

ANIMAL WELFARE (GOATS) CODE OF WELFARE 2012 REPORT

Introduction

1. The draft Animal Welfare (Goats) Code of Welfare (the Code) has been developed by the National Animal Welfare Advisory Committee (NAWAC), pursuant to the Animal Welfare Act 1999 (the Act). This report accompanies the Code recommended by NAWAC to the Minister, as required by section 74 of the Act.

The report notes:

- the reasons for NAWAC's recommendations;
- the nature of any significant differences of opinion about the Code, or any provision of it, that have been shown by the submissions; and
- the nature of any significant differences of opinion about the Code, or any provision of it, that have occurred within NAWAC.

In providing this report, NAWAC notes that it fully considered all submissions it received and reviewed relevant scientific literature, and that there was debate among NAWAC members on many points. This report is not required to, and does not attempt to, show every detail of the analysis and discussions that took place.

2. There are a number of minimum standards where the animal welfare implications are self-evident and require no explanation for their inclusion. NAWAC has decided that it will not provide comment on these minimum standards or recommended best practices, but will provide explanations on minimum standards which it believes are complex or controversial or on which it received submissions with significant differences of opinion. Minimum standards as drafted may have been amended for a number of reasons, including to make them legally robust, to ensure a more effective coverage of the issue, or to change from a recommended best practice to a minimum standard (or vice versa).
3. It should be noted that the Act does not define "significant differences". While there were a variety of opinions expressed in the submissions, NAWAC did not consider that all differences necessarily represented significant differences of opinion. NAWAC has taken the view that significant differences are either where there are large numbers of submissions which are contrary to a minimum standard in the Code, or where a submission puts forward a justification based on scientific evidence or good practice for a different or alternative minimum standard. NAWAC notes that some individuals or organisations may interpret "significant differences" in a way that varies from the NAWAC view.
4. The Code applies to any goat that is contained for management purposes (e.g held within any boundary fence), including feral goats after mustering and for the purposes of farming or slaughter, goats kept as companion animals (pets), any goat tethered anywhere and goats on game estates or safari parks. This code does not apply to goats defined as 'Wild Animals' by

the Wild Animal Control Act 1977. Goats in New Zealand are commonly farmed for the purposes of milk, fibre (mohair and cashmere) and meat production.

Why do we need a code of welfare for goats?

5. There are approximately 110000 goats in New Zealand (MAF, 2007). They are kept for purposes of weed control, as companion animals (pets), are used for farming purposes to produce milk, meat and fibre, mustered for slaughter and are held in game estates or safari parks.
6. The Act specifies that owners and persons in charge of animals (including goats) must meet the needs of animals in their care. It does not specify how to meet these needs. Nor does it describe how those responsible for ensuring compliance with the Act might determine whether or not these needs have been met. Additionally, the Act functions to avoid unnecessary or unreasonable pain or distress being caused to animals but does not list the areas or practices in which this might be a concern and the ways in which it might be avoided. This is the function of the codes of welfare.
7. It is essential that owners and persons in charge of goats know what the needs of goats in their care are, and how these needs can be met, in order that they can act lawfully and so that the welfare needs of their goats are met. This code of welfare for goats fulfils this requirement and constitutes the Government's statement of policy in this regard. It sets out the Government's expectations regarding appropriate treatment of goats and identifies what is considered to be inappropriate treatment of goats. It is expected that goat owners will use this code as guide to best practice and that those required to ensure compliance with the Act will use it to assist in identifying unacceptable practices.
8. Key needs are described in the areas of stockmanship, animal handling and restraint, mustering and droving, tethering goats, food and water, shelter, farm facilities, loafing barns and housing, kidding does, hand rearing and fostering of kids, milking, shearing and dagging of fibre goats, reproductive technologies and selection of animals, identification, pre-transport selection, health and emergency humane destruction.

Code preparation and public submissions

9. The Act allows for any individual or organisation to draft a code of welfare. The Code was initially drafted by a working group established by the New Zealand Dairy Goat Cooperative. The original draft of the Code therefore focused on the welfare of dairy goats. However early in the development process it was decided that the code should be extended to include all goats and so was refocused to include goats farmed for meat, for fibre and for any other purpose. The draft of the Code that was presented to NAWAC therefore covered all goats contained for management purposes within New Zealand. As required by the Act, representatives of those likely to be affected by the Code were consulted during its preparation and before public notification.
10. NAWAC considered the Code in early 2010 to ensure that it complied with the purposes of the Act, that it was written clearly so as to be readily understood, and that representatives of those likely to be affected by it had been consulted. NAWAC wishes to point out that, at that time, NAWAC decided not to make any final decisions on the Code until it had received submissions. The Code is required to be publicly consulted, and for NAWAC to come to any conclusion prior to this consultation would have meant that NAWAC was not following due process by acting in a biased and predetermined manner.
11. The Code was publicly notified on 29 April 2010 by notices in the major newspapers in Auckland, Wellington, Christchurch and Dunedin. In addition, it was sent to all major libraries and to specific interested groups. The closing date for submissions was 11 June 2010.
12. A total of 71 submissions were received during the public consultation period. In addition, 432 SAFE form letters and 46 submissions supporting SAFE were received. All submissions were read in their entirety and taken into account. A summary of the submissions received on the 2010 draft Code was prepared and NAWAC's responses to the submissions were noted.
13. In addition responses to nine specific questions were sought during public consultation. The responses can be summarised as:
 - *Is a code necessary?* All responses were in the affirmative.
 - *Do you agree that the minimum standards are the minimum necessary to ensure that the physical, health and behavioural needs of goats will be met?* Some submissions considered the minimum standards to be appropriate while some considered them to be too low to ensure welfare (criticism being reflected in comments at specific minimum standards only). One submission considered the minimum standards too stringent for smallholders.
 - *Do you agree that the example indicators are appropriate?* Generally, the example indicators were supported. Where they were not supported, this was due to the submitter not agreeing with a specific minimum standard with which they were aligned.
 - *Do you agree that the recommendations for best practice are appropriate?* Generally the recommendations for best practice were supported. Where they were not supported, this was

due to the submitter not agreeing with the minimum standard to which the recommended best practice was aligned.

- *Do you think that this code would change existing arrangements for the management of goats?* It was considered that the code would either improve husbandry for goats, especially if follow up inspections are also made by the appropriate personnel; or make no difference to current arrangements.

- *Will complying with this code involve costs for you or your business?* Responses were divided to this question with half of respondents indicating that complying with the code would involve increased costs to themselves and the other half indicating that complying would involve no increase in costs.

- *What barriers do you see to the implementation of the proposed code and how might they be resolved?* Barriers noted included a lack of awareness of the code, access to supporting knowledge, education and the cost of monitoring and enforcement of the code. It was considered that these can be resolved by increasing the promotion of educational resources, by increased monitoring and enforcement through a variety of avenues and by licensing of goat owners coupled with random inspections of the goats.

- *What benefits do you see from having this code?* Benefits would be an increased level of animal welfare, increased knowledge of skills and increased certainty of what goat owners obligations are. New Zealand's reputation as a fair producer of animal products will be enhanced and the 'clean, green' image will be promoted.

- *What other impacts would this code have on New Zealand society, the economy, or the environment?* Attitudes will vary but generally the Code will make a contribution to New Zealand's animal welfare performance.

14. All submissions were carefully considered by a subcommittee of three members appointed by NAWAC to review the Code. The subcommittee reviewed the Code in detail and all the submissions received on it. The subcommittee met for one full day in January 2011. Throughout the period the Code was under review, subcommittee members worked in collaboration by email, and in consultation with MAF Animal Welfare Directorate staff.

15. The subcommittee reported the Code back to NAWAC on 17 May 2011 for final consideration and approval for recommendation to the Minister. The Code was subsequently peer reviewed by international animal welfare expert Dr Neville Gregory from the Royal Veterinary School in London, England.

Key issues

16. The following key issues represent the significant concerns raised from the public consultation on the draft Code.

- Stockmanship and Animal Handling
Why is stockmanship given such emphasis in the code?
- Restraint and Tethering
Should the code allow the practice of tethering goats to continue?
- Mixing Goats
What are the main issues associated with keeping goats in herds?
- Shelter and Housing Facilities
Why is the need to make a range of provisions to prevent goats from developing hypothermia accentuated within the code?
Should goats be kept in intensive housing conditions?
- Hand Rearing and Fostering Kids
What is the minimum age at which goat kids should be fully nutritionally dependant on solid feed?
- Lactating Does and Milking Systems
Why have minimum standards been included for the procedure of milking goats?
- Pre-transport Selection
How can goats with foot scald or foot rot be transported for slaughter?

17. Stockmanship and Animal Handling

(a) *Why is stockmanship given such emphasis in the code?*

Stockmanship, a respect for the essence of the animal (Gatward, 2001), and stewardship are arguably the key to good animal welfare. Goats are as susceptible to suffer stress in response to management procedures as are other farmed species of livestock, and can experience stress when rearing practices suddenly change or when regrouping or relocating animals (Sevi et al, 2009).

The essentials of stockmanship have been described as knowledge of, and skills in, animal husbandry and personal qualities of dedication, patience, affinity and empathy with animals. The factors contributing to good stockmanship are experience and learning (stockmanship borne of practical personal experiences results in an intuitive feel for animals); personal qualities of patience and empathy with animals; and an understanding of the constraints and opportunities afforded by the climate, terrain and biota (Fisher & Stafford, 2007). Much of

stockmanship is learned and subtle. For instance, recognising the early signs of sudden illness in stock; this may be something as subtle as the fact that the animals don't look up as the stockman walks past the pen, something which occurs before they go off their feed (Smart, 2004).

Good or competent stockmanship then, is complex, subjective and intuitive and NAWAC acknowledges that some individuals are unlikely to possess all such qualities, especially those developed principally by experience. However handling and stockmanship are important components of animal welfare especially within a farming operation and it is expected that individuals will collectively have and share the required skills.

18. Restraint and Tethering

(a) *Should the code allow the practice of tethering goats to continue?*

The practice of tethering goats for the purpose of grass and weed control attracted a large number of public submissions. When performed appropriately for short periods of time, tethering can be an effective method of restraining goats while they feed (Romney et al., 1996). However, it is not usually the tethering and restraint of goats *per se* that is the main problem, but the issues that are commonly associated with tethering such as neglect, social isolation and increased vulnerability to attack or injury.

The public submissions received in relation to this topic outlined a variety of reasons for wishing this practice to be banned or more strictly regulated. These reasons include the fact that goats are naturally a social herd animal (Miranda-de la Lama and Mattiello, 2010) whereas, when tethered, they are often isolated. For this reason, this practice is denying them one of their basic needs; social contact. Goats are also often tethered in one place for extended periods of time out of visual contact of owners or persons in charge and hence can be subject to neglect and the insufficient provision of water, food or shelter. They are also often tethered by roadsides for purposes of weed and grass control, where they are highly visible to people passing on the road and as such, are open to attack from people and also from dogs. In addition, they are exposed to exhaust fumes and/or injury from cars.

A number of submissions also stated that, as goats are often tethered at the side of roads where tourists drive, this practice would have a detrimental effect on tourism as visitors to New Zealand would feel a sense of unease at seeing goats tethered in this manner.

Therefore NAWAC decided to include a recommended best practice of not tethering but to outline minimum standards and indicators to ensure that tethering does not deprive goats of their needs for feed, shelter, water, social contact and regular inspection.

19. Mixing Goats

(a) *What are the main issues associated with keeping goats in herds?*

Goats naturally exist in a complex hierarchical social structure (Schino, 1998) with individuals frequently competing over resources (Barroso et al., 2000). Social conflicts between goats, if frequent, can affect the feeding and resting behaviour of more subordinate individuals when housed in loose housing systems, especially if space allowance in the

feeding place and lying area are restricted (Jørgensen et al, 2007; Andersen and Bøe, 2007). High ranking goats can also defend a number of feeding spaces at one time, meaning that low ranking goats are forced to feed from one place or wait until a later time to try to access feed (Loretz et al., 2004).

It has been suggested that this competition for resources may affect productivity as well as have a detrimental effect on the welfare of lower ranking goats (Barroso et al., 2000). Horned goats in unstable social groups have a tendency to bully and can injure goats without horns (Smith and Sherman, 1994; Anzuino et al., 2010). Agonistic behaviour can be physical (e.g biting, butting, bumping) or aggressive without contact (threat displays, chases) (Miranda-de la Lama and Mattiello, 2010) and how individuals establish and maintain their hierarchical relationships within a group can differ depending on their rank (Miranda-de la Lama and Mattiello, 2010).

Usually male goats are dominant over females, but a horned female goat can dominate a male without horns (Haenlein et al., 1992). In addition, horned goats tend to be heavier than hornless goats (as well as more dominant) and they also occupy more space at feed troughs (Tölü et al., 2007; Miranda-de la Lama and Mattiello, 2010) as well as being more aggressive (Loretz et al., 2004).

For this reason minimum standards have been included to state that when mixing goats for any purpose, or housing goats in groups, they must be managed in a manner that minimises the risk of injury from aggression. Meeting these minimum standards will involve utilizing strategies such as maintaining an established and stable group wherever possible, mixing only with careful consideration of the different temperaments of the goats in the existing herd and separating horned and hornless goats if there is a risk of injury. To further emphasise the importance of mixing goats carefully, a recommended best practice has also been included that states that horned goats should be monitored and well managed when first mixed.

20. Shelter and Housing Facilities

(a) *Why is the need to make a range of provisions to prevent goats from developing hypothermia accentuated within the code?*

Goats are less able to withstand cold conditions than are sheep due to a different distribution of subcutaneous fat and the consistency of their coat (McGregor, 1985). Goats that are subjected to intense heavy rainfall or continuous rain for 24 hrs are at a significantly increased risk of developing hypothermia (McGregor and Butler, 2008). The provision of adequate shelter for goats (especially those that have just been shorn) is therefore important and a minimum standard has been included in the code to reflect this.

A number of studies have shown that livestock, including goats (McGregor and Butler, 2008), are at a greater risk of developing hypothermia when they are at a low body condition score, in addition to the more obvious risk of being undernourished. In cases when the climatic conditions are not so severe and goats are not at immediate risk of hypothermia, providing them with additional feed following shearing will help them to meet their energy requirements, thermoregulate effectively and maintain milk production rates (Fedele et al.,

1993). It has therefore been stated in a minimum standard that extra feed must be provided following shearing. A minimum standard has also been included stating that goats must receive sufficient food to prevent the body condition score from falling below 2. This has two purposes, to ensure that goats maintain good physical and physiological health and to aid the goat in maintaining core temperature.

(b) ***Should goats be kept in intensive housing conditions?***

A number of public submissions stated that they were uncomfortable with the intensive housing of goats. This is a relatively common system for housing goats, especially milking goats, in New Zealand. To ensure the welfare of goats housed in systems such as this, it is important that the facilities are well constructed, hygiene is maintained and management practices are used appropriately (Sevi et al., 2009) and minimum standards have been added in the code to reflect this. Another minimum standard states that goats must be able to lie down and rest for a sufficient time each day to meet their behavioural needs. Space requirements have been included in the code that reflect the requirements for space in accordance with scientific literature (Sevi et al., 2009). Shelter must also be provided when goats are released outside following an extended period of intensive housing.

21. Hand Rearing and Fostering Kids

(a) ***What is the minimum age at which goat kids should be fully nutritionally dependant on solid feed?***

The frequency, amount and type of milk that a goat kid receives can influence the development of the rumen as well as the growth and health of the kids. Feeding forages to goat kids from an early age encourages rumen development and appears to speed up the development of muscles in the rumen wall, enabling more effective mixing of rumen contents and digestion (Morand-Ferh et al., 1982). Feeding only milk ad libitum to a goat kid will result in the maximum rate of growth of the kid, but the early development of a functional rumen will be delayed. A balance between maximum growth and early development of the rumen is necessary for weaning to be successful (Lu and Potchoiba, 1988). For this reason, a recommended best practice has been added to the code to state that kids should have access to solid feeds, as well as milk, from their first week of life to enhance rumen development.

Goat kids remain largely dependent on the mothers' milk for food until the age of approximately 5 weeks, at which point they begin to increase their dependence on other foods (Bungo et al., 1998). To increase likelihood of a normal development and good welfare, weaning of the young kid should not occur before 6-7 weeks of age (Bungo et al., 1998). A minimum standard has been added to state that liquid feeds must be provided until the rumen has developed to the point where it can use solids as the sole food source and a recommended best practice states that this should preferably not occur until the kid is at least 6 weeks and preferably until it is 8-10 weeks of age.

22. Lactating Does and Milking Systems

(a) ***Why have minimum standards been included for the procedure of milking goats?***

A number of goats in New Zealand are kept as dairy goats for the purpose of providing milk for commercial reasons and are milked on a frequent basis using milking machines. Machine milking, if properly performed, can have beneficial effects on the goat as it can improve udder health by decreasing somatic cell and bacterial counts in milk (Sevi et al., 2009), however over-milking, poor hygiene or malfunction of the milking machine can have a deleterious effect and cause problems such as immune depression and increased risk of mastitis (Albenzio, 2003; Sevi et al., 2009). A minimum standard has therefore been included to state that milking equipment must be maintained to minimise the risk of damage to, or infection of, the teats and udder.

Familiarising goats with milking machines and the establishment of routines for milking goats are beneficial to reduce the amount of stress that they experience (Sevi et al., 2009). Emotional or physical stress can affect the productivity of dairy animals and the establishment of a routine helps to maintain both the health status and productivity of the goat (Sevi et al., 2009). A recommended best practice has been included to reflect these potential welfare compromises.

A number of additional recommended best practices have been included in the code relating to the correct maintenance and usage of milking machines and the performance of management practices which are aimed at reducing physical and emotional stress in goats during milking procedures.

23. Pre-transport Selection

(a) *How can goats with foot scald or foot rot be transported for slaughter?*

Lameness can present a significant challenge to goats in extensive systems (Goddard, 2006). Foot scald and foot rot can result in debilitating lameness in goats and, if persistent, can result in the relinquishment of a goat to slaughter (Seaman and Evers, 2006). A goat with serious foot scald or foot rot, is likely to be lame and will not be able to place weight on each limb equally as required in the code of welfare for transport of animals within New Zealand. NAWAC therefore decided that animals displaying these symptoms can be transported only if they obtain a veterinary certification stating that they are fit for transport; and guidance is provided within this code to ensure consistency with the transport code.

Other issues considered by NAWAC

24. NAWAC has considered how the Code aligns with other relevant codes and regulations both in New Zealand and internationally. NAWAC is not aware of any examples where the Code deviates significantly from these documents.

The nature of any significant differences

25. All significant differences of opinion about the Code, or any of its provisions, have been set out above or in NAWAC's response to submissions.

Dr John Hellström

Chair, National Animal Welfare Advisory Committee

1 August 2011

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