Care of goats in the Top End

Introduction

In the Northern Territory, domesticated goats are kept on rural blocks for a variety of purposes, from lawn mowing duties to household milk and meat production. While goat production and goat keeping are relatively small industries in Australia, the milk and meat of goats are the most widely consumed animal products on worldwide basis.

Goats are curious and adventurous, and thrive on attention and interaction, making them excellent pets. Potential pitfalls of owning goats include continual investigation of their living environment, which may lead to destruction of fences, gardens and other property. They are also indiscriminate eaters, which may have unfortunate consequences if they consume indigestible or poisonous plants or household items.

Goat meat is an excellent source of lean protein, iron, zinc, and vitamin B12. People who cannot tolerate cow's milk and those suffering from lung conditions, such as asthma, often consume fresh goat milk. In cooler climates, goats are also an important source of fibre production. Mohair comes from the Angora goat, and cashmere comes from the Cashmere goat. In the Territory, shorthaired breeds such as the Boer and Saanen are popular, owing to their ability to cope with extreme climatic conditions.

Housing

Adequate fencing is vital in the successful husbandry of goats. Predation by wild dogs and dingoes is a common cause of stock loss. Paddock fencing 1.5m to 1.8m high with posts 6m to 8m apart is recommended, ideally with a buried mesh 'skirt', to prevent dogs from digging under the fence to gain entry. In sandy areas, macropods (wallabies, wallaroos and kangaroos) may also dig under a fence to gain entry to irrigated pasture during the dry season. Barbed wire is not recommended in goat fence construction, as goats habitually rub against fencing and may damage their skin, eyes, udder and scrotum on the barbs.

Goats require access to shade and protection from heavy rain in the wet season. Ensure that natural shade in goat paddocks does not allow access to poisonous trees such as ironwood, as goats will browse and debark trees. Protective fencing around the base of trees may be necessary to restrict access. Built shade will ideally meet multiple needs, as goats prefer to socialise in family units and also enjoy climbing. Therefore, shed structures that goats can climb and bask on, as well as to shelter beneath in inclement weather, will meet both social and physical needs.

Nutrition

Goats have a high survival ability compared with sheep and cattle because they are able to graze a wider variety of scrub and tree species. Goats' upper lips are highly mobile and the tongue is prehensile and therefore able to grasp, twist and tear tough vegetation. Goats have a similar digestive efficiency to sheep and goats, but as they have a greater range of rumen microflora, they are better able to adapt to changes in diet.

Goats require a dry matter intake of 4 to 5% of body weight per day. Unimproved Top End pastures tend to be low in protein and other nutrients and high in fibre. Supplementation with a salt and mineral lick is recommended. Goats may also be provided with grain, fruit and vegetables, and hay. Where goats are kept in small paddocks and fed household scraps, attention should be paid to removal of uneaten portions, to



minimise consumption of spoiled food. Provide supplementary food and lick blocks in a feeder or trough off the ground, to avoid contamination with urine and faeces. This basic hygiene practice will also aid in managing intestinal worms.

Breeding

Goats are pregnant for 150 days (approximately 5 months). Multiple births of 2 or 3 kids are common.

Vaccination

Vaccinate goats against *Clostridial* diseases (tetanus, blackleg, pulpy kidney, black disease and malignant oedema) using a 5-in-1 vaccine. Vaccines are available through rural feed merchandise stores or veterinary clinics. Vaccinate kids from 6 weeks of age, with a second dose administered 4 weeks later, followed by annual boosters.

Goats are particularly susceptible to tetanus, caused by *C.tetani*. Tetanus bacterial spores enter the body through open wounds, which may include small cuts in the mouth caused by eruption of teeth, or a grass seed lodging in the gums. Tetanus is usually fatal, but is vaccine-preventable.

Common problems

Ironwood poisoning

Ironwood (*Erythrophleum chlorostachyum*) is a highly toxic tree species endemic to the Top End. Poisoning causes collapse, severe abdominal pain and sudden death, owing to effects of the toxin on the heart muscle. Goats are commonly poisoned when they are introduced to a paddock containing ironwood 'suckers' at ground level. This is likely to occur after fire has passed through, if there is scarce vegetation available to graze, if the animals are new to the area and not familiar with ironwood, or if hay is contaminated with ironwood leaves. Animals can succumb to ironwood poisoning after eating as little as one or two leaves. Goat owners should learn to identify ironwood and take care to remove suckers as soon as they are identified in pasture.

Go to Ironwood Poisoning (nt.gov.au) to find more information on ironwood poisoning.

Melioidosis

This bacterial disease of the wet tropics can affect several species of animals in the Top End, including humans. Because melioidosis poses a significant risk to human health, a veterinarian or stock inspector should always be contacted to investigate suspect cases. Signs of infection in goats include depression, fever, weight loss, lameness, swelling of joints and death.

Go to Melioidosis (nt.gov.au) to find more information on melioidosis.

Anaemia

Anaemia is a lack of sufficient red blood cells. Affected animals will have white or grey-blue gums, may be weak or stumble, and slow to rise. Anaemia is common in does after kidding, and any goat with a high worm burden. Worms in goats are a major problem that require meticulous attention. High worm burdens are a common cause of death. Go to Sheep and goats - NT.GOV.AU to find further information on management of worms in goats in the Top End.

Mastitis

This is an infection of the mammary gland in a lactating (milk-producing) goat. Female goats will produce an average of 2 to 3 litres of milk per day, for around 300 days after giving birth. Mastitis occurs when bacteria are able to enter the mammary gland, which may occur through trauma to the teat, trauma to the mammary gland, or poor hygiene during hand milking. Affected goats may present with hind-limb lameness, swinging a back leg outwards to avoid touching the painful mammary gland, which will be hot and hard or lumpy to touch. Milk may contain pus or clots of blood, and may be yellow or red in colour. Gentle cleaning of the teats with warm, soapy water prior to milking and use of an antiseptic teat dip or wipe afterwards, can help to prevent mastitis. Goats with mastitis require urgent veterinary attention.

Regulatory requirements

If you are keeping goats on your property, you need to comply with Territory and Australian laws around keeping livestock. These requirements contribute to keeping Australia free from exotic diseases, which in turn allows producers to sell animals both domestically and overseas, with confidence in the integrity of their product.

You will need to apply for a Property Identification Code (PIC).

For more information on this process, see Get a property identification code.

If you are moving goats on or off your property, it is necessary to fill in an NT Waybill. This is a record of stock movements, and is integral to Australia's biosecurity surveillance activity, as well as livestock traceability in the event of a disease outbreak.

To find out more about NT Waybills, go to Moving and exporting livestock.

Further resources

The Goat Industry Council of Australia and Meat and Livestock Australia organisations provide further information on goat husbandry.