

## Rangeland goat production in western NSW

Case studies of seven successful enterprises



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### **Producers**

Keith and Robin Francisco, Cobar

Greg Church, Wilcannia

Rick and Jo Gates, Ivanhoe

Tara and Sam Homfray, Wilcannia

John Vagg, Ivanhoe

Tony and Heather McGinty, Ivanhoe

Randall and Tracey Graham, Ivanhoe

### **Cover photo**

Twelve to 18 month old Boer X breeding bucks, averaging 75 kg each, John Vagg's property, Orana Station, Ivanhoe NSW. Photo: Allie Jones.

### **Disclaimer**

The information contained in this publication is based on knowledge and understanding at the time of writing (August 2012). However, because of advances in knowledge, users are reminded of the need to ensure that information on which they rely is up to date and to check the currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent advisor.

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## Introduction

This report was developed with the assistance of seven goat producers from western NSW, each of whom demonstrates best practice in their respective enterprises.

### About this report

This report was prepared to:

- gain an insight into goat enterprises in western NSW, highlighting the success of the selected enterprises
- provide a resource for other goat producers and for people considering entering the industry
- identify current challenges and issues faced by western NSW goat production and the Australian goat meat industry, and
- propose recommendations to assist producers progress the industry.

### Methodology

A producer questionnaire was developed as the basis for gathering information during property visits. The questionnaire captured information on topics related to the goat enterprises including environment, land and pasture, markets and access, animal husbandry and health, breeding and livestock selection, infrastructure and, importantly, challenges and producer views on the future of the industry.

The author met with producers on their properties. Using the questionnaire as a basis for discussion, information was gathered to provide an overview of each business and its operations. This information is presented in this report as case studies.

Comments from the producers and other information gained from the study tour formed the basis of a SWOT analysis conducted to investigate the viability of the rangeland goat industry and develop recommendations for its future success.

### Australia's goat meat industry

Western NSW producers believe the Australian goat meat industry is evolving rapidly and continuing to grow, with producers, depot operators and processors increasingly committed to developing supply chains that deliver a quality product to consumers. There is significant potential for growth in the goat industry, provided inputs remain low and the industry can maintain a simple flow structure between farm and markets. The value of Australian goat meat exports and live exports in 2010–11 was approximately \$125 million, with live exports accounting for \$10 million (MLA 2011). Rangeland goat enterprises are responsible for 95% of the industry's total goat meat production (MLA 2011).

*'Rangeland' goats are defined as goats raised on land where the indigenous vegetation is predominantly grasses, herbs and shrubs suitable for grazing and browsing, and where the land is managed as a natural ecosystem. This includes natural grasslands, shrub lands, deserts and alpine areas (MLA 2006).*

Goats in western NSW are either harvested from wild or unmanaged populations or produced in managed enterprises. Producers believe the industry faces a unique challenge to ensure the rangeland goat is viewed as a resource rather than a pest. Goats are sold directly to processors or via depots that consolidate and draft lines according to different market specifications.

It is difficult to estimate the number of rangeland goats because their numbers fluctuate with seasons, they are mobile and they are often in terrain that is difficult to survey. Estimates of Australian rangeland goat numbers range from 1.5 million (Pople et al 1996) to 5 million (DAFF 2005) and they occupy approximately 1.2 million sq km of rangelands (Ballard et al 2011).

The density of goat populations can vary significantly throughout their range, even at the local scale. An analysis of goat populations in western NSW from 1993 to 2010 showed a mean annual density across the region of nearly three goats/square kilometre, but densities at the district level were up to 100 goats/sq km at Coolah, in central eastern NSW (Fleming 2004). Goat numbers across the region rose from about 750,000 in the mid-1990s to 2.5 million in 2010 (Ballard et al 2011).

Goat meat is the most widely consumed meat in the world. There are few, if any, religious taboos limiting goat meat consumption. Goat meat is an important component of the traditions of the Hindu and Muslim faiths, being readily consumed on specific holidays (MLA 2011).

Goats produce a lean meat of high quality; particularly during the young stage. The meat is flavoursome, succulent, tender, attractive and tasty.

Despite being a relatively small producer of goat meat, Australia is the largest exporter of goat meat and live goats in the world, exporting to the US and Taiwan for meat and Malaysia, Singapore and the Philippines for live export (MLA 2011). Many of the markets into which goat meat is sold are price sensitive.

The export market consists of both skin-on and skin-off whole carcasses. A skin-on carcass is a product with the skin left intact and the hair removed. The major markets for this product are Taiwan and the Chinese community in the United States (MLA 2011).

Information about the characteristics of the Australian domestic goat market is limited, as the market is fragmented and difficult to describe in detail. The domestic market provides premium goat meat to high-end food service outlets, including restaurants and butchers along with farmers markets and food festivals.

The industry remains constrained by several factors, including inconsistent supply and quality. There is a need to develop supply chains which better satisfy the needs of an identified market and thus add value to the industry (MLA 2011).

## Overview of findings

The producers who were interviewed identified labour, education and markets as the big issues facing the industry. Other factors included government policy that they considered restricted or added costs to food production, a lack of interest in agriculture from the next generation and a limited understanding of the rangeland goat as a resource by the wider community and industry representatives. Producers had limited knowledge about the purpose of the goat levy and expressed frustration at this. These issues, along with the challenges and opportunities facing the sector, are discussed in this report.

Producers were asked to identify their vision for the industry in 20 years and what changes they would like implemented. They envisage a future where food producers are valued and consumers engaged, goat farmers are proactive, positive, environmentally sound and innovative while adopting best practice and embracing technological change.

## Case study 1: Adaptable rangelands

**Property:** 'Tindarey', Cobar, NSW.

**Producer:** Keith and Robin Francisco.

**Enterprise:** Controlled and managed rangeland goat breeding and opportunistic harvesting for the domestic trade.

The Franciscos have built a profitable business enterprise on breeding quality rangeland goats, whose characteristics include high prolificacy, good mothering abilities, adaption to the local environment and a consumable, marketable carcass.

**Livestock mix:** 4000 breeding does.

**Area:** 16,030 ha.

**Rainfall (average annual):** 300 mm.

**Target market:** Domestic trade.

### Going into goats

Keith Francisco has been involved with goats since 1985, when a severe bushfire burnt out part of Tindarey, which at the time ran a productive sheep enterprise. The impact of the bushfire persuaded Keith to try a different enterprise. Keith erected goat proof hinge joint fencing and harvested the rangeland goats that were running on Tindarey. He bought in Angora bucks to cross over his rangeland does, as Angora mohair production was profitable at the time.



*Keith Francisco with his granddaughter Laura and daughter Kathryn.*

Soon after Keith established the new enterprise, the mohair market dropped and Angora production was no longer viable. Keith decided to produce meat goats and focus purely on his goats and sustaining and improving his land for that purpose.

When Keith went into meat goats he also started a small depot on the property, buying harvested goats from neighbours and trucking them to the abattoir at Bourke. When the abattoir shut down in the late 1980s, Keith ceased trading as a depot and began working off-farm, while keeping a close watch on his rangeland business.

### Hardy and adaptable

Keith believes the rangeland goat is one of the hardiest small livestock breeds in Australia. Rangeland goats have a great capacity for adaption and thrive in a variety of climatic regions and land types in western NSW. The conditions of Tindarey are quite rugged, rocky and arid with dense bush inhabiting uncleared land. During years of drought the goats have survived well on Tindarey without requiring supplements.

### Land and pasture improvements

Tindarey is split up into 13 paddocks ranging in size from 40 ha (small holding paddocks) to 11,500 ha. The paddocks are fenced with hinge joint (7/90/30) and electric offsets. The Franciscos decided to invest in the best quality offset electric fencing they could buy. Although the initial cost of fencing was high, it has been one of the most important additions to the property. Keith says it has been cost effective in the long term in regard to controlling his stock and keeping predators and feral pests out.

During the last three to four years Keith has made a conscious effort to continuously spell his paddocks with the aim of regenerating pastures. The period of rest depends on seasonal activities; however, the average is six months.

Having paddocks that have been spelled is also an advantage for managing internal



*The paddock on the right of the fence has been locked up for two years to allow for regeneration, while the paddock at left has been grazed.*

parasites. Keith places at-risk stock on clean worm-free pasture. The goats are also an excellent resource to reduce woody weeds. One paddock was spelled for two years, resulting in significant regeneration and pasture improvement (see photo above).

Areas of Tindarey are cropped when season conditions are suitable. In 2011, 40 ha of oats and 100 ha of silk sorghum were sown. Crops such as silk sorghum and oats have been grown successfully and utilised as a grazing crop and supplement for weaners and finishing goats. Good growth rates have been achieved by grazing goats on the silk sorghum crop, for example, 18–20 kg bucks averaged a weight gain in 2011 of between 2 and 2.5 kg per week.

Keith believes he is improving soil physical and biological health through organic carbon accumulation within his silk sorghum crops.

### **Meat of a high quality**

Keith markets his goats between the age of 6 and 15 months (approximately 30 kg liveweight) into the domestic market producing a high quality carcass. However, Keith believes Australian consumers are not aware of the health benefits of goat due to the lack of promotion in large supermarket chains. He

believes there is a need for more education about the benefits of goat meat to increase public awareness and market appreciation of the red meat.

### **Opportunistic harvesting**

Keith currently harvests unmanaged goats from a 1600 ha paddock that is separated from Tindarey by the Kidman Way, a highway connecting Bourke and Cobar. Keith has erected three self-mustering yards around watering points which he uses to capture goats every 3–4 weeks.

Salt is used as an attractant to encourage the goats into the yards. Constantly, good



*A trapyard used for opportunistic harvesting on Tindarey.*

numbers of goats are harvested from these yards, on average 30 large bucks at a time. Goats captured that are over 25 kg live weight are trucked straight to processors in Cobar. However, goats captured under 25 kg are grown to a marketable weight on Tindarey.

Rangeland goat harvesting in this paddock is profitable.

## Issues and challenges

### Animal husbandry – drench suitability

Goat producers including Keith Francisco faced an extensive challenge in the wet summers of 2010 and 2011. High summer rainfall and warm weather provided ideal conditions for a very high worm burden in western NSW. High worm egg counts were seen across the district causing severe production loss and even mortalities in some herds. This was the first time Keith Francisco had witnessed such devastating results from worms infecting his goat herd and it was one of the biggest challenges Keith he has faced in the industry.

Currently there are only a few oral anthelmintics (drenches) on the market registered for goats. Hence, goat producers such as Keith use products registered for sheep, cattle and deer including pour-ons and injectables, under approval from a veterinarian. Keith's veterinarian prescribes dose rates and determines a safe withholding period for the goats using a backline registered for deer. However, Keith would like to see work commence on the development and registration of a registered pour-on backline anthelmintic for use on goats.



*Mixed sex and age rangeland goats caught in one of trapyards on the property.*

Keith would like to see a pour-on registered for goat producers in the next 10 years and in order to achieve this he would like a portion of the goat levy used to fund a research project to develop and register a pour-on product for goat producers in Australia.

Keith also points out that handling rangeland goats to orally drench them is a significant occupational health and safety issue. Extra manual labour is required when an oral drench is used: one person to administer the drench and a second person to monitor and manage the goats in the race to ensure they do not lie down or pack up too tightly. It is difficult at times to source the required additional labour. Keith also estimates that at least 5% of drench is wasted by goats spitting it out.

Worms caused weight loss, scours and death in Tindarey goats in the summer of 2011; with high egg count test results for Brown stomach worm (*Teladorsagia*) and Barbers pole (*Haemonchus contortus*). Keith now monitors his worm burdens throughout the year by conducting faecal egg count tests in high risk periods of the year such as during warm weather following rain.

He has implemented a parasite prevention program. An effective management program will always involve grazing management. Keith utilises his silk sorghum as a management tool for worms, combined with a minimum number of drenches. Grazing management involves paddock rotation with spelled paddocks and pastures which have not been grazed by goats or sheep since the previous summer, for example, cropping paddocks.

### Goat levy concern

Keith is confused and disappointed about the use of the goat transaction levy. He does not understand where the levy is being spent and would like to see a process established to allow stakeholders to identify and prioritise the issues and challenges facing the industry and direct funding to these areas.

## Future plans for Tindarey

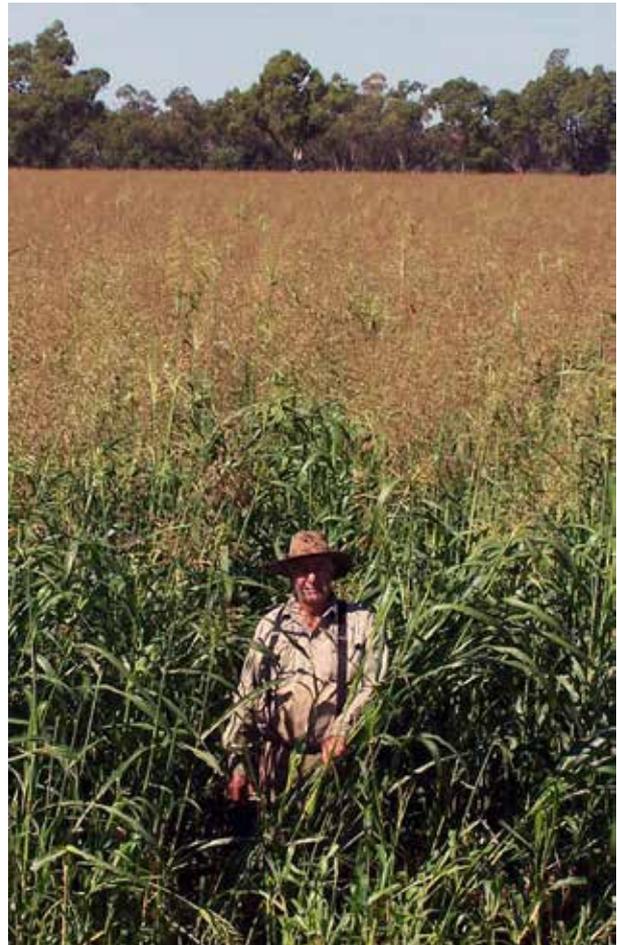
Keith would like to concentrate on improving genetics in his herd and intends to introduce Boer genetics into the breeding herd. Keith believes his rangeland goats, which he has bred himself over a number of years, are hardy and well adapted. However, he believes the Boer will play a vital role in increasing the growth rate of young kids and will have a place in the future herds of Tindarey.

New steel goat yards under construction on Tindarey will hold 5–6000 adult goats once completed. These yards are situated in the middle of Tindarey, central to all paddocks. Keith intends to incorporate a watering system to water down dust and to keep livestock cool in the hot weather.

Tindarey also has a large steel shed, which has yards and handling equipment inside, to handle goats. This is a significant benefit in the summer heat, providing a cool area for labour and shade for the goats. There is also electricity for lighting so work can continue into the cool of the evening.

## Key messages

- Opportunistic harvesting has proven profitable to Keith's enterprise.
- Internal parasite control is the biggest challenge Keith has had to face within the goat industry.
- A pour-on anthelmintic would be of great benefit to the rangeland goat industry.
- The allocation of the goat levy needs to be better communicated to goat producers to avoid confusion and frustration.
- Improved genetics are important for carcase quality and growth.



*Keith Francisco in his silk sorghum crop in March 2012. Photo: Francisco family.*

## Case study 2: Breeding Boer goats for rangeland conditions

**Property:** 'Bushley Station', 85 km south-southeast of Wilcannia.

**Producer:** Greg Church.

**Enterprise:** Breeding and marketing Boer goats for rangeland conditions.

Greg aims to breed cross breed Boer bucks that will produce and thrive in the semi-arid conditions of western NSW.

**Livestock mix:** 3000 breeding does and 600 third cross Dorper ewes. Cattle are also traded infrequently, viewed as an opportunistic business.

**Area:** 19,626 ha.

**Rainfall (average annual):** 300 mm.

**Target market:** Domestic trade market 24–33 kg liveweight.

### Goats as a new venture

Greg Church has lived at Bushley station for 19 years. Initially, the major business enterprises were beef and sheep. Greg began to consider rangeland goats as an enterprise when the price began to rise between 1998 and 2000, creating an opportunity to use unmanaged goat populations already on the property. The goats promised a bright future.

The first step Greg had to make towards a successful business change was to begin mustering the goats on his property and placing them in suitably fenced paddocks.

The next and most important step was to begin breeding quality rangeland goats. Greg started to buy rangeland goats to improve his breeding herd during 1996 and 1997. Selected rangeland does were sourced from areas such as Broken Hill and South Australia with most obtained from depots. Conformation, structure and coat type were the main traits Greg used when selecting his future breeding does.

It has taken six years to intensively goat-proof fence Bushley. Once the fence construction work started, Greg realised there was no turning back in his new venture. Bushley

station moved to a lower labour input system. By 2000 all Merino sheep had been sold as they were no longer viable. Most of the profits received from the goats were being used in the sheep enterprise (chemicals, labour for shearing) and infrastructure (fencing).

### Boer influence

The first Boer buck was introduced into the Bushley herd in 1998. Greg could not initially afford full blood Boers, so he invested in first cross Boers. These bucks introduced the characteristic Boer colour into the herd, but did not sufficiently improve carcase quality. Greg decided to invest in full blood Boer bucks at \$400 to \$600 per buck to improve herd quality.

Without Boer genetics, Greg believes he would be missing out on weight gain in his goats. He also believes Boer cross wethers have a higher dressing percentage, to increase carcase weights by 1.5 kg compared with a similar liveweight rangeland buck. Dressing percentage is a factor that Greg says many people do not take into consideration. The Boer infusion has made a big impact on the bottom line.

Greg faced significant challenges, with survival rates of introduced Boer bucks and a low proportion of Boer cross progeny when there was competition from Rangeland Bucks. Greg has been proactive in overcoming these issues using Boer bucks. A Boer goat trial was conducted on Bushley in 2005. The trial investigated a number of issues including the optimal age to introduce Boer bucks into



*Boer cross does and kids on Bushley Station.*

pastoral areas, acclimatisation and the effect of implementing a managed joining program. As the result of the trial Greg implemented many changes into his management program, including a restricted joining, buying in young bucks and culling rangeland bucks during peak joining periods.

### Breeding and livestock selection

Greg sells approximately 200 Boer bucks a year to commercial breeders. He aims to breed cross breed Boers bucks that will produce and thrive in the semi-arid conditions of western NSW.

Kidding is concentrated from May through to December, with the main objective a high turnoff of offspring. Between January and March Greg culls rangeland bucks that are getting into joining paddocks to ensure the Boer bucks have the best chance at serving the does. This can be labour intensive.

Greg consistently culls and classes his stock, culling for coat colour and length of hair, wild untamed horns, hooves, teats, temperament and general rangeland characteristics. Herd and kidding performance of the Bushley rangeland goats is hard to gauge as they breed all year round with bucks in the herd continuously and does and bucks reaching sexual maturity at a young age. Kidding percentages ranges from 135–170%, with variations largely related to season.

Greg castrates his male kids as early as possible, with 95% of his Boers marked (5% are usually missed at mustering). Greg believes wethers gain weight faster than uncastrated bucks. A wether also dresses better than an uncastrated buck, by approximately 1.5 kg/head.

### Infrastructure

Greg says infrastructure need not be highly engineered or 'flashy'. A simple design can be just as effective and much cheaper. Through trial and error, Greg has established four sets of steel goat yards on Bushley, all equipped with Metalcorp® goat handlers. Greg has established the benefits of a round yard system leading into the race: The goats no longer pack into corner and they flow better though the race, leading to less stress during handling.

One of the most important design features is the inclusion of shade, either with a tin roof or shade cloth. Greg has found that providing shade in the yards for the goats during kid marking has a significant impact on their behaviour and stress levels. He describes the kids as 'totally different animals' when provided with shade. Greg's focus is on kid survival as the kids are the next generation of the herd. Before the shade was implemented Greg believes the goats did not mother up as well and as a result kids were orphaned.



*One of four sets of steel yards on Bushley Station. All incorporate shade as part of their structure.*



*New yards under construction.*

## Markets

The domestic goat trade is the target market for Bushley. Goats are sold into this market every three to four weeks, weighing between 24 to 33 kg liveweight. In 2010 around 4700 goats were sold, with 6000 sold in 2009. More females and males were retained within the herd in 2010.

In the last eight years Greg has exported 2000 breeding does to Malaysia. This market is very specific about the colour and markings of does. The does must have the markings of a Boer (white body, red head), while confirmation is less of a priority.

Goat production now gives Greg great satisfaction. He now receives continual feedback from the abattoirs and processors he supplies about carcase weights required and the quality of the lines he delivers. Greg believes a relationship with his buyers is the key to success along the supply chain. Having achieved this, he aims to produce a high quality product desired by abattoirs.

## Marketing strategies

Greg is aware that product consistency is a large issue within the industry. Producers must supply processors with consistent lines of goats and carcasses. Wide variations in size and condition make the task of processing and marketing the product more difficult.

Greg believes he is maximising price by opportunistically supplying different markets, for example, the live export of does. Greg believes to succeed you need to gain access to niche markets to make your enterprise stand out from the rest.

## Yard design hints from Greg:

- Yard design needs to be flexible to take into account different situations and needs. Panels need to be 1200 mm high and 100 mm off the ground
- Yard shade is vital. August through to October is when the majority of kidding occurs, so marking occurs in the heat of summer. Hot days are hard on the goats and stock workers.
- A roof is an advantage. Work can be conducted in all weather conditions and the producer can still load stock in wet conditions
- Use curved yards to prevent goats hiding in corners.
- Use open sided races. Greg believes goats need visibility to flow through a race. When the race is opened up they can view goats on the other side, preventing balking behaviour.
- Holding yards must contain water.
- Have tanks and water on site to hose down dusty yards before beginning work.

Greg carries out most of his own marketing, dealing directly with the processor and only occasionally using an agency to market his product. While he appreciates the potential risk in dealing directly with processors, for example, security of payment, Greg cannot justify the cost of agent commissions. Instead, he has invested time building excellent working relationships with processors.

Greg's motto 'less is more' when it comes to determining and managing stocking rates and market opportunities. He may be turning off fewer goats, but the quality has increased, along with profit margins.

## The future

In the face of a labour and skills shortage affecting Australia's agricultural sector, Greg believes future leaders of the industry must be encouraged to begin a career in agriculture rather than turning to other employment sources such as mining. He believes the issue must be addressed if the goat industry is to continue with the next generation and

teamwork between producers and industry representatives is vital.

Within the next 10 years Greg would like to see industry leaders establish stable markets with reliable returns. At present the only markets that exist are those that producers have developed themselves. Greg would also like to see an increased premium paid for smaller domestic goats.

Greg also believes the relationship between rangeland and Boer stud breeders. Currently Greg continues to source pure Boer bucks from stud breeders as there is no one concentrating on commercial breeding for commercial buyers. Greg is disappointed that he receives no after sales service from the studs. Improved feedback and service would help build better relationships between the two industries.

### Key messages

- Acclimatisation of young Boer bucks into rangeland conditions is vital for their

survival and important for adaption and performance in western NSW conditions.

- A shade structure on yards has a significant impact on the behaviour and stress levels of goats and provides an improved working environment for stockpersons.
- Future leaders of the industry must be encouraged to begin a career in agriculture. The goat industry must be promoted to the next generation.
- Greg's motto is 'less is more' in regard to determining and managing stocking rates and market opportunities.
- Strong working relationships with processors are important.
- Genetic improvement must continue, as this is critical to enterprise success factors such as weight and carcass advantage.

## Case study 3: Gates goats

**Property:** 'Woolahra', Ivanhoe, and 'Burndoo', Wilcannia, NSW.

**Producer:** Rick and Joanne Gates.

**Enterprise:** Rangeland goat trading, processing and depot operation.

Rick and Joanne Gates operate one of Australia's key commercial goat depots, 'Gates Goats'.

**Livestock mix:** 150,000 goats are turned off per year.

**Area:** Woolahra 8,000 ha and Burndoo 25,000 ha.

**Rainfall (average annual):** 260–300 mm.

**Target market:** Export meat is the largest market; Goats are also supplied for live export, domestic meat and domestic re-stocking.

### Overview

Rick and Joanne Gates operate one of Australia's most productive commercial goat depots in western NSW. Rick has established the infrastructure, including yards and fencing on his properties 'Woolahra' and 'Burndoo' to accommodate a high throughput, productive and sustainable goat depot business.

The Gates family had operated a successful sheep and wool business since the 1920s. However, crippling wool prices coupled with dry seasons and drought forced the Gates family to consider alternative enterprises and business options. The first step in their change to goat meat production was to destock sheep and re-stock with rangeland goats sourced from other depots in the area and neighbours. It soon became obvious to the family that goats could be turned off very quickly, compared with a breeding operation. In 1998, the business 'Gates Goats' was established. Rick has never looked back.

### About goat depots

A depot is an essential tool in the Australian goat industry. Its main function is to consolidate significant numbers of goats for marketing purposes. Goat depots vary in nature but can be broadly defined as: 'A holding area where goats are brought together or accumulated before they are transported for slaughter, export or distribution to other businesses.' (Meat and Livestock Australia, *Going into Goats*, 2006).

'Burndoo' a 25,000 ha property between Ivanhoe and Wilcannia was purchased in 1988. Rick and Joanne bought the 8000 ha 'Woolahra', at Ivanhoe, in 2009.

Rick aims to have a sustainable, productive and profitable goat trading business. The business is set up to have the capacity and number of goats to respond appropriately to market demands. Rick explains that his business profitability depends on the efficiency of the operation and is driven by his capacity to generate net income on a consistent basis. Rick and Joanne have a long-term plan to succeed in the industry.

Maintaining ground cover and pasture conditions is imperative on both properties. Stocking rates are low in the paddocks because they are always turning over stock. This maintains pasture condition, necessary to achieve a short turnaround time from purchasing to reselling, on average every 10 days. Rick works on a carrying capacity of 10 ha per goat regardless of the size of the goat.

Goat grazing has been used to successfully control invasive native shrub. The goats have eaten out the hop bush on the properties and the Gates are controlling turpentine with a combination of goat grazing and chemical treatment.

## Infrastructure

Well designed yards equipped with proper stock handling equipment are required for efficient goat handling. Steel yards have been built on both properties. The yards contain a weighing pen used to weigh and draft lines of goats. The yards are set up with water and a Holland® stock lift race is also used for handling goats. A metal roof over the yard provides shade for the animals and staff during hot weather. The shade reduces stress on both the animals and handlers, which has improved the ease of handling the goats.

The goat handling facilities have reduced time, costs and operator safety when handling goats. Rick explains that this investment in infrastructure is vital to the efficiency of their business.

Effectively fencing rangeland paddocks for goats has been a significant challenge. The majority of the fencing on both properties consists of eight plain wires and two barb wires. There is minimal hinge joint on the property. Rick believes the plain and barb wire fence is superior to the conventional hinge joint fence. He has had issues with kangaroos and emus damaging the hinge joint and believes it is an animal welfare concern when goats get their heads stuck in the hinge joint. The material costs for the plain wire fencing were more expensive than hinge joint, but construction costs were less, resulting in a cheaper and more efficient fence design.



*A newly unloaded mob of rangeland goats.*



*Rick Gates drafting a mob of goats at Woolahra.*

## Marketing

The Gates family turns-off between 2500 and 3000 goats per week. In 2011, 'Gates Goats' traded 150,000 goats. The infrastructure on the properties can handle the turn-off of up to 200,000 goats a year. Goats are consistently supplied to four main markets. Currently, 65% of the goats are sold to the export meat market; 15% to live export; 15% to the domestic meat trade and 5% to domestic re-stockers.

Each of these markets has different specifications. The export meat markets require goats that are 23–45 kg liveweight for the skin-on trade and 26–80 kg for the skin-off trade.



*A mob of live export bucks ready for loading.*

Live exports are transported by plane from Adelaide, Melbourne or Sydney. The market prefers medium weight goats (25–40 kg) to minimise freight costs. There are also specific criteria relating to horn size and shape for this market. Malaysia imports 80% of animals of the live animals exported for the meat trade and the other 20% goes to other Asian markets.

The Gates source the majority of their goats from surrounding landholders in the Ivanhoe and Wilcannia area. The goats are sourced from a network of local producers that repeatedly supply to the depot. Rick has worked hard at establishing good relationships over the years, and this guarantees that he can consistently buy and provide healthy rangeland goats.

Goats are accepted and handled at either of the depots on 'Burndoo' or 'Woolahra'. The Gates collect the majority of the harvested goats using their own three-deck semi trailers.

When the goats arrive at the depot they are drafted into lines based on sex and weight. Suppliers are paid on a dollar per kilogram liveweight basis. There are varying rates for bucks over 22 kg, nannies over 22 kg and small stock under 22 kg. Once the goats are weighed and drafted into groups they are released into goat paddocks (averaging 1600 ha) close to the handling yards.

No drenching or other husbandry is required when the goats arrive at the depot. The goats do not stay long enough on the properties for parasites to become an issue.

On average goats will only stay for 4–10 days on the property before they are dispersed into the different markets; and while times depend on the market and the capability of the depot and a quick turnaround time is important to make a profit. Wages and fuel are the two biggest input costs that Rick has to manage to make his business a profitable enterprise. Rick employs three full time workers and casual staff in busy periods.

When asked if he ever receives a break from the business, Rick replied that running a depot is "... like a corner shop, you never stop – planning for a trip away is hard work'.

Rick is maximising the prices received for the goats by trading as a depot, a niche business

opportunity in the goat industry. While commercial goat producers do not have access to sufficient numbers to develop lines of goats for a diverse range of markets; Rick has the advantage of being able to buy directly from landholders and sell directly to the abattoirs.

## Issues and challenges

Rick believes the goat industry faces a unique challenge to ensure the rangeland goat is viewed as a resource rather than a pest. Unmanaged rangeland goats can be viewed as a pest, due to their contribution to grazing pressure. Rick feels that this challenge has been made more difficult by some areas of government and natural resource management agencies who view the rangeland goat mainly as a pest, without considering its value as a resource.

Rick believes the Australian goat industry is evolving rapidly, with producers, depot operators and processors increasingly committed to developing supply chains that deliver a quality product to consumers. For this reason, Rick encourages government to become more informed and engaged with the goat industry and community on projects and policies. He feels this would be positive, both for developing the goat meat industry and for natural resource management in western NSW.

The potential cost of tagging goats under NLIS (sheep and goats) is an issue of concern for the Gates Goats enterprise. Rick believes the national livestock identification system (NLIS) is vital to safeguarding the Australian goat industry and currently, goats consigned from the depot to slaughter require a National Vendor Declaration form (NVD). However, Rick says that if compulsory NLIS tagging is extended to unmanaged rangeland goats, labour and tag costs will jeopardise the profitability of depot operators across Australia and harvesting will no longer be a viable enterprise

Rick feels that if tagging every goat sold from the depot becomes mandatory the depot business would face a serious increase in labour and tag costs that would challenge its profitability.

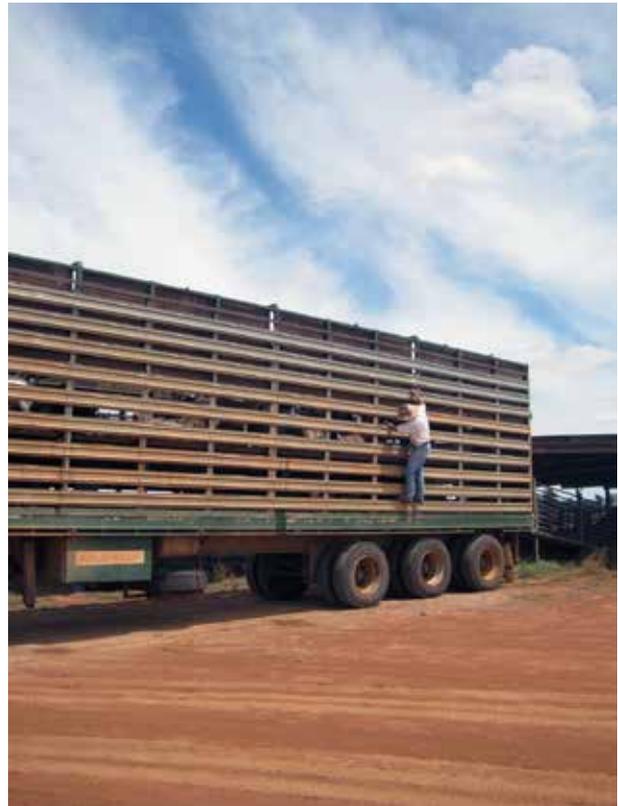
Rick believes the Dorper is one of the biggest threats to the goat industry at present. He feels the profitability of Dorper enterprise may encourage more producers to switch from goats and he will lose supply.

Goat markets can be fickle and are based upon supply and demand. Once the price of goat meat starts to drop, the landholders stop selling their goats to the depot and supply can be a problem. Rick believes goat markets must become stable in Australia.

In 10 years' time Rick would like to see the Australian goat industry expanding and be better understood by both the public and government.

### Key factors in the success of the business

- Building good relationships with suppliers, including local goat producers and harvesters, and processing plants, is essential. In Rick's case, efficient relationships have been built along the supply chain to maintain profitability.
- Rick provides attractive remuneration and benefits to retain staff.
- Rick does not buy goats without completed documentation (National Vendor Declaration). Rick believes traceability is important to the industry and has a strict policy: 'No NVD, no payment'.
- Rick does not undertake or support any activity that might lead to negative publicity for the goat industry.
- Rick believes you should never stop educating yourself about new technology and learning new skills, including measures to improve output and reduce costs, providing the means to keep your business strong when the economy gets tough.



*Unloading goats on Woolahra.*

## Case study 4: How goats fit into rangeland management

**Property:** 'Fairmount Station', Wilcannia, NSW.

**Producer:** Sam and Tara Homfray.

**Enterprise:** Controlled and managed rangeland goat breeding and harvest for the export trade.

The Homfrays are utilising tools gained from the holistic management course to set up and manage a property that has resulted in a goat enterprise with a sustainable and viable future.

**Livestock mix:** 7000 breeding does and approximately 350 head of trading cattle.

**Area:** 75,000 ha.

**Rainfall (average annual):** 250 mm.

**Target market:** Export meat trade: skin-on does to the United States, live exports to Malaysia.

### New approach to land management

Sam and Tara Homfray own and run Fairmount station, 40 km south east of Wilcannia. After spending time away from the area, Sam and Tara moved back to Fairmount in 2001 identifying the need for a new approach to land management in the rangelands. They saw traditional set stocking and overgrazing as the main contributors to the deterioration of land and set about gaining knowledge that would help them create a profitable and sustainable business.

Sam and Tara identified goats, which were in plentiful supply, as a cash flow positive and, when managed properly, an invaluable tool in their efforts to revitalise the land and improve ground cover, pasture composition and soil health.

The Homfrays began the transition to running goats and found it was self-perpetuating. They began with a 10,100 hectare paddock fenced for goats. Increases in cash flow allowed a faster transition and as they phased out the traditional Merino flock, management became simpler.

### Grazing management

Sam and Tara utilise grazing rest management principles to alter stocking rates and manage their land and ground cover composition. Their grazing strategy involves spelling anywhere from 20 to 50% of their land at any given time and running their livestock in large mobs to optimise the impact of the animals on soil composition.

The principles they apply where possible are:

- improving soil health and biodiversity of rangelands and pastures
- increasing grazing and wildlife capacity
- increasing annual profits and enhancing their livelihood
- optimally using rainfall and conserving water
- growing healthier crops and achieving higher yields
- reversing desertification in brittle environments
- breaking the cycle of food and water insecurity
- management practices that aim to reduce the effects of global climate change.

### Livestock selection:

Bucks are kept with does all year round at Fairmount. However, the Homfrays have learnt that it is important to wean young bucks at approximately 4–5 months of age and run them separately from the does. This is necessary to prevent does being harassed constantly from young bucks reaching sexual maturity. This harassment results in a loss of production due to reduced growth rates in both the young does and bucks.

Sam and Tara draft and cull their goats according to type and character. For example, they prefer goats without long hairy coats as these cause processing issues and Sam and Tara have found that this type of goat doesn't do as well on the property. The hair is thought to have evolved from the fibre shedding goats of lower carcass quality.



*Yard work on Fairmont Station. Photo courtesy of the Homfray family.*

After 11 years of culling in the rangeland herd, the Homfrays have identified the genetics of the Nubien goat, which was bred for milk production, as the type and style of goat that is best adapted and that has proven itself in the environmental surrounds of Fairmount.

## Marketing

Approximately 12,000 goats are turned off annually. Sam and Tara aim to turn bucks off at 12 months of age, while the does are turned off at all ages.

The live export trade is extremely important to the Homfrays as it underpins price and market access. The main market aimed for is the live export Malaysian trade. The live export market requires bucks to be 32–40 kg liveweight and the Homfrays aim to turn their goats off to meet this specification. Anything that is produced outside of these specifications is sold to Australian processors for the skin-off export market. Bucks are turned off between 32 and 40 kg liveweight and anything outside of these parameters goes into the skin-off market. Does are placed into the skin-on market dressing at 13–16 kg.

The Homfrays do not supply the domestic trade market. The small consignment number (200–220 goats at a time) required for the domestic market does not suit the large scale of the Homfrays' enterprise, or allow them to capitalise on transport efficiencies.

Sam and Tara have worked hard at building successful business relationships with their processors. As a result they have received premiums for their product. Operating a large

scale enterprise and maintaining high turnover is the Homfrays' business approach.

## Challenges and issues

The goat export trade was affected by the month-long closure of live cattle trade in 2011. The closure resulted in a domino effect, with all live export slowing as a result. The Homfrays feel it is important to protect the reputation of the Australian goat markets.

A labour and skills shortage is one of the most significant issues facing the goat industry at present. Sam and Tara believe consumers need to be educated so they understand the nutritional benefits of high quality goat meat from a well managed enterprise. Operators and consumers need to understand the three factors that contribute to success and balance (livestock, the land and the manager's influence). Government support is also vital to the future of the industry.

The Homfrays are frustrated at what they see as portrayal by the media of the rangeland goat as an environmental threat and uncontrolled. They want people to realise the potential of goats as a tool in improving rangeland environments. On Fairmount, the management of goats has resulted in improved pasture composition and soil health and decreased erosion.

## The future

Tara has recently completed a marketing course, which she considers to be a valuable tool to help improve cash flow and profitability of the property. Areas for potential expansion have been identified, for example in Fairmount's cattle trading enterprise, seen as a complement to grazing management.

Sam and Tara feel the potential for growth in the goat industry is huge, if the industry can maintain the low input nature of the enterprise.

Improved financial analysis is important. Benchmarks such as cost of production and gross margins do not exist for the goat industry and these need to be developed for the enterprise to continue making a profit.

Sam and Tara feel the industry needs to focus on people who are moving forward in their enterprises and showing initiative and engaging in new technologies.

## Key messages

1. To be successful, a balance must be achieved between the livestock, the land and the operator.
2. Further education is vital to securing tools to improve business approach.
3. Sam and Tara have found holistic management to be the key to managing their property's environmental sustainability.
4. Benchmarking must be established for the goat industry.

## Case study 5: The improved Boer goat

**Property:** 'Orana Station', 33 km north-west of Ivanhoe.

**Producer:** John Vagg.

**Enterprise:** Goat breeding and export trade.

John Vagg has been successful in establishing a thriving and profitable goat breeding enterprise that is well suited to the semi-arid environment of western NSW. Persistence and dedication to establish a hardy, fertile, high yielding carcass has been John's objective.

**Livestock mix:** 3000 breeding nannies (cutting back to 2700 in 2012).

**Area:** 19,668 ha.

**Rainfall (average annual):** 250 mm.

**Target market:** Export meat market.

### The beginning

In the 1980s up to 10,000 Merinos were shorn at Orana annually. However, the collapse of the wool floor price and the price discounts received for vegetable matter were major factors that promoted a change to goat production in 1990.

While running his Merino enterprise, John was harvesting and selling up to 2000 rangeland goats off Orana each year. This enterprise was bringing a financial return with minimal input costs and profits were going straight back into the sheep business to cover expenses such as shearing and chemicals. As a single operator, John realised goats were a no-fuss, easy enterprise requiring less labour than his Merino enterprise.

The first step to successfully changing enterprises was to upgrade the fencing on Orana by placing hinge-joint using 6/70/30 on all existing plain wire fences and to begin capturing the rangeland does that were already running on country surrounding Orana. John utilised his cattle selection techniques including confirmation, structure, temperament and milking ability to select a breeding base of does that were suited and ready to perform. Culling of lighter and weak animals was also initiated. John was

establishing a breeding herd of rangeland goat well adapted to the pastoral environment.

John believes the rangeland goats benefit the environmental characteristics on his country, if managed using grazing rest periods. John believes his property has never looked better, as the goats prefer to browse or eat weeds such as Wards weed (*Carrichtera annua*). The goats also eat most of the woody weeds at the more palatable seedling stage. John has also observed that goats will eat the perennial grasses down to their crown but not eat the crown out, allowing the crowns to reshoot relatively quickly after the rains, aiding faster pasture regeneration. John rotates his stock, spelling paddocks for 6–9 months to ensure they recover from any over grazing.

### The evolution of the improved Boer – the crossbred

In 2003, John introduced eight pure Boer bucks from Longreach, Queensland, to increase carcass weight and profitability. However, the Boer bucks did not join well with the rangeland does, with only 16 kids produced from 2200 does in the first year of joining. John believes the doe and buck contact was not sufficient in the large paddock for bonding and joining to occur. This joining also occurred in a drought year. Reproductive rates were vastly improved when John joined first and second cross Boer bucks with the rangeland and Boer cross does.



12 to 18 month old breeding Boer cross bucks on Orana Station. These average 75 kg.

John has introduced the Boer genetics to increase his carcass qualities via increased weight gains and to enhance the overall vigour of his herd. The Boer cross has successfully improved weight gain. The quicker weight gains are resulting in a faster turnaround which ultimately results in increased turnover and profit. This has all started from selective, strategic selection of mating his best does with his best bucks.

John started to select rangeland does and bucks with good body type and conformation and infused some Boer stock into the mix. John finds the progeny are more robust with heavy shoulders and hind ends and the males are achieving the weight targets at an earlier age.

### Poll genetics

John has bred a line of poll goats, by selecting poll does occurring in the rangeland herd. The single dominant poll gene was introduced from breeding with poll rangeland does. When John started breeding poll does some other producers cautioned John against the idea, as there is a commonly held belief among pastoral producers that poll goats are also commonly hermaphrodites. However, John has proven this theory wrong, as no more than one per cent of the goats he breeds a year are hermaphrodites. John believes the poll gene may be traced back to the Saanen milking goat. Meat and Livestock Australia (MLA) has recently taken blood samples from John's goats to trace the origins of the gene.

### Reproduction performance (fertility and kidding percentage)

John believes that high rates of reproduction and low post-natal mortality are the most crucial requirements for productive and profitable meat producing livestock.

John believes the Boer genetics within his herd are responsible for the increased fertility and kidding percentages. The Boer cross goat has proven to be very fertile and is not a seasonal breeder; therefore mating occurs all year round. Further, multiple births are the rule rather than the exception, with an average kidding percentage of 170%. This result exceeds the kidding rate attained in other small stock breeds. These two important

economic characteristics have made the Boer genetics very popular and a success within John's herd for the following reasons:

- As the Boer goat is not seasonal, the kidding season can be selected to fit when feed is most plentiful. John believes his nannies are kidding every six months, usually April and November when feed is plentiful.
- The exceptionally high kidding percentage implies that the Boer goat genetics cannot be surpassed with regard to the percentage of meat per kilogram per doe per hectare. This factor ranks the goat very highly with regard to a profitable farming enterprise. John explains he would need more feed to run Dorper sheep to get the same kg per hectare obtained from his highly productive goats.

John has introduced the Boer bucks to increase the versatility and carcass qualities of the rangeland herd. However, John says that if his reproductive capacity was to drop from introduced genetics he would look to re-introduce rangeland bucks to increase herd vigour.

The offspring of John's Boer cross herd are early breeders, reaching puberty at six months of age (kidding at 10–12 months). This is particularly advantageous to the meat breeding business. No issues in regard to birthing problems are witnessed with these young females. By mating twice per year or three times per two years, the number of kids per doe per year or the potential gross meat yield per ha has risen dramatically on Orana.

### Markets

John is flexible in his approach to marketing prepared sale stock, waiting for the right opportunity such as a price rise before offering to processors. He uses an agent to help market some of his goats, to guarantee payment.

In the 2011 financial year John turned off 10,000 goats to processors. The average age at turnoff is 8–10 months for bucks, at an average of 43 kg liveweight (approximately 20 kg carcass weight). Currently, the average dressing percentage of John's does and bucks are 40% and 45% respectively. This illustrates the exceptional carcass

characteristics of John's Boer cross offspring. John believes processor feedback is vital to give the business the confidence to continue expanding.

John believes that the introduction of the Boer genetics into his rangeland herd has enabled market specifications (20 kg dressed carcass weight) to be met at a faster rate. John is now reaching this target weight in 8–9 months with his Boer cross progeny, compared with 11 months with his rangelands. The weight gain has enabled market specifications to be met faster with a greater financial return.

John's recipe for success is crossing the rangeland does with the Boer cross bucks to produce a productive and fertile animal that meets market specifications earlier while still retaining the vigour and adaptation aspects of the rangeland goat.

### Issues and challenges – the future

John believes that there is significant potential for growth within the goat meat market in Australia, particularly the domestic market. However he also understands there is a shortage of committed producers. Opportunistic supply is an industry issue, hindering the growth of the Australian market including access into high end quality restaurants, supermarkets and gourmet delis. Promotion and distribution of the meat is an area that must be improved if the Australian domestic market is to reach its full potential.

John believes there is a significant future for Boer infused cross bred goats. They are in demand at present for the domestic small

trade market. John believes there is room for niche markets to open and expand while presenting the consumer with a quality carcass. John believes the Boer cross is going to become very popular within the domestic market with butchers and chefs realising the potential the carcass offers, i.e., superior quality and taste that can be obtained from quality meat.

John believes up to date information on goat production and their marketing within Australia is virtually non-existent. MLA is committed to fostering world leadership for the Australian red meat and livestock industry. However John believes there is a long way to go in regard to delivering vital information on goats to goat producers in Australia.

In the future John would like to maintain his successful business approach to goat breeding.

### Key messages

- Rangeland/Boer goat crossbreds can improve enterprise productivity and profitability.
- Rangeland does are seen as the perfect breeding partner, with high prolificacy, good fecundity and mothering abilities.
- There is significant room for improvement and growth within the Australian domestic market.
- Marketing and other information about goat production in Australia needs to be improved.

## Case study 6: 'Even Better' reds

**Property:** 'Wallangarra Station', approx 55 km north east of Ivanhoe, NSW.

**Producer:** Tony McGinty.

**Enterprise:** Red Boer goat breeding, Sale Bucks for commercial buyers and export trade.

Tony McGinty of 'Wallangarra' station, Ivanhoe has found that by utilising the red Boer genetics in his herd he is increasing carcase value, yet still retains the superior vigour, reproductive ability and hardiness of rangeland goats Tony claims the tendency for over fatness of traditional Boer genetics has been avoided.

**Livestock mix:** Approximately 3000 Dorper ewes and 5000 breeding does.

**Area:** 30,000 ha.

**Rainfall (average annual):** 300 mm.

**Target market:** Domestic trade market (primarily Melbourne) at 4–6 months of age, approximately 14 kg dressed carcase weight.

### Breeding beginnings

In 1985 changed from wool production to goats when the wool industry collapsed. Rangeland goats were already on his property and were familiar with the harsh, semi-arid conditions of western NSW. Tony believed there was a profitable future in goat production.

In 1985 cashmere goats were trialed at Wallangarra. However, in 1993 they were dispersed as vegetable matter in the fibre became a considerable issue affecting price. Additionally, cashmere was seen to be an impossible industry in western NSW as the proportion of cut obtained from the fibre was minimal and the goats were not considered a dual purpose breed. The carcase attributes of the Boer and rangeland goat were superior.

The first 'Even Better Red' Boer goat appeared in a draft of Condobolin does

brought onto Wallangarra. Tony decided the red Boer was superior to the red headed, white bodied traditional Boer noting how they quickly adapted and produced on his country.

Tony sourced red does that suited his enterprise and breeding objectives from the Armidale district over three years. An artificial insemination (AI) program was conducted in 2003 to secure bloodlines and gain bucks for his breeding program to continue extensively improving his herd.

The red headed, white body traditional African Boer had been trialed heavily on the McGinty property from 1996 to 2000. The traditional Boer failed to breed successfully with Tony's does and did not adapt to the environmental conditions of western NSW as expected. Tony suggests that the traditional Boer was bred for intensive hobby farming and not extensive livestock enterprises.

Tony has found the red Boer superior to the traditional Boer, as he feels they are better breeders, hardier, have an improved and more uniform carcase and are heavier at a younger age. Tony also believes the red Boer is adapted to the western NSW environment and also does not get over fat like the traditional Boer at higher carcase weights.

### Registered stud

'Even Better Red Boer' became a registered stud in 2003. Tony spent many successful years on the show scene, including nine years with his cashmere goats.



15 to 16 month old red boer bucks on Wallangarra station.



*Tony McGinty with a herd of his 'Even Better Reds'. Photo: McGinty family.*

Tony stopped showing goats soon after he started to show the red Boers as he wanted to focus his breeding on improving meat and carcass attributes. He believes the show scene negatively affected the Boer; as they were being bred for show rather than for practical commercial traits.

Tony has bred most of the rangeland characteristics out of his breeding herd, persevering for nine years with a strict culling procedure on temperament and successfully introducing poll genetics into his herd. Tony has effectively bred a goat of superior carcass quality and as a result of selecting for temperament now has a herd that is much quieter and easier to handle than the rangeland goats from which it descended.

Tony's property consists of 18 paddocks fenced with hinge joint (a mix of 6, 7 and 8 line). The paddocks range in size from 4,000 to 18,000 acres. Six holding paddocks, each of about 80 ha, are also used. Tony has three sets of steel yards for mustering and drafting positioned so they can be easily accessed from all points of the property, with one in the middle and two at either end of Wallangarra.



*Dominant males within their herd.*



*Breeding stock on Wallangarra.*

## Markets

A significant number of slaughter goats are turned off per year at Wallangarra. Tony turns off kids to the domestic market at 34 kg liveweight at 5 months of age. A rangeland goat at 5 months of age will only weigh between 12 and 15kg. The Boer genetics ensure a faster turnoff which ultimately secures a faster profit. Goats over 34 kg liveweight will enter the export market. Tony has sold all his young red Boer bucks in the past four years to commercial breeders across eastern Australia and Tasmania. Commercial breeders are utilising the genetics specifically to increase value, growth and turnoff weight.

## Challenges and issues

The two key issues Tony is facing are the lack of skilled labour readily available to work on properties and the lack of red genetic bloodlines accessible in Australia.

The goat industry is an easy care, low cost enterprise at present. Tony is concerned about the impact of mandatory tagging on this enterprise and believes his poll Boers may be the enterprise of the future.

Goats have proven to have a remarkable environmental benefit. They are well adapted to the Australian ecosystem. They are drought tolerant, low cost and easy care. Tony would like to be involved in promoting these benefits. In the future, Tony would like to see better

bred goats in rangeland areas. He would also like to see unmanaged rangeland goats eradicated from uncontrolled areas.

## Key messages

1. The red Boer genetics have enabled Tony to produce a product of superior quality and quickly secure market access.
2. Labour and skill shortage is an issue for rangeland goat production.
3. Tony's experience shows goats to be a remarkable environmental tool, adapted to the Australian surroundings and drought tolerant
4. Tony believes poll genetics are the future of goat enterprises.



*Red Boer kids at five months of age, weighing an average of 34 kg.*

## Case study 7: Organic rangelands

**Property:** 'Tasman' and 'Corinya' Station Aggregation, approximately 65 km north east of Ivanhoe, NSW.

**Producer:** Tasman and Corinya Stations (Proprietor – Bryan Milne, Manager – Randall Graham).

**Enterprise:** Organic goat meat breeding and export trade.

Randall Graham of Tasman Station, Ivanhoe, is supplying both the domestic and export trade markets with a high quality Boer infused organic meat product.

**Livestock mix:** 7000– 9000 breeding does and 1000 3rd and 4th cross Dorper ewes.

**Area:** 72,000 ha (in total)

**Rainfall (average annual):** 304 mm.

**Target market:** Majority to export, skin-on/skin off, weight as market dictates.

### In the beginning

In 1995 Bryan Milne purchased Tasman station and Randall Graham commenced as Manager in 2001. Corinya Station, which adjoins Tasman, was purchased in 2001 and this is where the owner and his family reside.

Damaras were introduced in 1999 as an organic market had been identified for this breed. However, in 2008 Tasman and Corinya changed from breeding Damaras to breeding Dorpers. The demand for live export trade Damaras was dropping off, and marketing them in traditional prime lamb markets was difficult because of their carcass confirmation. The Dorper breed was becoming increasingly common in the district and was seen as a very hardy animal that survived in dry extensive areas with a carcass confirmation more suited to traditional prime lamb markets.

Goats had been harvested opportunistically since the properties were purchased and Bryan Milne, who had successfully fenced and managed them, identified the opportunity for a rangeland goat enterprise on Tasman.

### The improved Boer

The hardy Australian rangeland goat and the farmed South African Boer were used as base stock to produce a composite Australian meat goat.

Full blood African traditional Boers were trialled intensively on Tasman for three years. Rigorous hand feeding of kidding does and 24 hour watch while kidding was required. Randall did not expect to have to establish such labour-intensive practices when he introduced the Boers and this was unsuited to an extensive pastoral enterprise. The pure bred does' kidding percentage in their first year at Tasman was very disappointing with only a 40% marking achieved. Randall believes he lost up to 90% of potential foetuses conceived from early pregnancy to marking. There appeared to be no firm explanation for this level of loss, although Randall believes the answer may lie in a genetic issue with the pure Boer in regard to kid survival as he has observed the pure kids are slow to get moving once born.

Cross bred kids, by contrast, seem to have a better basic survival instinct and are quick to become mobile. Following the full blood trials, Boer bucks were joined to the rangeland does. The marking percentages achieved with this cross were much better than with the pure bred does.

After 10 years of perseverance and labour, Randall has a herd of 4000–5000 breeding



*Boer influenced does with kids at foot.*



*Boer cross kids on Tasman Station. Photo courtesy of the Graham family.*

composite does. It has taken five crosses of the rangeland goats and Boer bucks to get to this stage. The bucks that resemble a high degree of Boer characteristics are now kept for breeding purposes at Tasman. Tasman's herd is now consists of 65% Boer cross goats; the remainder of the herd are rangeland does. In five years' time, Randall aims to be running all Boer cross does.

### **ACO and USDA certified organic**

In 2005, Tasman became ACO (Australian Certified Organic) and USDA (United States Department of Agriculture) organically certified.

Tasman has embarked on its own marketing scheme to promote their organic product to the consumer via a website, [www.tasmancorinyastations.com.au](http://www.tasmancorinyastations.com.au). Since organic goat meat is yet to become an exclusive market with sufficient demand and price premiums, the website has resulted in minimal interest. Most interest has been from ethnic families living in Australia wanting one or two carcasses for family meals. Extensive pastoral stations such as Tasman need to secure demand for larger consignments to recover high transport costs.



*Tasman is certified as an organic producer.*

The aggregate will continue its marketing, hopeful that a large supply chain or the wider consumer market will take an interest in the high quality organic product. At present none of the meat sold from Tasman is sold to consumers labelled as certified organic meat as a premium market has not been established. Tasman has received interest from Australian and overseas companies; however, Randall points out that the global financial crisis discouraged companies from finalising business arrangements.

### **Reproduction**

November to March is the critical period during which to eradicate feral rangeland bucks that make their way through the hinge joint into the composite Boer herds. The

rangeland bucks need to be removed from the doe paddocks, as they are particularly effective at locating does in oestrous and out-compete the Boer bucks. If they are not removed a high proportion of progeny will be sired by rangeland bucks.

Randall is not interested in what the goat physically looks like as the property is not a stud; his bottom line is the kilograms of the carcass that is produced. Strict rangeland culling has been adopted. Anything presenting distinct rangeland characteristics such as long hairy coats is culled as soon as it hits the domestic market weight of 25 kg.

## Markets

Tasman and Corinya stations supply goats to four markets: export skin-on, export skin-off, live export and domestic trade. Most of the goats produced at Tasman are processed in Australia and exported as either a skin-on or skin-off product. Additionally, between 400 and 500 cross-bred breeding does are exported live (by air) to Malaysia once a year. The enterprise also supplies some goats to the domestic trade, although this market currently only accepts small consignments (up to 250 at a time). For example, in November 2011 Randall sold 3,000 into the export trade and 250 domestic.

## Environmental benefits

Randall has observed that through using low stocking rates and low impact grazing, the rangeland goat enterprise has improved the condition of the country and proved the area's ecological system can be sustained while running goats. In fact, the browsing and grazing habits of the goat successfully control invasive species which are not readily consumed by livestock such as sheep or cattle. As a result, rangeland ground cover is improved and the habitats of native species are enhanced.

## Infrastructure

Investment in infrastructure has been considerable since the properties Tasman and Corinya were purchased. Improvements include access to mains power via grid, over 310 km of internal and external hinge joint mesh fencing, three solar pump systems, seven additional in-ground tanks and pipe

lines, two renovated homesteads, air-conditioned workers' accommodation on each property and substantial new shedding and stock yards with shade.

Randall is also investigating implementing water infrastructure that can be monitored and managed remotely.

## The future

Depot quality assurance is one of the biggest issues that concerns Randall. He feels there is a need to introduce quality assurance requirements for anyone wanting to start trading as a depot. The depots must uphold the quality of the industry by continuing to supply and export a high end product throughout the chain.

A common factor facing Randall is the continued shortage of skilled labour. He would also like to see greater feedback from abattoirs on his goat carcasses. A present Randall is not given any feedback on why some carcasses are deemed condemned. This information would be beneficial as Randall would be able to implement changes to minimise the chance of the issue occurring again.

Randall believes national venter declaration (NVD) forms are currently providing adequate traceability. If tagging was introduced he says he would not have the labour, machinery or time to tag. Tagging may not be viable for some rangeland goat enterprises.

Randall has considerable ongoing plans for the property for the next 10 years. Fencing is ongoing and requirements will be reviewed as more is learnt about the management of goats. Pipelines are yet to be laid and roads to the yards are to be graded. The property needs to be adaptable to continuous change within the industry.

Randall would like to see more data collection on why the pure Boer struggles to survive and reproduce in western NSW: Is it a genetic or environmental issue? Randall is yet to determine what will happen over time with the rangeland composite, i.e., the extent to which yield, survival, adaptability and reproduction may change.

Randall wants to see more education about the goat as a viable industry, rather than a

'feral animal'. In particular, he would like to see attitudes change within the domestic market.

### Key messages

- Organic markets must be accessed and opened to increase trade opportunities.
- Australian goat meat is a cheap source of nourishing protein and the health benefits must be promoted.
- Research needs to be conducted on the pure Boers' adaptability in western NSW on extensive properties.
- The goat industry is continually changing and therefore infrastructure and management must be willing to change and evolve with it.



*Trucks loaded with 850 head of mixed sex rangeland goats heading to Myrtleford abattoirs.*

## Recommendations

### Market development

- Efforts should be directed to improving domestic and export markets and developing stable markets.
- Niche markets, such as an organic product, need to be developed in order to secure top price for the grower while presenting the consumer with a quality carcass.
- Supply chains need to be created to meet the needs of potential markets.

### Research and development

- There needs to be effective collaboration between government agencies, industry and producers to identify areas of research required (for example, genetic improvement.)
- More effective internal parasite control programs and drenches must be developed. Specifically, a pour on anthelmintic registered for goat use would be of great benefit to the industry.
- Increased delivery of better funded extension and research activities needs to be provided by agencies.

### On farm productivity

- The industry should establish a national benchmarking process to determine production costs and gross margins necessary for further growth and profit.
- Quality assurance standards need to be developed and introduced for the operation of depots. This is necessary to uphold the quality of the product by ensuring a high end product is maintained throughout the supply chain.
- Producers would like to see more data collection and research into why the pure Boer struggles to survive and reproduce in western NSW and whether genetic or environmental factors are responsible. They want issues that may impact on the 'composite' goat such as survival, adaptability and reproduction, growth and carcass quality considered.

### Producer skills and development

- The industry and government should work together to develop accessible education programs keep producers abreast with the latest technology and business strategies required to increase output and decrease costs.
- The industry and government should support and encourage field days, workshops, webinars and industry tours to encourage producer communication and provide information on the latest developments.
- MLA and NSW DPI must collaborate to increase the amount of information about goat production and marketing that is available to goat producers in Australia.
- The industry and government should collaborate to provide incentives to attract the younger generation to enter the industry.

### Marketing and promotion of the industry

- Marketing strategies must be developed to educate the consumer about the nutritional benefits of goat meat. Specifically, the industry needs to work with meat retailers and

chefs to inform them of the potential of goat meat, superior quality and taste that can be obtained from quality meat.

- A marketing campaign is needed to alter the perception of government agencies, the media and the wider community so that they view the goat enterprise as a resource rather than an environmental threat or a pest animal.

## Appendix 1. SWOT matrix

A SWOT analysis was conducted to identify the key factors that will impact on the future viability of rangeland goat enterprises in western NSW.

Producers, industry and government are encouraged to use the results of this analysis to inform strategies to ensure the future growth, success and viability of the rangeland goat industry.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• <b>Relationships.</b> Efficient relationships between producers, depots and processors have been built along the supply chain to enhance profitability.</li> <li>• <b>Environmental tool.</b> The rangeland goat is a remarkable environmental tool, adaptable, fertile and drought tolerant and available at low cost in large numbers</li> <li>• <b>Dedicated producers.</b> The industry is sustained by motivated and hard working producers who show initiative in moving forward with their enterprises, engaging in technology and achieving goals.</li> <li>• <b>Successful crossbreeding.</b> Commercial Boer and Boer cross breeding stock exist that reproduce and survive in extensive rangeland conditions</li> <li>• <b>Easy care.</b> Rangeland goats are a low cost, low input enterprise.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Price fluctuations.</b> Goat markets can be fickle and are based upon supply and demand. Goat markets need to become more stable in Australia.</li> <li>• <b>Supply.</b> There is an identified need for consistent supply of good quality lines of carcasses.</li> <li>• <b>Labour and skill shortages.</b> The industry is constrained through a lack of labour and skill development opportunities.</li> <li>• <b>Research.</b> As yet minimal funding is allocated to research</li> <li>• <b>Reputation.</b> The rangeland goat is viewed by the community as an environmental pest-rather than a resource</li> <li>• <b>Lack of consumer knowledge.</b> Existing marketing strategies do not emphasise the nutritional benefits of goat meat as a red meat.</li> <li>• <b>Internal parasite control.</b> Producers report there is no practical safe way to drench goats and only limited products are registered to treat goat internal parasites.</li> <li>• <b>Communication links.</b> Lack of community awareness and poor communication between industry, producers and the wider community. Relationship between commercial and stud Boer goat breeders is inadequate</li> <li>• <b>Goat levy.</b> Producers are concerned about where their goat levies are spent and do not have a good understanding of how the levy is used.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• <b>Niche markets.</b> Butchers, supermarkets and delis have not yet realised the full potential of goat meat.</li> <li>• <b>Market development.</b> Opportunities for increase trade, organic and value added markets</li> <li>• <b>Collaboration.</b> Industry and government agencies can work together to promote the industry and develop information and research</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Tagging regulation.</b> <ol style="list-style-type: none"> <li>1. Producers feel the removal of the exemption for tagging unmanaged goats for NLIS traceability purposes would create additional costs and be unworkable for pastoral zone goat enterprises.</li> <li>2. The introduction of mandatory RFID tagging for goats is considered too costly for pastoral goat enterprises to absorb.</li> </ol> </li> </ul>

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- programs.
  - **Promotion.** The health benefits of goat meat can be taken to the consumer, as can positive messages about the potential and quality of the carcass.
  - **Benchmarking.** Opportunities exist to establish benchmarking within the goat industry, for example to analyse production costs and gross margins.
  - **Education and technology.** Producers can access new technology and skills to improve output and reduce costs and to keep their businesses profitable.
  - **Market growth.** There is significant potential for growth within the Australian domestic and export market.
  - **Supply chains.** These can be developed to better meet the needs of potential markets and add value to the industry.
  - **Profitability of alternative enterprises.** For example, gross margins of other enterprises (such as Dorpers) are more attractive than goat enterprises.
  - **Pricing.** Consistency in pricing is a major issue, along with actual prices received for the product.
  - **Loss of young leaders.** Many young people are starting their careers in mining work rather than agriculture
  - **International trade issues** such as export market closures, fluctuating prices and the Australian dollar.
  - **Environmental issues.** Overgrazing and the threat of invasive native scrub.
  - **Live export trade uncertainty.** The ongoing impact of the temporary closure of live cattle trade continues to impact on export trade generally.
  - **Depot quality assurance.** This was identified as a serious issue that may impact on the reputation and future of the Australian goat industry
  - **Exotic disease outbreaks.**
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## SWOT analysis findings

Overall the SWOT analysis has demonstrated a highly productive enterprise being run by producers who are passionate and driven about the future success of their industry. While the analysis identified several areas of weakness that require addressing, importantly, it confirmed a number of opportunities for industry development and promotion. There is significant potential for collaborative efforts to ensure the future growth and viability of the business.

## Appendix 2. The goat levy

The Goat Industry Council of Australia (GICA) is responsible for managing and making recommendations to the Minister on the distribution of the goat transaction levy income. The transaction levy funds Meat and Livestock Australia (MLA), Animal Health Australia (AHA) and the National Residue Survey (NRS). Legislation stipulates that the transaction levy is collected at a rate of 37.7 cents per head. This is divided among the levy-funded organisations and programs as follows, with expenditure programs overseen by the GICA.

MLA Marketing – 16.7 cents

MLA Research and development – 10.5 cents

Animal Health Australia – 4.5 cents

National Residue Survey – 6 cents

More information about the levy and how it is spent is available from the GICA website at [www.gica.com.au](http://www.gica.com.au).

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