

# final report

Project code: PROJECT NO. B.GBP.0018

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Date published: 10 June 2019

PUBLISHED BY  
Meat and Livestock Australia Limited  
Locked Bag 1961  
NORTH SYDNEY NSW 2059

## Grassfed beef (Aust) consultancy 2017-2019

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

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## Abstract

This project report outlines the tasks performed by an external consultant, Geoffrey Niethe on behalf of MLA over the period 1<sup>st</sup> July 2017 to 31<sup>st</sup> May 2019. This position provides flexibility within MLA to access expert advice in specific areas of industry involvement where program managers wish to rapidly seek a second opinion on significant and substantial technical material. MLA publications including final reports on major research projects, extension and adoption material and articles for the Feedback magazine must meet a high standard i.e. be accurate, evidence based and technically sound. Furthermore, the peer review process within the animal production research discipline is under pressure as senior researchers progressively retire from the industry. The consultant was engaged for 176.5 days over the 2 year period and key achievements during that time have been outlined in this report. These include review of final reports – several of which were unacceptable for immediate posting on the MLA website, co-ordination of the Phosphorus challenge in northern Australia, production of new extension material including 4 new Tips and Tools and mentoring new extension officers in Western Australia. A model to develop a Centre of excellence for the northern beef industry was proposed and a business plan developed.

## Executive summary

It is essential that MLA are prudent managers of the industry levy dollars. All activities undertaken must ultimately align with the Meat Industry Strategic Plan, be performed according to industry requirements and the accompanying reporting process be fully transparent and be evidence based. Because of the diverse portfolio of work being funded by MLA, it is impossible to be able to always find the relevant expertise within the company and the external co-ordinator position presents a practical and economical solution to ensure some of the expected gaps in expertise can be covered in a quick and reliable manner.

The Consultant is responsible to the MLA program manager for On Farm Innovation and Adoption Grass fed beef and is available at short notice to provide technical information and recommendations when required.

Objectives: The Consultant will have achieved the following objectives to MLA's reasonable satisfaction by 30th June 2019:

1. Evaluate proposed R&D and PDS projects/ areas of interest within the guidelines provided under the consultative framework and/or the MLA program manager.
2. Provide review and comment of milestone and final reports to ensure MLA requirements of technical and editorial quality are met.
4. Provide on-going review of the validity of the projects and advised MLA from time to time on other issues.
5. Liaise with beef producers, R&D providers and other stakeholders as required by MLA.

Between 1<sup>st</sup> July 2017 and 31<sup>st</sup> May 2019, 176.5 days of mixed duties were performed in various roles to assist the MLA program manager, On Farm Innovation and Adoption Grass fed beef, in reviewing milestone and final reports relating specifically to the program area, advise on future areas of work relevant to the Australian beef industry and represent program area staff as required at MLA approved activities. A total of 176.5 days were provided over almost a two year period. Travel included several trips to Sydney, a trip to Canberra, Kangaroo Island, Darwin, 2 trips to the Kimberley, one trip to Perth, a trip to the Atherton Tableland and road trips to Taroom and Roma.

Major achievements include:

- Development and background research to support the adoption of a business plan to establish a possible post graduate training centre of Excellence with James Cook University
- Review of numerous final reports and milestone reports all completed within 3 weeks of being received.
- Production of new extensive material in the form of 4 new Tips and Tools associated with Cashcow outputs.
- Co-ordination of a P workshop and associated Phosphorus challenge on 100 herds in northern Australia. The Phosphorus work will culminate with a new 6 page extension hand-out on Phosphorus along with a revised P manual in 2020.
- 'On farm' mentoring support for 2 newly appointed extension officers in the Kimberley and Pilbara region.
- Revision of more Beef from Pastures website along with refereeing other contentious reports produced outside the MLA framework.

It is recommended that the role and position be reviewed and renewed for a further 2 year contract at the discretion of the program manager.

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# 1 Background

As a manager of industry funds for research and adoption agencies, it is essential that MLA are prudent custodians of the industry levy dollars. All activities undertaken must ultimately align with the Meat Industry Strategic Plan, be performed according to industry requirements and the accompanying reporting process be fully transparent and importantly, be evidence based. In some projects, components of research are published in reputable journals which are peer reviewed but in every instance, MLA must accept milestone and final reports prior to any external review process occurring so that funds are able to flow through to research agencies and that proper budgeting processes can be adopted. A significant number of MLA funded projects never reach publication in reputable journals and often the internal review process within the relevant research organisations is the only review of the work undertaken. This can be limited due to staffing constraints or availability of suitable expertise within the organisation itself. Very few project reports however ever progress through the MLA system without some modification or requirement for additional information in order that reporting is performed at a level acceptable to MLA's requirements. On the other hand, some projects have to be modified or terminated as they have failed to deliver or comply with their schedule. Notwithstanding all MLA projects must be accompanied by a final report which is available to the public on the MLA website and these reports are often referenced in other project work. It is essential therefore to ensure the best possible outcomes are achieved at all times. Similar issues also apply to the review and production of extension and adoption material that MLA generates as this material must also represent the best available advice to industry at the time of publication.

Because of the diverse portfolio of work being funded by MLA, it is impossible to be able to always find the relevant expertise within the company and the external co-ordinator position presents a practical and economical solution to ensure some of the expected gaps in expertise can be covered in a quick and reliable manner. The Consultant is responsible to the MLA program manager for On Farm Innovation and Adoption Grass fed beef and is available at short notice to provide technical information and recommendations when required.

## 2 Project objectives

The Consultant will have achieved the following objective(s) to MLA's reasonable satisfaction by 30th June 2019:

1. Evaluate proposed R&D and PDS projects/ areas of interest within the guidelines provided under the consultative framework and/or the MLA program manager.
2. Provide review and comment of milestone and final reports to ensure MLA requirements of technical and editorial quality are met.
4. Provide on-going review of the validity of the projects and advised MLA from time to time on other issues.
5. Liaise with beef producers, R&D providers and other stakeholders as required by MLA.

### 3 Methodology

The Consultant will be responsible to the MLA program manager, On Farm Innovation and Adoption Grass fed beef, for; reviewing milestone and final reports relating specifically to the program area, advise on future areas of work relevant to the Australian beef industry and represent program area staff as required at MLA approved activities. The Consultant will also support the On Farm Innovation and Adoption Grass fed beef R&D project manager with the review of milestone and final reports and communication of results from the program.

### 4 Results

A detailed list of all activities performed between July 2017 and June 2019 is provided in Appendix 7.

Some of the main activities include the following:

• Develop a 6 Page extension tool on phosphorus	6 Days
• Involvement in working party with ABS and ABARE on national herd stats.	9 Days
• Working group on adult equivalents	6.25 days
• Corporate Bench Marking Group and recording minutes	7.5 days
• Bredwell Fedwell pilot workshop	1.5 days
• Review Economics of fertility	4.25 days
• Review Feedback articles	3.25 days
• FIN workshops	2.25 days
• Field Day at Taroom	2 days
• Review Final Reports – Phosphorus, calf loss, weaner supplements etc	20.15 days
• Goat work while goat contract being sorted	7 days
• Beef Industry breakfasts – assist with organisation and act as usher.	4.125 Days
• International Leucaena Conference and paper reviews	3 days
• JCU post graduate Centre of excellence – develop vision & project development	9.5 days
• Mentoring new graduates'/extension officers in Kimberley – breeder mortality	9 days
• Leucaena workshop review in WA	8 days
• More Beef from Pasture – review website for Ted Parish	2 days
• Milestone Reports	6.25 days
• Phosphorus Challenge	12.25 days
• Review PDS project final reports	2.125 days
• Organise and co-ordinate P Forum	2 days
• Create 4 New Tips and Tools from CashCow	6.175 days
• Review Weaner Manual	2.5 days
• Spay accreditation process	2 days

In all a total of 176.5 days were provided over almost a two year period. Travel included several trips to Sydney, a trip to Canberra, Kangaroo Island, Darwin, 2 trips to the Kimberley, one trip to Perth, a trip to the Atherton Tableland and road trips to Taroom and Roma.

## 5 Discussion

Between 1<sup>st</sup> July 2017 and 31<sup>st</sup> May 2019, 176.5 days of mixed duties were performed in various roles to assist the MLA program manager, On Farm Innovation and Adoption Grass fed beef, in reviewing milestone and final reports relating specifically to the program area, advise on future areas of work relevant to the Australian beef industry and represent program area staff as required at MLA approved activities. The project requires that the co-ordinator carries their own public liability insurance cover independent of that provided to permanent staff in MLA. The advice provided is always supported by extensive research and background reading and is 'evidence based' where ever possible. This position helps maintain MLA's high standards for reports and extension material associated with MLA managed research and adoption programs and provides ready access to external expert opinion when required.

## 6 Conclusions/recommendations

The position provides great support to the MLA program manager for grass fed beef and provides confidence for the effective outputs of the unit without the need to engage additional permanent staff. The position helps ensure deadlines are met within MLA and it also frees up the manager's time to engage in other activities. It is recommended that the role and position be reviewed and renewed for a further 2 year contract at the discretion of the program manager.

## 7 Key messages

Major achievements include:

- Development and background research to support the adoption of a business plan to establish a possible post graduate training centre of Excellence with James Cook University
- Review of numerous final reports and milestone reports all completed within 3 weeks of being received.
- Production of new extensive material in the form of 4 new Tips and Tools associated with Cashcow outputs.
- Co-ordination a P workshop and associated Phosphorus challenge on 100 herds in northern Australia. The Phosphorus work will culminate with a new 6 page extension hand-out on Phosphorus along with a revised P manual in 2020.
- 'on farm' mentoring support for 2 newly appointed extension officers in the Kimberley and Pilbara region.
- Revision of more Beef from Pastures website along with refereeing other contentious reports produced outside the MLA framework.

## 8 Appendix

### 8.1 Qualifications and Experience of consultant

#### CURRICULUM VITAE

Name: Geoffrey Niethe

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Email: g.niethe@bigpond.com

Tertiary qualifications: Bachelor of Veterinary Science (Hons)  
University of Queensland  
Master of Veterinary Studies  
University of Melbourne

#### Positions held:

**April 2003 –Present: Livestock production and veterinary consultant**

- External program coordinator for animal production – the Northern Beef Program for Meat & Livestock Australia. In this role I liaise with industry and research providers and develop and monitor MLA funded projects in northern Australia. This took me throughout Queensland, the Northern Territory and the Kimberley and Pilbara regions in Western Australia. I attended North Beef Industry Committee (NBIC) meetings and liaised with the 11 regional beef research committees in northern Australia. I have chaired over 100 Beef-Up forums and field days for beef producers across northern Australia and presented on various technical topics from reproduction to nutrition.
- Research co-ordinator for goats undertaking similar roles as described in my beef portfolio above as well as developing extension and adoption material to improve uptake of known technologies.
- Course coordinator and lecturer in Preventive Medicine and Epidemiology for the University of Queensland Veterinary School for 2004.
- Private consultancy for Necati Kurmel, a large private feedlot operator in



Turkey.

- Private consultancy for Elders Rural Bank in Western Australia concerning Brooking Springs, Beefwood Park and Labelle Stations.
- Professional advice in legal challenges regarding herd projections and production issues on stations such as Mountain Valley, Scott Creek, Tipperary, Brooking Springs, Beefwood Park, Labelle, Henbury, Maryfield, and Ban Ban Springs.
- A scoping study on potential beef production from the northern rangelands of Western Australia in relation to the supply chain on behalf of the West Australia Department of Agriculture and Food.
- A scoping study on potential beef production from the southwest of Western Australia in relation to the supply chain on behalf of the West Australia Department of Agriculture and Food.
- Development and writing of Animal Health and Wellbeing Course for Rangelands Australia, University of Queensland.
- Course co-ordinator (2009) of Animal Health and Wellbeing, an external subject provided by the University of Queensland.
- Assessment of small holders cattle breeding needs and reasons for poor fertility in breeder cattle originating from Australia on behalf of MLA–LiveCorp Joint Program.
- August 2009 “A scoping study on potential red meat production from the southern rangelands of Western Australia.” A report to the Department of Agriculture and Food, Western Australia”, by G. Niethe & M. Quirk
- A feasibility study for the NT and WA governments on establishment of a multi species abattoir in northern Australia.
- A feasibility study for the NT and WA government on establishment of a multi species mobile abattoir in northern Australia.
- Examiner in State and Preventive Medicine for the National Office of Overseas Skills Recognition (NOOSR) –the body responsible for assessing if overseas veterinarians are eligible to be registered in Australia (2009–16).
- Category ‘A’ member of the Queensland Department of Agriculture and Fisheries Animal Ethic Committee (2007 –current).
- Review and upgrade technical material in the Breeding EDGE course –an MLA initiative to improve producer skills in genetics and reproductive management of beef herds in northern Australia.
- Member of expert panel to review research proposals to be funded by MLA in 2016–18.
- Scoping study to determine research priorities to increase the size of the breeding herd on Indonesian palm plantations on behalf of ACIAR.
- Developed guidelines for resolution of dispute over cattle between Henbury Station and Palmer Valley Station in the NT and investigated

allegations of illegal tag removal.

**March 2001 –March 2003:** Technical Manager for McDonalds (Turkey) for a fixed 2–year contract with the objective “to develop feedlot management protocols that would provide the owners with assurances that the operations would continue to be managed at the highest level of performance and that the results were continually optimised.” This was the first time McDonalds had ventured into the feedlot industry anywhere in the world. Initial research identified that a significant production efficiency gap existed in the Turkish feedlot sector and the primary objective of the Technical Manager’s position was to improve the efficiency of the feedlot operations and cattle supply chain. Many diseases that are exotic to Australia were encountered and this posed enormous challenges when designing health and induction protocols to control the routine respiratory, digestive and feet issues normally associated with feedlot medicine. The nutritional management was equally as challenging as the primary focus was on providing cost effective rations based on the large range of vegetable by products that were available in a productive farming area in western Turkey. With these overall instructions in mind I worked within the economic and technical constraints that existed after firstly trying to understand the cultural and regional differences which exist in the feedlot business in Turkey. Two feedlot operations were established utilising local stock and the various co–products and feedstuffs available and are still operating successfully today.

**1996 –March 2001:** Director of Farm Animal Practices, University of Queensland, which included a supervisory role for all of the teaching practices run by the Department of Farm Animal Medicine and Production. This involved close supervision of the various budgets and overall responsibility to ensure the practices operated effectively and efficiently. Part of the role through the Goondiwindi Pastoral Veterinary Centre allowed me to pursue outside consultancy work. Some of the major contracts undertaken in those years include the following:

- Review of the role of the Veterinary Technical Services section of the Department of Primary Industries and Fisheries of the NT in 1991 (with Roly Nieper).

- Establishment of a large Ruminant Production course at the University of Kupang, West Timor.
- Provision of legal advice concerning extensive beef properties in northern Australia –Killarney, Anna Plains, Kalala, Tanumbirini and Murrarji.
- Property assessment advice for the Indigenous Land Corporation (ILC) prior to purchasing pastoral holdings in Western Australia and NSW.

**August 1988 –1996** – Director of the Pastoral Veterinary Centre in Goondiwindi which was responsible for the teaching of beef cattle and sheep medicine and production to the final year veterinary students. I was course co-ordinator for the fifth year veterinary subject “Beef Cattle Medicine and Production.” From 1988 to 2001 I was responsible for the efficient operations and financial management of the Centre. The Pastoral Veterinary Centre ran post graduate courses as well as conducted its own applied research. I was an examiner (1991–2000) in Preventive and State Medicine for the National Office of Overseas Skills Recognition (NOOSR) which examines the standards for overseas veterinarians who wish to practice in Australia.

**December 1987** – Appointed Principal Animal Production Officer for the Northern Territory. The main duties were to co-ordinate research and development within the Department and to develop projects and budgets that met the Departmental goals in servicing the animal industries of the Northern Territory. I worked closely with the Assistant Secretary of the Animal Industries branch in monitoring and managing the division's budget. The sections for which I was responsible were Animal Production, Veterinary Laboratory North, Veterinary Field Research and Pastures and Extension. My role included all livestock enterprises including the buffalo industry, the crocodile industry and many other small cottage industries based around Darwin.

**1987** – Transferred to Darwin to explore post Tuberculosis and Brucellosis eradication campaign (BTEC) planning and to establish Productive Herd Management programs within the Department. This entailed investigating area for possible research, retraining programs for officers post BTEC and exploring avenues for funding.

**1986** – Studied at the University of Melbourne and obtained a Masters Degree under the supervision of Professor Ivan Caple and Dr. Fred Morley in Diseases and Management of Agricultural Animals. The main areas studied were nutrition, economics, reproduction, genetics, epidemiology, computer modelling, statistics, diseases of cattle and sheep and grazing systems. The Masters program is run in conjunction with the MacKinnon project where the main emphasis is on farm management and profitability.

**1981 –1985:** Appointed to the position of Senior Veterinary Officer and Regional Co-ordinator for the Barkly Region of the Northern Territory. At this stage of the program, the economic impact of BTEC was becoming a major concern as it was starting to impact on the economic viability of some of the stations. On stations that were struggling financially with eradication, full economic assessments were performed and stations were provided with assistance in budgeting. Herd projections and cash flows were prepared as part of a comprehensive plan to ensure successful eradication on individual properties. Budget preparations and close financial supervision was required to ensure that the departmental resources matched the level of work that was being undertaken in all aspects of Departmental services.

**1978 –1981:** District Veterinary Officer for the Barkly Tableland of the Northern Territory. The main duties involved oversight and planning of the BTEC programs for all of the stations on the Barkly Tablelands. This involved close liaison with managers and private practitioners and regular station visits to ensure goals were being achieved.

**1975 (May) – 1978** – Veterinary Officer, Class 1 in Tennant Creek with the Animal Industries Branch of the NT. Main duties involved BTEC activities on local stations along with disease investigations and provision of veterinary services to station stock.

1975 (Jan – May) – Various locums in mixed practice in South–East Queensland.

**Other relevant activities:**

- Chairperson of the Australian and New Zealand Veterinary Council (1999–2001)
- National President of the Australian Veterinary Association (1998–99)
- President of the Australian Association of Cattle Veterinarians (AACV, 1994–95)
- Editor of the AACV newsletter for two years.
- As a member of the AACV I represented that organisation at the senate inquiry into lot feeding in Australia.
- Member of the organising committee of the World Buiatrics Conference in Australia in 1998.

**Publications and presentations:**

Dissertation 1986, "Opportunities for Herd Health and Production in the N.T."

"Animal Health and Production in the Northern Territory" Proc. Australian Society of Animal Production, Vol 17, 1988.

"Economics of Beef Enterprises." Australian Advances in Veterinary Science. 1989.

"Commercial Evaluation of Genetic Input." Proceedings of the Annual Conference of the Qld Division of the Australian Veterinary Association. 1990.

"Sustainable Agriculture." Australian Veterinary Association Conference – May 1991.

"A Model for the Development of a Beef Cattle Production Practice." Continuing Professional Education – Vet Update '91.

"A Comparison of Development Options on a Northern Australian Beef Property." B. Foran, M. Stafford Smith, G. Niethe, T. Stockwell, & V. Michell. Agricultural Systems 34 (1990).

A series of lectures on Beef Cattle production at the North Queensland Division of the Australian Veterinary Association's Annual conference – 1995. Topics

includes "Clinical Examination of the Bovine", "Examination of the Beef Breeding Herd", and 'Common Surgical Procedures in Cattle'.

“Assessment of Breeder Cow Mortality Rates” Australian Association of Cattle Veterinarians. Toowoomba Proceedings 1996.

“Concerns for Sustainable Wool Production in Semi-Arid Areas.” G. Niethe & P. Rolls, Mackinnon post graduate Seminar, Melbourne University, 1998.

“Welcome to Australian Cattle Production Systems.” Proceedings of XX World Buiatrics Congress, Sydney 1998.

“Best pastoral practice Options in the 21<sup>st</sup> Century.” G. Niethe & Prof. I. Caple, Proceedings of the Australian Association of Cattle Veterinarians, Hobart 1999.

“What Percentage of Their Time do Private Practitioners Spend with each species of Animal.” T.J. Heath & G.E. Niethe – Submitted for publication in the AVJ 2001.

“Effect of Gender on Ownership and Income in Veterinary Practice.” – Volume 79, Issue 8, August 2001, Pages: 546–548, TJ Heath and GE Niethe

“Veterinary Practice in Rural Australia: A National Survey.” – T.J. Heath & G.E. Niethe –Volume 79, Issue 7, July 2001, Pages: 464–469, TJ Heath and GE Niethe “Spaying as a strategy to boost herd profits” G.E. Niethe, Proceedings of the Australian Cattle Veterinarians Conference, Geelong November, 2008,

“Modelled female sale options demonstrate improved profitability in northern beef herds.” G.E. Niethe and W.E. Holmes, Australian Veterinary Journal, Dec 2008. Vol 86, 12 pages 458 – 464.

“New R and D for better herd health and productivity.” North Australian Beef Research Update Conference, Darwin: August 2011

“Resource use and greenhouse gas intensity of Australian beef production:” 1981–2010, S.G. Wiedemann a,\*, B.K. Henry b, E.J. McGahan a, T. Grant c, C.M. Murphy a, G. Niethe Agricultural Systems 133 (2015) 109–118