

Module 5 - Goat selection

What to do?

When selecting goats for your enterprise, focus on what you are trying to achieve ie product specifications. If you are unsure of the type of product you are aiming to produce, more information can be found in *Module 8 – Marketing*. Once you have this clear in your mind, the basis for your selection decisions can be separated into two categories: genetic characteristics and prior conditioning.

Begin this section by rating the importance of each of the following goat characteristics to your enterprise. Think about those features that are going to make the biggest contribution to enterprise profit. The information presented is relevant to both buck and doe selection.

- Genetic characteristics:
 - Fertility
 - Propensity for multiple births
 - Ease of kidding
 - Mothering ability
 - Growth rate
 - Frame size
 - Conformation (feet, mouth, muscling, testicles, udder)
 - Carcase and meat characteristics
 - Temperament
 - Fibre characteristics (length, micron, colour, percentage down)
 - Milk volume and composition
 - Physical characteristics – skin colour, size of ears (small/’pixie’ ears can indicate inbreeding), hoof colour, horns/polled, excessive hair
 - Other

- Prior conditioning:
 - Fence trained
 - Managed/unmanaged
 - Acclimatised
 - Hardiness

This list should be reviewed every 2-3 years. You may find that your priorities change as your business develops, as you gain more experience, and in response to changing market demand or new marketing opportunities.

How to do it?

Your approach to goat selection, both bucks and does, will vary depending on the stage of development of your enterprise:

A. Buying a goat-farming business

- Look for the key characteristics that will drive profit, but avoid being too selective as this may limit the number of animals that you can afford to buy. Remember that keeping costs down is a key component of running a profitable business. Make sure that you can see a clear return on your investment.
- Focus on building goat numbers, but do so with risk management in mind eg consider the impact of drought.
- Select for fertility and, during the establishment phase, be prepared to keep does to an older age to help build numbers.
- Prior conditioning of the animals that you source is important. This issue will be covered in more detail later in this section.
- As your business develops and as cash flow allows, you can look at upgrading your herd via the introduction of improved genetics and strategic culling.

- In pastoral areas, opportunistic harvesting of previously unmanaged goats may be an option to generate the cashflow required to assist in the establishment of a managed herd. As you begin to establish a managed herd, strategic culling based on type is important. “If you just cull your mob without introducing other breeds it is a cheap and easy way to get started. This should be the first step.” *Will Scott, Mt Magnet, Western Australia.*



A long-haired rangeland goat which would be culled from a managed herd.

Neil Duncan, Western Exporters, Charleville, commented that long-haired goats are generally culled as they are often in poorer condition than short-haired goats run under the same conditions. Neil commented that long-haired goats are much harder to process once they are slaughtered – they are generally difficult to skin and increase the risk of hair contamination.

B. Changing the operation of an existing farm business to include a goat enterprise.

- Solid financial returns from the new enterprise are a priority. However, in the drive to increase profits, do not forget that your business must function sustainably – both financially and environmentally.
- The factors that drive profit in a goatmeat enterprise are the same as those for most meat-focused livestock enterprises: high fertility,

propensity for multiple births and growth rates. For further information on these traits refer to *Module 6 – Husbandry*. Carcase and meat characteristics are important, but in the current climate within the goatmeat industry, they are not being rewarded with a high price premium, and so should not be your main selection criteria. It is more important to focus on meeting weight and condition score specifications.

- Prior conditioning of the animals that you source is important. This issue will be covered in more detail later in this section.

C. Existing goat producer, seeking to improve performance of his/her farm business.

- Having been in the industry for some time and established a herd, you can now focus on fine-tuning the operation to optimise animal performance.
- This may involve looking more closely at some of the lower priority genetic characteristics, but do not shift your focus from the main profit drivers: high fertility, propensity for multiple births, mothering ability and growth rates.
- Individual animal identification and performance monitoring will assist you in targeting your culling and breeding program. One of the important performance criteria to record is the ability of the doe to successfully rear kids and provide sufficient milk supply to support high growth rates. Individual animal recording is labour intensive – remember to put a cost on your labour.

“A good mob is produced by what you cull, not what you keep.” David Booth, Cootamundra, NSW.

Breeding for meat products:

The following table provides a guide to the potential breeding combinations that can be used in a goatmeat enterprise and the potential market placement for product.

Sire	Dam	Marketing options for progeny	Comments
Meat breed	Meat breed	Herd replacement.	Suitability is based on how well the animal fits the key selection criteria of your enterprise.
		Genetically improved stock can be sold as breeding stock.†	Both domestic and export opportunities exist.
		Live export (25+kg liveweight).	
		Carcase trade – capretto. To be classed as capretto a carcass must meet the following AUS-MEAT requirements: <ul style="list-style-type: none"> • Be less than 12kg HSCW. • Have pale pink meat colour of the internal flank muscle. • In the case of males, show no secondary sexual characteristics. 	The percentage of kids turned off for this market depends on the milk supply of the dam and the feed available to maintain that supply. Dry kids and smaller kids must be carried on to other market segments or sold on to be finished by another producer.
		Carcass trade – chevon. To be classed as chevon a carcass must meet the following AUS-MEAT requirements: Female, male or castrate male caprine that: <ul style="list-style-type: none"> • Has no evidence of eruption of permanent incisor teeth. or Shows evidence of the eruption of one but no more than two permanent incisor teeth. • In case of males and castrate males, show no evidence of secondary sexual characteristics. 	After weaning, growth rate must be maintained to ensure turn-off weights are achieved while the goats still have their milk teeth.
		Carcass trade: <ul style="list-style-type: none"> • Commodity goatmeat. • Small goods. 	Larger, older goats; cull bucks and does

† Some commonly used terms that you may hear with reference to stud Boer goat enterprises:

Full blood – Full Boer goat parentage on both sides.

Pure bred – Graded up from Boer goats for a minimum of 4 generations for females and 5 generations for males, or has full South African parentage on one side of the pedigree.

Sire	Dam	Marketing options for progeny	Comments
Meat breed	Fibre breed	Herd replacement.	Dual purpose fibre and meat production. Suitability is based on the conformation of the animal and its genetic potential.
		Live export (25+kg liveweight).	Different countries have different specifications for fleece length and time of shears.
		Carcase trade – capretto. To be classed as capretto a carcase must meet the following AUS-MEAT requirements: <ul style="list-style-type: none"> • Be less than 12kg HSCW. • Have pale pink meat colour of the internal flank muscle. • In the case of males, show no secondary sexual characteristics. 	The percentage of kids turned off for this market depends on the milk supply of the dam and the feed available to maintain that supply. Dry kids and smaller kids must be carried on to other market segments or sold on to be finished by another producer. If carried over, shearing may be necessary.
		Carcase trade – chevon. To be classed as chevon a carcase must meet the following AUS-MEAT requirements: Female, male or castrate male caprine that: <ul style="list-style-type: none"> • Has no evidence of eruption of permanent incisor teeth. or Shows evidence of the eruption of one but no more than two permanent incisor teeth. • In case of males and castrate males, show no evidence of secondary sexual characteristics. 	After weaning growth rate must be maintained to ensure turn-off weights are achieved while the goats still have their milk teeth. Weaners are usually shorn prior to sale, as kid fleece is a valuable income source. Short fibre goats are used for the skin-on carcase trade. Refer to <i>Module 8 - Marketing Toolkit 8 page 7</i> for an explanation of the term ‘skin-on’ Mohair is undesirable for the carcase trade, so goats should be shorn 10-30 days before sale for slaughter.
		Carcase trade: <ul style="list-style-type: none"> • Commodity goatmeat. • Small goods. 	Larger, older goats; cull bucks and does.

* In the fibre industry, it is usually the older or cull does with lower quality fleece that are joined for meat production.

Sire	Dam	Marketing options for progeny	Comments
Meat breed	Dairy breed	Carcase trade – capretto. To be classed as capretto a carcase must meet the following AUS-MEAT requirements: <ul style="list-style-type: none"> • Be less than 12kg HSCW. • Have pale pink meat colour of the internal flank muscle. • In the case of males, show no secondary sexual characteristics. 	Dairy dams have the milking capacity required to produce capretto. However this ability to produce large quantities of milk can cause management problems after the first lactation eg big udders. A crossbred dairy dam, whose genetics are at least 50% meat breed, may be a better option as you will get the benefit of an increase in milk production with fewer udder problems. Hybrid vigour results in high growth rates.
		Carcase trade – chevon. To be classed as chevon a carcase must meet the following AUS-MEAT requirements: Female, male or castrate male caprine that: <ul style="list-style-type: none"> • Has no evidence of eruption of permanent incisor teeth. or Shows evidence of the eruption of one but no more than two permanent incisor teeth. • In case of males and castrate males, show no evidence of secondary sexual characteristics. 	After weaning growth rate must be maintained to ensure turn-off weights are reached while the goats still have their milk teeth. The expression of dairy characteristics may mean that the kids are too leggy to achieve the required condition score of 3 at this age.
		Carcase trade: <ul style="list-style-type: none"> • Commodity goatmeat. • Small goods. 	Larger, older goats; cull bucks and does.

Points to note about breed combinations:

- Large variation can occur both within and between breeds.
- Cross breeding offers the advantage of hybrid vigour, which can be particularly beneficial in terms of growth rates.
- The second cross progeny from meat x fibre or meat x dairy are

more variable in type. Producers need to monitor the growth rates and condition scores closely and manage turn-off times according to the variability.

For more information on goat breeds refer to *Module 5 - Goat selection Toolkit 5 page 4.*

Estimated Breeding Values:

One tool that can help you to assess the genetic potential of stock that you may be considering for purchase is Estimated Breeding Value (EBV). EBVs provide an estimate of the value of an animal's genes for particular heritable genetic traits.

EBVs are calculated based on the pedigree and performance data of a sire's progeny and family (parents, full sisters and brothers, half-brothers and half-sisters) in relation to a range of traits.

Having identified the genetic traits that are most important to your enterprise at the start of this module, you should look for breeding stock with high EBVs for the desired features.

EBVs are commonly used in other livestock industries, but as yet there has been little demand for this service from the goat industry. In the goat industry, the program responsible for the calculation of EBVs is called KIDPLAN.

At the moment KIDPLAN is only being used by some Boer breeders.

For participating herds, EBVs are available for production factors such as weight, fat depth, eye muscle depth, reproduction and internal parasite resistance. The next stage is the development of EBVs for structural traits eye feet, mouth and shoulders.

Artificial breeding and embryo transfer:

Artificial insemination and embryo transfer are options for achieving genetic improvement. These techniques are quite specialised and can be expensive. They tend to be used mainly by stud breeders.

Artificial insemination involves harvesting semen from superior bucks. This semen can then be inseminated into multiple does. This technique allows the owners of high value bucks, the security of being able to harvest

and store semen, which can be sold and/or used over their own does in the future. It also offers the opportunity to be selective in terms of choosing a sire with specific characteristics to complement the genetics of a particular doe.

Kidding percentages may, however, be lower with artificial insemination than paddock joining.

Embryo transfer involves hormonal stimulation to increase ovulation of a doe, impregnation with desired semen, harvesting of fertilised eggs and implantation in recipient does.⁴¹

Both artificial insemination and embryo transfer increase the rate of multiplication of the genetics of superior animals.

There is an increased cost and husbandry input associated with these techniques, so it is important to carefully analyse the return on investment and practicality before embarking on such programs.

The success of such programs is determined by the ability to produce kids, and then being able to capitalise on the genetics of these kids. This means either managing the animals to achieve their full genetic potential, or being able to sell them for a premium as breeding animals.

For further advice, talk to producers who have experience in using these techniques, or a vet or an experienced technician.

Prior conditioning:

Introducing goats to a different farming system can be very stressful for both goats and farm managers. The stress level of both parties can be reduced by sourcing goats that come from a similar environment and management regime. Adopting this sort of strategy makes for a smoother transition to the new property, and reduces the degree of check in growth and performance.

⁴¹ Reid, R.L. (1990). Livestock Breeding. In: "The Manual of Australian Agriculture", 5th Edition. Butterworths, Sydney.

Some of the more commonly sought features are:

- Fence trained – if goats are to be introduced into a system with defined paddocks, it is advantageous to buy goats that respect fencing, as they are less likely to try to escape.
- Managed/unmanaged – the intensity of management and level of human contact are important factors to consider when buying goats. For example, goats that have grown up with low levels of human intervention are likely to experience a high degree of stress and exhibit behavioural problems if introduced into an intensively managed system. Note: the second generation of managed goats will be quieter and easier to manage.
- Acclimatised – goats become accustomed to the environment into which they are born ie weather conditions, fodder types and terrain. If moved to a vastly different environment, they will take some time to adapt to the new conditions, during which time their performance may suffer. All ruminant animals take some time to adjust to changes in feed supply; this is discussed in more detail in both the *Husbandry (6)* and *Nutrition (7) Modules*.

Goats moved into cold, wet environments may be prone to shock and possibly die as a consequence. Shelter, adequate feed and supervision are essential.

Rangeland goats can be successfully moved into agricultural areas, but it would be very unwise to buy goats from an agricultural area and expect them

to survive in pastoral areas, where conditions are much harsher. *Will Scott, Mt Magnet, Western Australia.*

“Within production zones (agricultural and pastoral) it has been observed that goats acclimatise better when moving from wetter areas to drier areas.” *Trevor Bunce, Darkan, Western Australia.*

- Hardiness – select animals that have been raised under similar conditions of management to those which you employ in your enterprise, particularly in relation to feeding. For example, if goats are accustomed to significant levels of hand feeding, they will not be hardened to cope with an extensive operation where they are largely left to fend for themselves.

Age:

When you are buying goats, it is preferable to source young animals. A young animal (two-tooth) offers more productive years to repay the investment than an older animal.

In a breeding program, the youngest generations hold the greatest genetic potential, being the product of years of selective breeding to improve performance.

However, age should not be the limiting factor when purchasing breeding stock. An older doe with proven performance, provided that she is physically sound, is still capable of producing quality offspring.

If you are establishing a fibre enterprise, you should be aware that mohair fibre quality tends to decline with age.

One point of difference between sheep and beef enterprises is that goat sires are often selected and purchased at an earlier age.

Toolkit 5 - Goat selection

Tool 5.1 Finding further information (page 2)

Tool 5.2 Goat breeds (page 4)

Tool 5.3 Determining the age of a goat (page 7)

Case studies

Goat selection with a dollar focus

Tim and Mary Perrottet (page 8)

If you are unsure how to determine the age of a goat, refer to *Module 5 - Goat selection Toolkit 5 page 7*.

Introducing new goats to your property:

When purchasing goats it is important to minimise the risk of introducing pests and diseases to your property. Some strategies to reduce the risk include:

- Purchase goats from reputable suppliers, ie suppliers with a reputation for having healthy stock and who are willing to provide a vendor declaration relating to health status and treatment history of their goats.
- Be wary of saleyards, where the vendor is unknown to you and you are unsure of their reason for selling.
- Buy from as few properties as possible, thus reducing potential exposure to problems.
- Carefully examine goats for signs of disease, parasite infestation and general ill-health. This should be done before purchase and repeated when the goats arrive at your property.
- Be aware of any stock movement restrictions that may apply to either your local area or the location of the property from which you are buying goats, eg in Queensland there are restrictions pertaining to stock moving from areas known to be infested with cattle ticks.
- Treat incoming goats with appropriate parasite treatments and vaccinations. Allow them to empty out in the yards before moving them to another location.

- Check and treat for foot problems if required.
- Quarantine newly introduced goats for at least seven days, and monitor them for any sign of health issues. Goats should not be released from quarantine until they have been treated for any parasite and foot problems.
- Blood test for diseases if there are specific risks eg Caprine arthritis encephalitis virus (CAEV).
- If buying dairy stock, source goats from accredited CAEV free herds. For more information on CAEV go to the *Module 6 – Husbandry Toolkit 6 page 27*.
- Keep thorough records of all stock purchases.

The buying process:

Buying goats is not quite the same as buying sheep and cattle. In the goat industry, most of the exchange is direct from the farm through private treaty, rather than involving a stock agent/buyer. There are reputable agents and buyers who can provide advice and assistance, but at the industry's present scale, relative to the other major livestock industries, there are few agents/buyers willing to specialise in goats.

Putting goat selection into perspective:

Remember goat selection is only a small part of the production equation. Good nutrition and appropriate animal husbandry are the things that will deliver the end product.

Tool 5.1

Finding further information

Useful contacts

Breed associations:

Australian Cashmere Growers Association Ltd (ACGA)

President: Andrew James

Executive Officer: Carolyn Gould

Tel/Fax: 02 9629 2390

Email: cashmere@acga.asn.au

Boer Goat Breeders' Association of Australia Ltd

c/- ABRI

University of New England

ARMIDALE NSW 2351

Tel: 02 6773 5177

www.boergoat.une.edu.au/

Dairy Goat Society of Australia Ltd

PO Box 9048

TRARALGON VIC 3844

Tel: 03 5176 0388

Email: dgsasec@bigpond.com.au

Mohair Australia Ltd

147 East Street,

PO Box 22

NARRANDERA NSW 2700

Tel: 02 6959 2069

www.mohair.org.au

Cashmere

Cashmere Connections Pty Ltd.

Avtar Singh

4 Station Street,

BACCHUS MARSH VIC 3340

Tel: 03 5367 4222

Email: avtar_singh@optusnet.com.au

References

Australian Goat Notes. Simmonds, A.J. 2001. Australian Cashmere Growers Association Limited. This is a published collection of papers and notes covering all aspects of goat production. Contributing

papers and notes from many of the State Departments of Agriculture, Rural Industries Research and Development Corporation (RIRDC), breed societies and breed associations.

The role of Boer goat in the development of the Australian goatmeat industry.

Suiter, R.J. 1999. Fibre Technology and Marketing, Agriculture Western Australia. MLA Project TR 012.

Goatmeat Language. 2001. AUS-MEAT. This document is available as a free download from the AUS-MEAT website:

www.ausmeat.com.au. It explains the standard industry terminology used to describe goatmeat in a marketing context.

Websites

Refer to *Module 1 – Property planning Toolkit 1 page 5* for instructions on how to conduct an effective web search.

NSW Department of Primary Industry

www.dpi.nsw.gov.au

Department of Primary Industries, Victoria

www.dpi.vic.gov.au

South Australia Research & Development Institute www.sardi.sa.gov.au

Primary Industries and Resources South Australia www.pir.sa.gov.au

Department Primary Industries, Water & Environment, Tasmania www.dpiwe.tas.gov.au

Department of Agriculture Western Australia www.agric.wa.gov.au

Queensland Department of Primary Industry and Fisheries www.dpi.qld.gov.au

Northern Territory Department of Business Industry and Resource Development www.dpi.nt.gov.au

Rural Industries Research and Development Corporation www.rirdc.gov.au

Tools in development – things to look out for

Trials are being carried out on the hardiness and survival of Boers in the pastoral areas, reports will be available on conclusion of this work. Regular updates appear in the New South Wales Department of Primary Industries/ Department of Infrastructure, Planning and Natural Resources Western Division Newsletter. See also Meat & Livestock Australia Primary Industry Research and Development (PIRD) Reports.

Tool 5.2

Goat breeds

Having decided which genetic characteristics are important to the development of your enterprise, you can now begin to think about the breed that may suit your enterprise. The following tables will assist you in the decision-making process.

Common goat breeds used in Australia:

Meat breeds	Breed characteristics
Rangeland The term rangeland goat is used to refer to goats raised on land where the local native 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, shrublands, deserts and alpine areas. This definition includes goats previously referred to as feral stock or bush goats.	<ul style="list-style-type: none">• Hardy; will breed in low-rainfall zones.• High fertility in dry conditions. High fertility may compensate for growth rates being lower than those of some of the other meat breeds.• Suitable for carcase and live trade.• Low maintenance.• Do not require shearing, crutching or mulesing.• Hybrid vigour when crossed with other breeds.• Excellent mothering ability.• May initially be harder to handle, depending on the level of training.• Relatively low cost.
Boer	<ul style="list-style-type: none">• Selectively bred for meat.• High bodyweight.• High dressing percentage.• High fertility – possible to reproduce all year round, except in coastal areas where they are seasonal breeders.• Tender meat.• Ability to fatten.• High growth rates.• Do not require shearing, crutching or mulesing.• White colouring may predispose them to predation.• May require hoof trimming when run in wetter environments in intensive operations.
Kalahari Red	<ul style="list-style-type: none">• Hardy, suited to harsh conditions.• High fertility.• Good mothering ability and milk production.• Tender meat.• Do not require shearing, crutching or mulesing.• Tall with long bodies, very mobile.• Red colour blends in with environment providing camouflage from predators.• May require hoof trimming when run in wetter environments in intensive operations.

Meat breeds	Breed characteristics
Condobolin	<ul style="list-style-type: none"> • Selectively bred in Australian for meat production. • High fertility. • High weaning percentages. • Sound structure and good conformation. • May require hoof trimming when run in wetter environments in intensive operations

Fibre breeds	Breed characteristics
Angora	<ul style="list-style-type: none"> • Produce mohair. • Lustrous, high tensile strength, soft, lightweight fibre with special dyeing properties. • Requires shearing twice a year. • Fibre diameter greater than 22 micron. • High husbandry demand, especially at kidding. Requires hoof trimming. • May require hoof trimming when run in wetter environments in intensive operations.
Cashmere	<ul style="list-style-type: none"> • Produce cashmere. • Very fine, soft, warm and luxurious fibre. • Fibre diameter 12-18.5 micron. • Produce quality meat. • Good mothering ability. • May require hoof trimming when run in wetter environments in intensive operations.
Cashgora	<ul style="list-style-type: none"> • Produce fibre that is intermediate in fibre diameter between mohair and cashmere. • Fibre diameter greater than 18.5 micron. • May require hoof trimming when run in wetter environments in intensive operations.

Dairy breeds ⁴²	Breed characteristics
Toggenburg	<ul style="list-style-type: none"> • Heavy frame. • Very intelligent. • High volume milk producers. • Increased nutritional demands to support size and production levels. • May require hoof trimming when run in wetter environments in intensive operations.
British Alpine	<ul style="list-style-type: none"> • Fine, tall, rangy build. • High volume milk producers. • May require hoof trimming when run in wetter environments in intensive operations.
Anglo-Nubian	<ul style="list-style-type: none"> • Short lactation of the dairy breeds. • Low milk volume. • High butterfat producers – good for cheese making. • May require hoof trimming when run in wetter environments in intensive operations.
Australian Melaan (bred from British Alpine stock)	<ul style="list-style-type: none"> • Tall, fine, rangy, graceful build. • Intense black colouring. • High milk volume. • May require hoof trimming when run in wetter environments in intensive operations.
Saanen	<ul style="list-style-type: none"> • High milk volume. • Long lactation length. • Placid nature. • May require hoof trimming when run in wetter environments in intensive operations.

To find out more about the specific characteristics of individual breeds refer to breed societies, industry groups and *Goat Notes*.

⁴² Source: Dairy Goat Society of Australia website www.ksrcl.com.au/dairygoat/index

Tool 5.3

Determining the age of a goat

How to tell the age of goats. Agfact A7.2.2 first edition 1982. (Reprinted 1986) Terry Mitchell, Livestock Officer (Goats), Division of Animal Production, Dubbo, NSW. Revised November 2003.

This publication is free and available on the web site. See NSW Department of Primary Industries www.dpi.nsw.gov.au

Visual cues that will help to gauge the age of a goat:

- Length of horns – horns get longer with age.
- Ridges in horns – the ridges get more pronounced with age.
- Horn colour – young goats tend to have paler coloured horns.
- Condition of horns – the horns of older goats become flaky near the head.
- Udder structure – udders tend to sag with age.
- Backline and belly – older does tend to display a sway back and are bigger in profile when carrying kids.

Case study

GOAT SELECTION WITH A DOLLAR FOCUS

NAME:	Tim and Mary Perrottet
PROPERTY NAME:	Dongon Plains
PROPERTY LOCATION:	Dirranbandi, Queensland
PROPERTY SIZE:	28,340ha
NUMBER OF GOATS:	10,000 – 20,000
MAIN GOAT ENTERPRISE:	Meat
TARGET MARKET:	Export – carcass and live trade
OTHER FARM ENTERPRISES:	Beef cattle and sheep (wool and meat)

The Perrottets run an extensive operation comprising a herd which has largely been bred up from unmanaged rangeland stock. In the past, they tried introducing Boer bucks, but without success. They found that they got better results selecting and using bucks from within their own herd. These animals are identified in the yards at the annual muster and drafted off to run with the breeding does. Unwanted males are removed from the herd and sold.

Females are culled mainly on the basis of age, but any does with obvious physical faults are also culled.

Tim comments that starting with unmanaged rangeland goats gives you large numbers from which to select. In turn, the opportunity for heavy culling allows rapid improvements to be made in developing the quality of the herd.

When asked to identify those genetic characteristics which he believes are important in developing a productive herd, Tim listed the following features, in priority order: fertility, propensity for multiple births, frame size, growth rate, conformation and temperament.

He also rates prior conditioning as an important criterion when purchasing goats. This is particularly relevant for an extensive operation such as Tim's. If goats are not hardened to the country, they will struggle in the harsh conditions and will certainly not perform at the desired level.

