



Code of accepted farming practice for the welfare of goats (Victoria)

August 2001
AG0591
ISSN 1329-8062

Bureau of Animal Welfare, Attwood

This Agriculture Notes provides detailed information from the code and is intended as a guide for all people responsible for the welfare and husbandry of goats.

Goats are kept in situations which vary from extensive grazing to close confinement and housing. Whatever the form of husbandry, owners, managers and custodians of goats have a duty of care and a clearly defined legal responsibility under the Prevention of Cruelty to Animals Act 1986 to care for the welfare of the animals under their control.

The basic behavioural, anatomical and physiological needs of goats are considered in this document, irrespective of the method of husbandry practised.

The importance of competent stockmanship and management in animal welfare cannot be overemphasised. Important skills of the competent manager and stockperson include the ability to recognise the early signs of distress or disease in goats so that the cause can be identified, and prompt, appropriate, remedial action taken.

The basic requirements for the welfare of goats are:

- Food and water to sustain health and vitality;
- Sufficient space to provide freedom to stand, lie down, stretch, turn around, move about and groom themselves;
- Protection from predation;
- Protection from disease, including disease that can be exacerbated by management;
- Protection from extremes of climate during certain phases of their life;
- Protection from pain, suffering and injury.

1. Food and water

Food

Goats should have access to or be provided with adequate food to maintain their well-being. They are more selective feeders than either sheep or cattle and can choose from a wider range of plants including browse from trees and shrubs. Goats are fastidious, and will not thrive or produce on soiled, contaminated, tainted or poor quality feed and may reject good quality food if superimposed on leftovers.

Goats should not be deprived of food for periods longer than 24 hours.

The food available to goats should meet the requirements of maintenance, growth, pregnancy, lactation and fibre production, and any extra demands such as exercise or cold stress.

Health and productivity of goats are maximised when goats are fed forage diets of high digestibility which enable high levels of energy intake and contain sufficient nitrogen and trace minerals. Such diets enable goats to grow and lactate at high levels.

On pastures where no browse exists the recommended stocking rate for goats, measured in Dry Sheep Equivalents' (DSE) per hectare, is similar to that recommended for sheep.

Goats can be successfully grazed on pasture. Browse is not necessary. If browsing is available as a supplement to pasture, it may be possible to increase the stocking rate. However, the feed quality of scrub is often very low.

If only browsing is available, its height must be such that it is within reach of younger kids. Where only poor quality scrub is available, supplementary feed should be supplied.

In grazing situations conducive to high stocking rates (such as on improved perennial pastures), goats are vulnerable to internal parasites. To assist in the control of parasites, it is recommended that breeding goats are grazed at no more than 8 DSE per hectare.

Goats prefer a diet containing forage. In particular, where goats are confined to yards they should be supplied with forage daily in the form of good quality hay or browse, or pelleted feeds which contain at least 30% forage.

Body weight and condition of goats may fluctuate with seasonal feed availability, usually being lowest in late summer and autumn. Animals with a condition score of I (very lean) need to be supplementary fed (see Appendix 1).

Nutritional stress or sudden dietary changes (e.g., in the concentrate mixture, in the amount or type of green feed, or the introduction of grains) predispose goats to serious diseases (including enterotoxaemia, ruminal acidosis, and pregnancy toxaemia) and should be avoided. Feral goats

require a conditioning period of 14 days to adjust from browsing scrub under range conditions to grazing pasture under intensive conditions, to allow them to change feeding habits and for their gut flora to change appropriately.

If goats are to be fed predominantly grain or concentrate mixture, it must be introduced slowly to the diet over a period of 2 to 3 weeks to prevent ruminal acidosis. It is recommended that the introduction be at no more than 50 g per head per day with increases of 50 g per head every second day.

Goats should be protected as far as possible from foods and materials deleterious to their health (e.g., many ornamental plants are toxic).

Water

Clean, potable water must be readily accessible to goats. The amount of water drunk depends upon the dry matter content of feed eaten and surface moisture available from rain or dew, body weight of goats and production level, especially of lactating goats. A goat in full lactation may consume up to 10 litres of water per day; this intake may double if the temperature exceeds 40°C.

Water quality (salinity, taste, temperature) can adversely affect intake. Goats may adapt to high salt levels (> 5000 mg/L) but generally prefer saline levels less than 2000 mg/L.

One DSE is regarded as equal to a 45 kg wether. Goat equivalents are calculated on a pro-rata body weight basis. Pregnancy and lactation must be considered in the calculation.

2. Drought

Drought may be defined as a severe rainfall shortage which leads to deficiency in water and/or feed supply for grazing goats. Drought is not the normal seasonal shortage of feed.

Goats being fed for survival should be inspected daily for health and vitality. Less thrifty goats may require segregation for special treatment and more frequent inspection.

Where provisions for health and vitality cannot be met, goats should be moved, agisted, sold or slaughtered humanely on site.

Drought-affected goats are highly susceptible to stress and require careful handling:

- if they are unable to rise and walk, they must be destroyed humanely on site;
- if they go down after limited exercise, they are not fit to travel, and should be fed to improve condition or, alternatively, be slaughtered humanely on site;
- if they are still able to walk but in an emaciated condition, and for which supplementary feed or agistment is not available, they should be sent directly to a knackery, rendering works or abattoir, as close as possible to their on-farm location, or slaughtered humanely on site; they should not be consigned to saleyards.

Drought-affected goats should be protected against exposure to extremes of temperature and weather. Vehicles transporting drought-affected goats must provide adequate cooling in hot weather and protection against cold, wet conditions.

3. Protection from climatic extremes and predation

Goats are sensitive to extremes of weather and all reasonable steps should be taken to minimise the effects of climatic extremes and other factors that produce either cold stress or heat stress.

Goats are vulnerable to cold stress, especially off-shears or when in low body condition, or during continuous rain when in full fleece. They require the provision of effective shelter or good natural shelter.

Steps should be taken to ensure that, as far as practicable, goats can be attended to promptly in the event of fire, flood, injury or disease.

Reasonable precautions should be taken to protect goats from predation. The use of electric fencing should be considered.

4. Intensive goat systems - housing and accommodation

Feedlots and feed pads should provide sufficient space for each goat to be able to stand, turn around, stretch, lie down and move to feed and water. The design, location and construction of feedlots and feed pads should take account of topography, climate, age and size of animal, space and feed requirements, and labour and management skills available.

Confined goats should have enough space to be able to lie down, stretch, stand up and to exercise. They should have access to shelter, food and water.

Tethering of goats must not be used as an ongoing form of confinement. It may be acceptable only as a short-term measure for a specific confinement need where conditions could otherwise cause injury, endanger the goats in some way, or permit them to stray.

If tethering is required it should be done in accordance with this code and also the Code of Practice for the Tethering of Animals. The agility and mobility of goats make them prone to entanglement when tethered; in addition, tethered goats are particularly vulnerable to attack by predators. For these reasons, tethering should be used only where there is adequate close supervision.

Goats should not be tethered by lengths less than 4 body lengths, unless selective veterinary therapy under shorter tether is prescribed, or for show, display or approved experimentation purposes. Collars, ropes, chains and similar materials used for tethering of goats should be constructed and used so as to avoid injury and pain.

Sheds or arks (mobile sheds) provided for goats should be of sufficient size to allow the animal to stand up, turn around and lie down.

In the case of housed goats, ventilation, whether mechanical or natural, should assist in the removal of environmental heat, moisture, dust, carbon dioxide and other noxious gases and airborne infectious organisms, and replace these with fresh air. This air should be distributed in a manner appropriate to the location of the stock and the design of the building.

Adequate fire fighting equipment should be available to control a fire in any goat housing shed, building or feedlot.

5. Goat handling facilities

Sheds, pens, yards, lanes, loading ramps, dips and areas where goats are forced to congregate should be so constructed and maintained and of such a size as to minimise the risk of injury, disease, overcrowding and trampling.

Floors or yards, sheds, pens and loading ramps should have a surface which is not slippery and which facilitates cleaning. Uneven or steeply sloping surfaces greatly increase the risk of falling because goats often display defensive reflexes when confronted with such situations and may make sudden erratic movements.

Goats should spend as little time as management practices allow confined in yards, so as to minimise chances of injury. Handling of goats in small groups, particularly kids and heavily pregnant does, will minimise injury in yards.

Special facilities should be available to permit adequate restraint of goats which require inspection or treatment because of illness or injury.

Goats should be caught and restrained with care. Homed goats may be restrained by holding the hom at its base, not at its tip, as this may cause the hom to break. If it is necessary to pick up goats it should be done by the body and not by their horns or hair.

6. Management practices

General

Management procedures carried out on goats should be competently performed. Any injury, illness or distress observed should be promptly treated. Practices that cause pain should not be carried out on goats if painless and practical methods of husbandry can be adopted to achieve the same result.

Hygienic precautions should be undertaken for all operations.

Restraint used on goats should be the minimum necessary to perform procedures efficiently.

Pregnant does are susceptible to stress-induced abortion. Animal husbandry practices should induce minimal stress, whether from extreme climatic conditions, mustering, handling, prolonged transportation or nutritional factors.

Health

Appropriate preventive treatment should be administered to goats for diseases that are common in a district or are

likely to occur in a goat herd, in particular enterotoxaemia ('pulpy kidney') and tetanus.

Goats are particularly susceptible to gastro-intestinal parasites (including 'worms' and coccidiosis). A suitable control plan should be devised and followed. Paddocks used for grazing and yards where goats are confined should be managed in such a way that pick-up of contamination with parasites or other agents is minimised. Where anthelmintic resistance is suspected, faecal egg count reduction tests should be performed to determine suitable anthelmintic on an annual basis.

External parasites, such as lice, should be treated as early as possible.

Suitable methods of administration of vaccines and medication should be employed. Parenteral medicines, such as vaccines and other injectables, internal medication, such as vaccines and drenches, and external medication, such as dips and pour-on formulations, should be given in strict accordance with the manufacturers' instructions. Any medication which does not bear specific instructions for treatment of goats should be performed on the farm in a humane manner.

During the last month of pregnancy does are susceptible to pregnancy toxaemia ('twin kid disease'), which should be prevented by not allowing does to get overfat, by encouraging regular exercise and by avoiding nutritional stress. The condition should be detected and treated promptly if it occurs.

Difficult kiddings should be diagnosed promptly and does assisted only by a skilled and competent operator or by, or under the supervision of, a registered veterinary practitioner.

When does are producing more milk than is required by their kids, they should be hand-milked to relieve udder pressure.

Regular feet care is imperative to maintain soundness. Hoof trimming should be performed as necessary to remove over-growth of hom.

Goats are susceptible to deficiencies in trace elements, including iodine, selenium, copper or cobalt, when grazing deficient pastures. Appropriate preventive measures should be undertaken in known deficient areas.

Supervision

Frequency and level of inspection should be related to the likelihood of welfare problems of goats. Milch goats and goats kept under intensive management should be inspected, fed and watered daily. Goats grazing under more extensive conditions require regular supervision, according to density of stocking, availability of suitable feed, reliability of water supply, age and pregnancy status.

Agreements relating to leased land and agistment should specify who has duty of care under the Prevention of Cruelty to Animals Act 1986 for supervising stock.

Castration

Castration should be carried out on kids as early as management practices allow, preferably before 2 months of age. Surgical castration without the use of anaesthesia should be confined to bucks under two months of age.

Disbudding, dehorning and horn trimming

Disbudding of kids should be by heat cautery only. The entire horn bud must be removed and the operation must be performed as soon as the bud can be located. Regrowth of horn occurs very readily, so kids should be checked two to three weeks after disbudding.

Disbudding by means of chemicals is not acceptable.

Dehorning (as distinct from disbudding) should only be performed under general anaesthesia or narcosis.

Dehorning should only be performed by, or under the supervision of, a registered veterinary practitioner.

Horn trimming or the removal of sharp horn points is recommended to minimise injury to other goats. It should be performed so as to avoid bleeding and ensure that no sharp horn projection remain after the procedure.

Kidding

Kidding doe herds should be under adequate surveillance to ensure that does having difficulty are given attention and that other problems such as pregnancy toxemia and predation are not occurring.

Access to a sheltered paddock is recommended for kidding doe herds if the risk of bad weather at kidding is high.

Milking practices - dairy goats

Dairy goats in full lactation should not be left for more than 24 hours without relief by milking.

Careful management of the milking operation and proper milking machine function directly influence longevity of lactation, total production and prevalence of mastitis in dairy goats. Milking machines should be checked and, if necessary adjusted by a competent technician at least annually.

Shearing

Mohair goats should be shorn twice each year and cashmere goats may be shorn twice each year. The procedure should be performed by a competent operator and care should be taken to prevent injuries.

Shearing stress should be kept to a minimum by avoiding undue yarding and travelling procedures, avoiding exposure to adverse weather and by providing access to feed and water if animals are confined for more than 24 hours.

It is desirable that goats are provided with access to effective shelter or good natural cover after shearing. The critical period is the first six weeks post-shearing, depending on body condition and seasonal weather conditions.

7. Identification

Ear tagging, ear tattooing or microchipping are the preferred methods of identifying goats. Ear marking and ear notching are accepted methods of identification provided they are performed on goats less than 8 weeks of age.

Hot iron branding and freeze branding should not be performed.

8. Mustering, driving, yarding and drafting

Goats should not be driven to the point of collapse. The use of goading devices and dogs for the handling and moving of goats should be limited to the minimum necessary to complete the procedures.

Electric goads should not be used on goats.

9. Humane destruction of goats

Goats should be humanely destroyed using the behind-the-horn method. The captive-bolt pistol (captive bolt penetrating stunner) or firearm should be directed to the skull behind the horns in the line with the animal's mouth (see Figure 1).



Figure 1. The humane destruction of goats.

Kids may also be shot from the front, as for cattle, directing the shot at a point of intersection of lines taken from the base of each ear to the opposite eye (see Figure 2). This method is not suitable in mature goats, as the brain is located well back in the skull compared with other livestock.

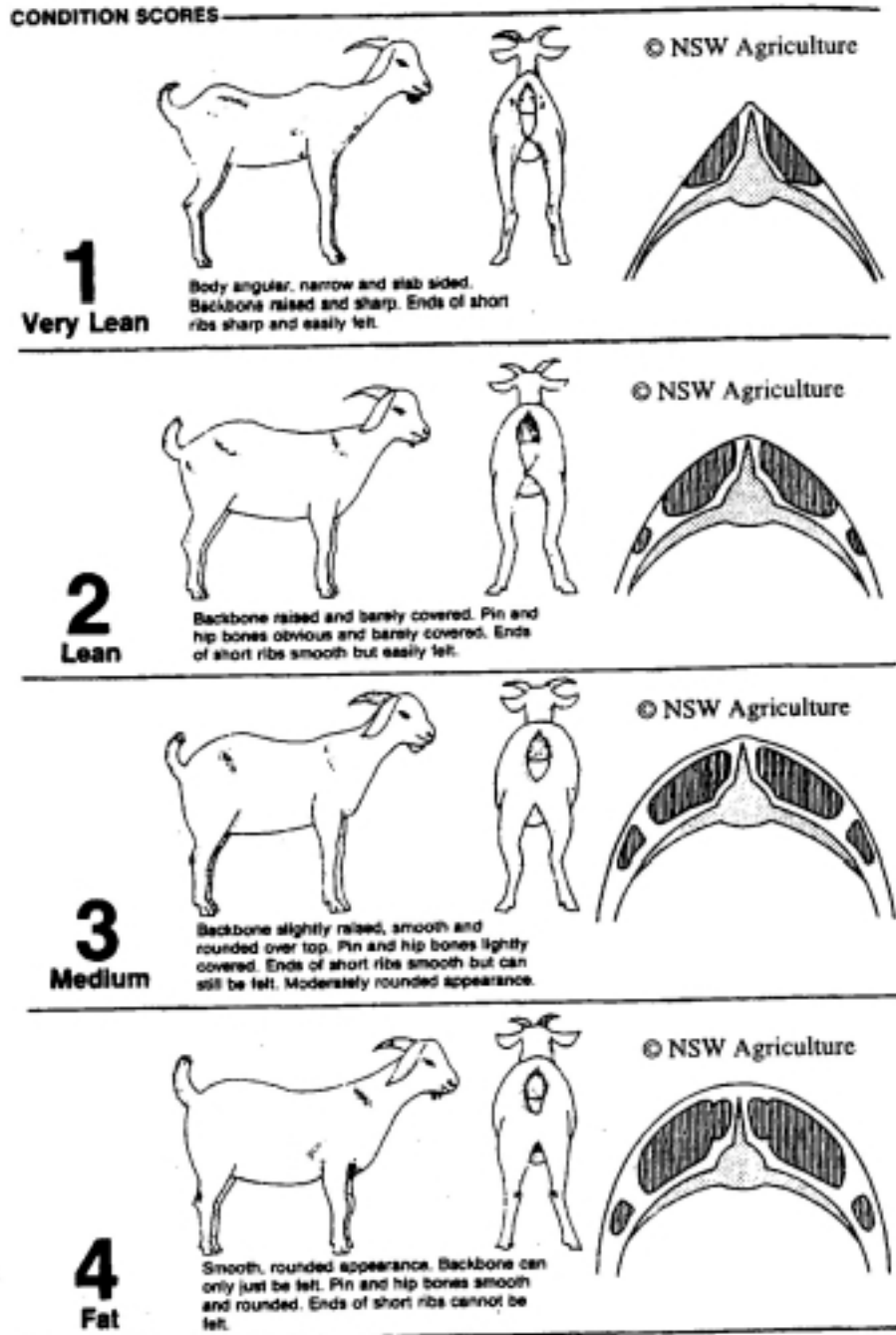


Figure 2. The humane destruction of kids.

Goats may be destroyed by overdose of anaesthetic under veterinary supervision.

Other methods of killing are unacceptable except under extreme conditions in which commonsense and a genuine concern for animal and human welfare should prevail.

APPENDIX 1



Further reading: Condition Scoring of Goats, The New South Wales Department of Agriculture, Agfact A7.2.3

Prepared by the Minister for Agriculture.

Approved by the Governor in Council, 21 November 2000.

Published in the Victorian Government Gazette 7 June 2001.

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