced from Mt. Brisbane Pastoral Company in the Brisbane Valley who supplied eight Charolais heifers. These were transported to Pinjarra Hills a week before the pilot and fed and watered in the yards. They were weighed and given temporary markings. After spaying, they were kept under observation and allowed to rest for a week before being transported the short distance back to the owners.

The pilot was structured as below and was able to meet the timeframes and adhere to the structure as agreed.

Day 1

- Background and introduction to the technical training aspects of the pilot
- The unit of competency and nationally recognised training requirements
- Objectives to be achieved during pilot
- How the Pilot will work- the structure, the training, the reviews and feedback
- Enrolment forms completed
- Roles of the participants, the facilitator, the RTO, AgForce Training staff
- Agreed approach to working through the program- alternating trainers and participants/learners
- Recording feedback
- Discussion: how to approach the RPL process for future training and assessment.
- Commence the training guide and assessments review process

Day 2

- Continue with guide and assessment review and recording of feedback
- Undertake the practical tasks- assess suitability of cattle, palpation, spaying, marking
- Feedback and guidance- methods, task descriptions and instructions

- RPL process for experienced lay spayers- knowledge evidence, skill evidence, what does competency look like?
- RPL final discussion
- Wrap up and conclude the pilot, complete any outstanding assessment documents

4.5 Recognition of Prior Learning

The RPL process was examined in detail by the project Steering Committee and the Pilot group. It was considered that the RPL process faced a number of challenges including small numbers of applicants across a wide geographical area, access to cattle and facilities for skills assessment, dealing with gaps in skills and knowledge and ensuring that a detailed assessment of an application was applied without creating further barriers to recognition.

An RPL Kit was developed to meet these criteria. A video evidence checklist was added to apply structure and guidelines for video evidence.

The approach used for this RPL Kit is a conventional one which has worked successfully across a wide range of competencies within the national training system. The RPL Kit recognises that an RPL process is suitable for judging competency at unit and qualification level; It cannot be applied for partial achievement of unit competency.

To determine if a person is 'competent', the assessor is provided with a Kit that contains all the tools necessary. The key parts are:

- Initial statements and evidence from the applicant about their skills and knowledge
- Detailed follow up conversations to establish in detail the claims of the applicant and examine their knowledge
- Practical tasks that reflect the critical aspects of competency and fit with the preceding parts above
- Optional video evidence checklist

Finally, it is the assessor's judgement that is then applied and the outcome decided:

- *Competent in all aspects* of the unit
- *Not Yet Competent*- the applicant cannot at present meet all the requirements.

For the *Not Yet Competent* outcome, a separate process may commence that will arrange for further training to raise the level of skills and knowledge required to be competent. At this point the accreditation process may have to provide for a provisional accreditation to facilitate the required further training and experience.

The RPL Kit is comprehensive but follows a standard approach:

SECTION A – Assessor Information

SECTION B – Candidate Information, FAQs, RPL Self-assessment & RPL Application Form

SECTION C – Competency Conversation

SECTION D – Practical Tasks and Observation Recording Sheets

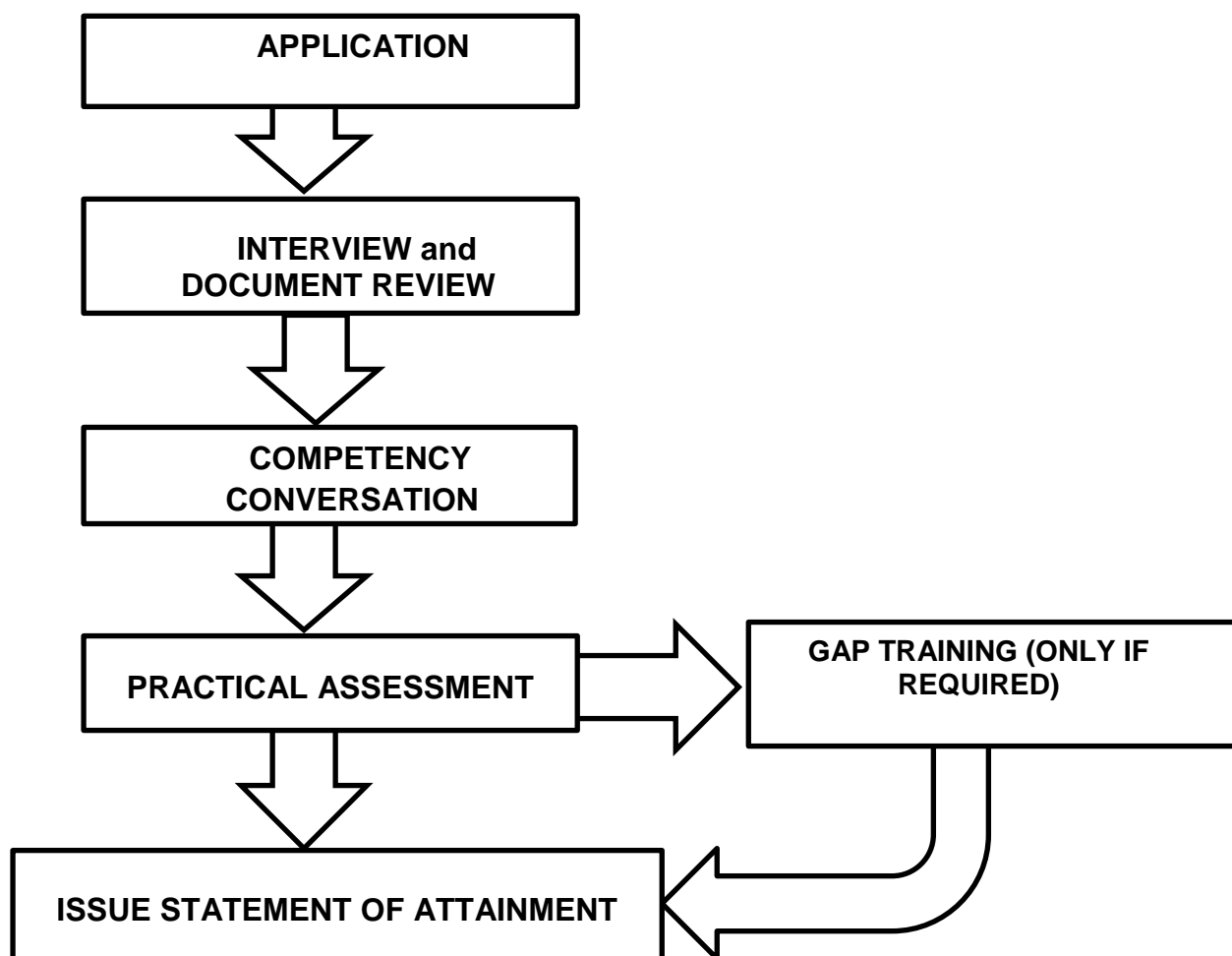
SECTION E – Resources for Practical Tasks

APPENDIX 1 RPL Self-assessment

APPENDIX 2 RPL Application form

APPENDIX 3 Frequently asked RPL questions

The process generally follows this pattern:



5 Discussion

5.1 Learning materials

The project delivered final draft versions of the Training Delivery Guide, Assessment Guide, Recognition of Prior Learning Kit, Video Evidence Checklist and various RTO related documents. The guides are detailed and lengthy due to the amount of technical information related to the act of spaying using the Dropped Ovary Technique as described in the unit. The materials were piloted and reviewed thoroughly by technical experts and are now ready for use by qualified instructors.

Extensive review notes were taken during the pilot program and these changes were incorporated into the final draft versions of the guides. Detailed discussions were conducted on how the training as a whole could cater for both new learners and experienced (but non-accredited) lay spayers. A number of possible processes and solutions were raised and analysed.

The fundamental issue raised by participants was that the spaying technique requires a high level of palpation skill and knowledge of anatomy as well as an understanding of anomalies and impediments and how to deal with them.

“Can a learner develop these skills by working through the Delivery Guide and later the Assessment Guide and reach the level of expertise required?”

5.2 RPL

The pilot program was attended by experienced cattle vets who participated as trainees as well as potential trainers. The RPL process was extensively discussed as this is the most likely application of the unit in the short term. It was decided that video evidence could play a crucial role in establishing and recognising competency. The video evidence checklist was then developed to assist this part of the process.

6 Conclusions/recommendations

6.1 New learners and tailored training programs

The objectives of this project were to develop new training materials for the unit of competency and to test and critique them in a pilot program. That has been achieved and the training materials can now be used as part of a training program. Any such program then requires a more tailored Training and Assessment Strategy which takes account of: learner types and needs, cattle husbandry experience, logistics and location, individual progress, acceptable timeframes, application of the technique under supervision and mentoring. This is the responsibility of the individual training provider.

For delivery of training to new spayers (as opposed to RPL), the participation and assistance of third parties may be necessary. These could be vets, cattle managers or other trainers for example. A typical training program would include an extensive workshop during which the Delivery Guide and Assessment Guide are completed. This could be done as a single workshop (3 to 4 days) or divided into 2 or 3 smaller workshops over time with the trainees returning to the supervised workplace to practise the skills learned.

Therefore, the workshop is just one component. The application of the developing skills needs to be done in a workplace under supervision as with most other units and training programs. The rate of progress of the learner will be individual and can be determined by the workplace supervisor and would fit within the overall training pattern of “workplace- workshop-workplace” or on the job and off the job training rotations.

6.2 Accreditation System- the final phase

The training programs and the RPL process were developed to support an accreditation system for lay spayers using the DOT method. The unit of competency can be delivered by any RTO in Australia registered to do so with the Australian Skills Quality Authority (ASQA). To maintain the integrity of any accreditation system, it will be necessary to ensure that training and recognition services provided by RTOs meet and continue to meet industry standards. An accreditation system should accept evidence of competency (via a statement of attainment) only from industry endorsed providers. This endorsement may need to form part of the accreditation system. Alternatively, given the likely small numbers, it could be maintained by an industry body while the accreditation system focusses on the lay spayers themselves.

An accreditation system may need to consider a provisional accreditation for current lay spayers who are participating in the process and working towards completion and full accreditation. An effective accreditation scheme also needs to be accompanied by a practical traceback system which can identify individual animal back to the operator who performed the procedure. The NLIS would seem a logical method to achieve this outcome and the feasibility will be investigated as part of a subsequent project.

6.3 Recommendations

Given that the Australian Animal Welfare Standards and Guidelines for Cattle were endorsed in 2016 and is being regulated into law by States and Territories, the development of an accreditation process for lay spayers using the DOT will now be the final phase of an effective industry response.

The development of this process would include at least the following parts:

- Identification and clarification of accreditation issues
- Criteria for each decision point and requirements
- Monitoring and responses
- Provision for fairness, appeals and redress
- Process flow
- Consultation and feedback
- Selection of accreditation system managing organisation

7 Bibliography

American Veterinary Medical Association, Animal Welfare Division 2011. *Literature Review on the Welfare Implications of Ovariectomy in Cattle*. Accessed at

<https://www.avma.org/KB/Resources/LiteratureReviews/Pages/Welfare-Implications-of-Ovariectomy-in-Cattle.aspx>

Animal Health Australia (AHA) 2014. *Australian Animal Welfare Standards and Guidelines for Cattle*. Publication record: Edition 1 Version: 1.0 January 2016 Endorsed. (S6.7-S6.9; G6.26-G6.27). Available on the internet at www.animalwelfarestandards.net.au

Animal Biosecurity regulations include monitoring the health of livestock). Accessed at <http://www.farmbiosecurity.com.au/essentials-toolkit/production-practices/>

Australian Veterinary Association 2011. *Guidelines for Veterinary Personal Biosecurity*. Australian Veterinary Association, St Leonard's NSW 2065, Australia

Blackwood, I. Exton, S. Littler, B and Siddell, J 2013. *A national guide to describing and managing beef cattle in low body condition*. Meat & Livestock Australia, North Sydney NSW 2062, Australia. Accessed at

<http://www.alpa.net.au/UserFiles/File/Documents/MLA%20Low%20Score%20cattle%20Sept%202013.pdf>

De Witte, K. Jubb, T and Letchford, P 2006. *The Dropped Ovary Technique for Spaying Cattle*. Edited by Dr Scott Norman & Dr Kevin McGrath Australian Cattle Veterinarians a special interest group of the Australian Veterinary Association (AVA) St Leonards, NSW 2065. Accessed at:

<http://www.ava.com.au/sites/default/files/private/ACVDroppedOvary.pdf>

DeJarnette, M. and Nebel, Dr R. 2016. Reproductive anatomy and physiology of cattle. Select Sires, Inc., 11740 U.S. 42 North, Plain City, Ohio 43064 USA. Accessed at:

http://www.selectsires.com/resources/fertilitydocs/reproductive_anatomy.pdf?version=20160420

Habernehl, N.L. 1993. Heifer ovariectomy using the Willis spay instrument: Technique, morbidity and mortality. *Can Vet J* 1993, 34: 664-667.

Meat & Livestock Australia, 2013. *A national guide to describing and managing beef cattle in low body condition* - P. 4. Meat & Livestock Australia Limited, North Sydney NSW 2062, Australia.

Accessed at

<http://www.alpa.net.au/UserFiles/File/Documents/MLA%20Low%20Score%20cattle%20Sept%202013.pdf>

National Health and Medical Research Council (2013). *Australian code for the care and use of animals for scientific purposes, 8th edition*. National Health and Medical Research Council, Canberra ACT Australia. Accessed at

https://www.nhmrc.gov.au/files_nhmrc/publications/attachments/ea28_code_care_use_animals_131209.pdf

All states and territories maintain websites on animal welfare, they can be found at:

<http://www.agriculture.gov.au/animal/welfare/state>

Northern Territory Government and Meat & Livestock Australia 2013. *Cattle and land management best practices in the Top End region 2011*. First published 2012 (Department of Resources).

Reprinted with corrections 2013 (Department of Primary Industry and Fisheries). Accessed at

<http://www.nt.gov.au/d/Content/File/p/pi/topend/Best%20Practice%20Top%20End.pdf>

Primary Industries Standing Committee 2004. Model Code of Practice for the Welfare of Animals Cattle, 2nd Edition. Published by Meat & Livestock Australia, North Sydney NSW 2062, Australia.

Download at <http://www.publish.csiro.au/nid/22/sid/11.htm>

Senger, PL 1997, *Pathways to Pregnancy and Parturition*. (Fig. 2-14; P.27). Current Conceptions Inc.

via Auburn University, Auburn Alabama 36849 USA. Accessed at

<http://www.ag.auburn.edu/~bartoff/anatbov5.htm>

Smith Thomas, H.2013 Why spaying beef heifers makes sense. Beef Magazine, 7900 International Drive, Suite 650, Minneapolis, MN 55425 USA. Accessed at [http://beefmagazine.com/cattle-](http://beefmagazine.com/cattle-genetics/why-spaying-beef-heifers-makes-sense?page=1)

[genetics/why-spaying-beef-heifers-makes-sense?page=1](http://beefmagazine.com/cattle-genetics/why-spaying-beef-heifers-makes-sense?page=1)

University of Missouri Extension 1993. *G2015 Reproductive Anatomy and Physiology of the Cow*.

Accessed at <http://extension.missouri.edu/p/G2015>

Appendix 1

Veterinarian Report on Pilot Program

by Dr Scott Parry BVSc (Qld) N5690. (CCA AHWB CC Member)

**DOT Lay Spayer Training Pilot Course Report.
University of Queensland Veterinary Science Farm
Pinjarra Hills, Queensland.
December 13 and 14, 2016.**

By December 2016, after a prolonged development phase, the DOT Lay Spayer Training course reached the stage where it was ready to be run as a pilot course.

The aims of this pilot were to:

- Test and refine the delivery and assessment guide that has been developed by AgForce.
- Present the pilot as a 'train the trainer' course for the veterinarians who attend the pilot so that they can deliver the course to lay people in conjunction with an RTO such as AgForce.

The University of Queensland provided a training venue at the Pinjarra Hills Vet School farm in western Brisbane. 8 Droughtmaster heifers were sourced by AgForce to be used for the practical component of the pilot.

A number of veterinarians experienced in performing DOT spaying were approached to attend the pilot. The four veterinarians who were available to attend were:

- Ed Butterworth - North West Vet Services, Mt Isa, Queensland.
- Glenn Kenneally - Glenn Kenneally Vet Services, Townsville, Queensland.
- Geoffry Fordyce - UQ - QAFFI, Charters Towers, Queensland.
- Scott Parry - NorthWest Vets (and CCA representative), Coonamble - Walgett - Lightning Ridge, New South Wales.

Apologies were received from the following veterinarians:

- Ian Braithwaite & Trevor Smith (North Australian Vet Group - Mt Isa and Cloncurry, Queensland)
- Peter Letchford (Pastoral Veterinary Solutions - Kununurra, WA).

Justin Toohey from CCA was a late apology as and server and attendee. Geoff Niethe from MLA indicated his availability to attend on Day 2.

Peter Smith, the Training Manager from AgForce organised, coordinated and ran the two day pilot course. Jeanette Hannah from AgForce assisted for the two days as well. Marine Empson, Innovation and Adoption Project Manager from MLA who is now overseeing the project for MLA attended Day 1 of the pilot.

Day One - Tuesday, December 13, 2016.

Following introductions and an overview of the background to the project, most the day was spent going through the training and assessment manual on a page by page basis. This allowed the veterinarians to provide technical and practical input to the course content and the assessment process. Little in the way of major changes to the resources was required. Mostly it was a case of

cutting out some content, adding some in and generally tidying up and updating the material that was included in the first draft training and assessment manuals.

Day Two - Wednesday, December 14, 2016.

Geoff Niethe from MLA joined the group today. The process of reviewing the training materials and assessment tools was taken up from where it had left off on Day one. When this was completed, the group then spent an hour in the cattle yards, completing the practical DOT spaying of the eight heifers that had been provided by AgForce for the pilot. This provided an excellent opportunity for some of the AgForce and MLA staff to view firsthand the spaying process and to collect video footage for future training purposes.

The final afternoon was spent looking at and critically discussing how the actual accreditation or approval process for non-veterinary DOT spay contractors could possibly work, in conjunction with the training and assessment package. See comments below.

Outcomes from the pilot.

All participants were happy that the training and assessment resources - once final editing has occurred as per the changes made over the two days - are now 'fit for purpose' to be used as part of a training package for non-veterinary DOT spay contractors. They are up to date, technically accurate and practically applicable to industry.

All four veterinarians who participated in the course are now eligible to act as presenters/trainers for this course when it becomes commercially available. (Completion of a Cert IV in Training and Assessment will be further required to do this.) Furthermore, as they have had a major part in the editing of the training package, they feel more familiar with the content and have confidence in the fact that it is 'fit for purpose'. It was the feeling of the group that they would be comfortable presenting this material as part of a commercial training package.

- Major issues pertaining to animal welfare, biosecurity and WHS, as they pertain to the presenting of such a training package, have all been addressed in this review process.
- MLA and AgForce representatives have a much greater understanding of the practical process of spaying and how it fits into a holistic property management process.
- All participants have a greater understanding of the reasons behind why this DOT training and assessment program has had to be developed by industry.

Comments and discussion.

All four veterinarians who were involved in the DOT spay pilot are active and heavily engaged at the coal face of the commercial cattle industry.

Drs Butterworth and Kenneally, as practitioners who service the northern Australian industry both derive significant commercial income from DOT spaying as part of their business.

Dr Fordyce, as a government and university veterinarian acts in a research and extension capacity and was involved with launching the DOT technique in northern Australia in the mid-1990s.

Dr Parry as a southern Australian practitioner performs a limited amount of spaying at a commercial level, but as a CCA representative has significant investment in the project from a whole of industry level.

Suffice to say, all four of these veterinarians, due to their intimate knowledge of and experience with the DOT technique have significant reservations about the roll out of this training and assessment package to the wider industry. The potential for disastrous animal welfare outcomes associated with inadequately trained and skilled operators performing DOT spaying is enormous. By providing a structured pathway for non-vets to enter the industry as DOT service providers, there is concern that there could be a rush of poorly equipped operators who will be afforded legitimacy via the process.

As outlined above, all the vets involved were, by the end of Day Two of the pilot, comfortable with the raw content of the training and assessment resources. However, it was the collective feeling of the group (MLA and AgForce representatives included) that successful completion of this training package alone would be insufficient to adequately equip a 'greenhorn' (inexperienced) candidate to go out into the cattle industry and provide a competent DOT spay service.

For the limited number of highly experienced and for the most part competent non vet DOT spay contractors operating mostly in Northern Australia at the moment, completion of this training and assessment package, combined with a critical review of their RPL credentials, should provide a sound pathway to assess their competency and provide an approval process for them to operate legitimately.

For a 'greenhorn' candidate, this training and assessment package could provide a sound base level of training to enable them to gain an understanding of and very limited technical grasp of DOT spaying. However, for them to become adequately skilled to provide this service at a commercial level, far more actual DOT spaying would be required to get them to a level of competency acceptable to industry and perhaps even more importantly, industry welfare standards. The major challenges to this process hinge largely on the fact that from a legislative standpoint in several Australian states, it is illegal to perform DOT spaying unless one is either a veterinarian or an adequately approved lay operator. How then does a 'greenhorn' candidate legally gain adequate experience to get to an acceptable level of competency?

Conclusion.

Drs Butterworth, Kenneally, Fordyce and Parry all agreed that participation in the DOT spay pilot was a worthwhile process. All four came away from the two days with a much greater understanding of the background and motivation to the project.

Subsequent to their inputs, there is now significant confidence in the integrity of the training and assessment resources to be used for the program. One request from all four of the vets is that industry assist in the gaining of a Cert IV Training and Assessment Qualification so that all four are fully equipped to roll this package out to industry when the time comes.

The major shortcomings of the whole concept hinge on how the actual approval or accreditation scheme will be structured, administered and enforced. All four vets would like to remain involved in the process of developing this training and approval scheme.

Dr Parry, as a CCA representative has requested to be included in subsequent meetings and discussions to retain a constant veterinary presence and to provide an ongoing conduit between CCA - MLA - AgForce and the veterinary industry.

All four veterinarians would like to take this opportunity to thank MLA - AgForce - CCA for the opportunity to be involved and for the hospitality afforded to us during our time in Brisbane.

A particular thanks to Peter Smith and Marine Empson who pulled the whole thing together and ensured that the two days ran smoothly, punctually and that the process was worked through in a logical manner. As busy people, all of us really appreciated the fact that such a businesslike approach was taken and that our valuable time away from our family and businesses/workplace was used effectively. We look forward to continuing to work closely with industry on this and other animal health, welfare and biosecurity projects as they arise.

Scott Parry BVSc (Qld) N5690
NorthWest Vets,
Coonamble - Walgett - Lightning Ridge
CCA AHWB CC Member