

ANIMAL WELFARE ON ORGANIC FARMS

GUIDANCE FOR ORGANIC SHEEP AND GOATS

The ECOA Animal Welfare Task Force (AWTF) has reviewed the Canadian standards for organic production (CAN/CGSB 32.310-2006 Organic Production Systems General Principles and Management Standards) and has provided additional guidance for the optimal welfare of sheep and goats in the context of the standard. The information provided is based on best management practices outlined in various animal welfare standards and in published research on animal welfare and organic systems of production.

The numbering refers to the specific paragraph numbers in the 2008 amended version of CAN/CGSB 32.310-2006.

6. LIVESTOCK PRODUCTION

6.1. General

6.1.3 states that livestock production is a land based activity and herbivores must have access to pasture during the grazing season. For sexually mature ruminants, grazed forage must represent a minimum of 30% of total forage intake.

Guidance 6.1.3

Pastures must be kept free of loose wire, or anything with sharp edges which could cause injury. Check for poisonous plants such as celery leaved buttercup (across Canada) and white snakeroot (eastern Canada).
<http://res.agr.ca/brd/poisonpl/poisonworld.htm>

6.4 Livestock Feed

6.4.1 & 6.4.2 require that the operator of an organic livestock operation provide livestock with an organic feed ration balanced to meet their nutritional requirements, and that the ration be made up of substances that are necessary and essential for maintaining the animals' health, well-being and vitality while meeting the physiological and behavioural needs of the species in question.

Guidance 6.4

There should be sufficient bunk or feeder space so that all animals can feed simultaneously. Recommended minimum: ewes and rams 400mm/16"; feeder lambs 300mm/12" ⁽³⁾. Body condition should be planned, monitored and maintained according to the stage of production and should not at any time be less than 2. ⁽⁴⁾ (See appendix for body condition scoring of sheep and goats).

In the last trimester of pregnancy when 75% of fetal growth occurs, ensure feed is sufficiently nutrient rich to avoid pregnancy toxemia (twin lamb disease) - avoid silage and low quality forage. 15-18% protein and 68-75% TDN are recommended with 15-40% grain content. Supplementary protein in late pregnancy and early lactation can help reduce the ewe's per-parturient faecal egg count.⁽¹³⁾

Ensure all bale twine or mesh is completely removed before feeding.

Use mineral supplements formulated especially for sheep since they are prone to copper toxicity. Diets should not contain more than 15ppm, on a DM basis and less than 10ppm for sensitive breeds such as Texel. If goats are fed sheep mineral they may become marginally copper deficient.⁽¹⁾

Paragraph 6.4.3a requires that specific rations for young animals take into account the need for natural milk.

Guidance 6.4.3a

If lambs and kids are orphaned within 48 hours of birth they should receive a minimum of 225 ml of colostrum.⁽¹⁾ Lambs require 50 ml per kg of bodyweight: so a 6kg lamb needs 300 ml within 6 hours of birth.⁽³⁾

Kids and lambs should not be weaned before 6 weeks of age⁽⁴⁾ or must be at least 2.5 x birth weight, be readily drinking water and consuming a minimum of 0.16 – 0.23 kg (0.35-0.5lbs) of solid feed.⁽²⁾ Lambs should be eating a minimum of 0.45kg (1lb) per day.⁽³⁾

Weaning of lambs at 3 months of age is not very stressful regardless of the method used.⁽¹²⁾

6.4.5 requires that animals be provided with clean fresh water on demand.

Guidance 6.4.5

A good water source is necessary even when there is available snow or high moisture feeds.⁽²⁾

Space requirements

	Bowl or nipple	Tank (hd/ft)	Tank (hd/m)
Does/Ewes	40-50	15-20/15-25	49-66
Bucks/Ram	10	2	7
Young kids >30kg Lambs	50-75	25-40	82-131

Source: Sheep & Goat Science 5th edition 1986

6.5 Breeding

The standard states that the operator must select breeds and types of livestock suitable for the site-specific conditions of the production system and that are resistant to prevalent diseases and parasites. Producers must use natural methods of reproduction without the use of reproductive hormones to trigger and synchronize estrus.

Guidance 6.5

When a harness is used it should be checked regularly to ensure it is properly adjusted to prevent injury or discomfort and not left on longer than necessary. Check that the crayon holder has smooth edges and pins are bent correctly.

If more than one buck or ram is used at a time, natural behaviour to establish dominance can result in fighting and injury – the situation should be closely monitored. Weight and size of bucks/rams should be appropriate to the size and development stage of the does/ewes. Do not breed young does/ewes at less than 65% of mature body weight –it will result in birthing difficulties, reduced milk production and reduced growth.⁽²⁾

When kidding (or lambing) on pasture, observe frequently to ensure prompt attention if problems occur and to prevent predation losses.⁽²⁾

Pregnant ewes should be kept in groups of less than 50 to allow for individual recognition and attention at lambing time.⁽⁹⁾ Use of individual clean, dry claiming pens for 2 or 3 days after lambing helps prevent mismothering (failure of the ewe to bond with her lambs). Dimensions must meet those stated in 6.8.9 (1.5m²/head plus 0.35 m² head for each lamb/kid).

6.6 Transport and Handling

This section requires that stress, injury and suffering be minimized in all handling, transportation and slaughter of livestock. In addition 6.6.2 also specifically prohibits the use of electrical stimulation or allopathic tranquilizers.

Guidance 6.6.1

Animals become frightened of people who handle them roughly. Never hold by the wool or solely by the horns. Use of a shepherd's crook for catching by the leg should be avoided.⁽¹⁾ Restrain with hand or arm under neck with other arm placed on or around rear; or use a properly fitted collar.⁽⁴⁾

Handling which separates individuals from the flock is stressful. Facilities should allow for the flow of animals without removing sheep from the line of sight of other sheep. Restraining cradles should be of appropriate size relative to sheep or goat and designed to ensure safety.⁽¹⁾

The use of well-trained dogs for herding probably reduces overall stress by decreasing time required to complete the work. Poorly trained dogs or dogs that bite cause much greater stress.⁽⁷⁾

Guidance 6.6.2

Animals should be moved as quietly as possible with lighting over alleyways and holding pens. They will balk at entering dark spaces and tend to move towards the light. Raceways should be an appropriate width (36-38cm for mature ewes, 25-28cm for lambs).⁽¹⁾ For goats, runways and pens should have barriers high enough to discourage jumping.⁽²⁾

Paragraph 6.6.3 states that during transportation and before slaughter the animals must have suitable shelter against inclement weather conditions.

Guidance 6.6.3

Goats have a low tolerance for moisture; bedding will help to keep goats clean and dry. Bedding on the floor of the vehicle will also help prevent slipping and reduce the chance of injury.

In addition 6.6.5 requires the duration of transportation to be as short as possible.

Guidance 6.6.5

Transport time should be under 8 hours whenever possible. If more than 12 hours, keep the vehicle moving during the hottest times of the day and rest during the cooler times. Nursing kids and lambs should be allowed to nurse at suitable intervals.

See Farm Animal Transportation codes for requirements for resting and feeding for longer journeys. At the end of a long journey provision of both feed and water is important. If animals are to be held for an extended period in lairage prior to slaughter it is important they eat and drink and be allowed to lie down and rest, preferably in their original social groups.⁽¹²⁾

Signs of stress during transportation include: load will not settle and continues to be noisy, animals lie down and cannot get up (overcrowding); open-mouth breathing (overheating); eating of available bedding (cold exposure and cold stress).^(2,11)

Mature bucks should be separated from other animals during transportation and horned goats separated from hornless goats.⁽²⁾

Paragraph 6.6.6 requires that animals too ill to be transported be suitably euthanized without cruelty.

Guidance 6.6.6

See the UC Davis veterinary guide for euthanasia of sheep and goats.⁽⁶⁾ Use gun shot or captive bolt by trained personnel with well maintained equipment. A barbiturate overdose administered by a veterinarian is also an acceptable form of euthanasia. Manually applied blunt trauma to the head is not acceptable.

6.7 Livestock Health Care

Paragraph 6.7.1 requires the operator to establish and maintain preventative health care practices including, amongst other things, the establishment of practices to minimize the occurrence and spread of diseases and parasites, and conditions that allow for a reduction in stress.

Guidance 6.7.1

Health can be measured by performance (e.g. lambs born/ewe exposed to ram; lamb growth; as well as by the occurrence of disease (morbidity and mortality rates).

Fluctuating temperatures in the pen, excessive moisture in bedding or yards, ineffective ventilation and nutritionally unbalanced diets all contribute to stress and illness in sheep and goats. Sheep and goats are prone to respiratory diseases when confined indoors.

Producers are encouraged to develop a herd health plan suited to the health status of the flock. It should cover the yearly cycle and include:⁽⁹⁾

- prevention of foot rot and treatment of lameness;
- a vaccination policy and timing of injections;
- control of internal and external parasites;
- prompt attention to any health concerns;
- pasture management; and
- regular flock/herd inspection.

New animals should be quarantined to help control viral diseases such as orf and CAE (in goats), as well as internal and external parasites.

In herds with CAE, kids should not be allowed to nurse and must be fed heat treated or cow colostrum – 150ml/kg of body weight over the first 24 hours.⁽²⁾

Loss of lambs is a significant welfare problem as well as a financial loss. Exposure, starvation, infectious disease, predation, and misadventure are all possible causes and all can be prevented with good management.

Healthy ewes help to ensure lamb survival. The whole reproductive process is influenced by stress which can be caused by high density, excessive handling, transport, excessive use of dogs, isolation from the flock or too large a group size. Stress results in lower milk yields, reduced milk quality, poor milk let down and impaired maternal behaviour. ^(9, 11)

The operator must also provide prompt treatment for animals with disease, lameness and other ailments. Allowed preventative practices include the use of vaccines for diseases that are communicable and cannot be combated by other means.

Guidance 6.7.1.e

Carry out routine health checks of the flock/herd and individuals. Lameness in sheep and goats is a common cause of ill health and discomfort particularly when conditions are warm and damp.

Lameness can result in a decline in body condition, lower lambing percentages, lower birth weights, reduced growth rates, reduced milk production, lower fertility and reduced wool growth. Downland sheep breeds are more susceptible than cross breeds. Hill breeds are less susceptible. Overwintering on poorly drained land with severe pugging (poaching) will lead to a high incidence of lameness. Ensure roads, tracks and handling facilities are well maintained; poor ground surfaces can physically damage feet. ⁽⁸⁾

It is recommended that the feet of goats be inspected every 4-12 weeks for signs of abnormal wear, infection, or excessive growth unless on dry range where 4- 6 months is acceptable. ⁽³⁾ An annual hoof trimming to remove overgrowth is usually sufficient but may not be necessary for all feet. It should be done more frequently if needed. The DEFRA booklet "Lameness in Sheep" provides instruction.

Although a zinc sulphate footbath is recommended for cases of foot rot in published articles only Copper sulphate is on the Permitted Substances List for this use. Stand animal in a footbath (10% solution) for 20 minutes (for an example see Defra booklet) and repeat in 4 days. Keep affected pasture free of animals for a minimum of five days. ⁽¹⁾ Defra suggests that the organisms causing footrot can survive on pasture for up to 12 days under favourable conditions. ⁽⁸⁾

A significant percentage of lame sheep (over 10%) may be indicative of poor overall welfare standards. ⁽⁹⁾

Zinc promotes healthy horn growth. Zinc containing feed supplements are said to reduce the incidence of lameness. ⁽⁸⁾

6.7.2 allows physical alterations when absolutely necessary to improve the health, welfare or hygiene of animals, or for identification or safety reasons. Alterations must be done in a manner that minimizes pain, stress and suffering, with consideration given to the use of anesthetics, sedatives and non-steroid anti-inflammatory analgesics. Allowed procedures under these conditions are dehorning, ear tagging, castration and docking of lambs tails.

Guidance 6.7.2c: Castration

All methods of castration cause pain and distress. Use local anaesthetics, sedatives and analgesics to reduce an animal's pain response. Methods causing the least pain and distress for sheep and goats involve crushing the spermatic cords with a rubber ring (use before 7 days of age) or a burdizzo 2-14 days after birth. Castration can be avoided by marketing bucks and ram lambs prior to sexual maturity or by practising herd/flock segregation to prevent unplanned breeding. Intact male lambs convert feed more efficiently and produce leaner carcasses.⁽³⁾

Castration should not be performed on lambs until the ewe/lamb bond has become established.⁽⁹⁾

Guidance 6.7.2c: Tail docking in lambs

Tail docking is a routine practice for most sheep operations – it is carried out to prevent fly strike for breeds with long wool and to prevent the accumulation of tags interfering with breeding success. Docking is not necessary for hair sheep with short tails with little wool on them or for lambs not being kept for breeding stock where fly strike is not an issue. Docking is stressful. It should be carried out when lambs are between 2 & 14 days old after maternal bonding has occurred, preferably by surgical removal rather than rubber bands. If using bands, the use of a local anaesthetic injected into the tail 1-2 minutes before applying the ring is recommended or administering an anti-inflammatory drug 20 minutes prior to application.⁽¹⁾ To prevent fly strike and infection, tail docking should not be done during warm summer months. Tails should be left long enough to cover the vulva or equivalent length in males.

Guidance 6.7.2c: Dehorning

Horned goats will not pose problems in well designed facilities and horns are important for grooming and social communication. Research has shown that horned does are not more aggressive than non-horned does. Aggression is only a factor if available space is less than 2m²/doe.⁽⁵⁾

Disbudding is the only option for horn removal in goats (naturally polled goats have limited fertility). If disbudding, the procedure should be carried out only if kids are healthy, thriving and are between 2-30 days old (for European breeds 2-7 days for males, 3-10 days females; Nubians have no buds until 30 days) using adequate analgesia and local anaesthetic. Disbudding irons are preferred to caustic paste which would require removal of the dam to prevent transfer of paste to the udder. Allow sufficient time

between kids to ensure maximum heating and only apply for 5-10 seconds.⁽¹⁾ Ensure personnel are skilled.

The tips of ingrowing horns should be trimmed if necessary to prevent pain, distress and infection, if they come in contact with the face.

Guidance 6.7.2.c: Identification

Consider the growth of the ear when tagging young animals with metal tags. To prevent ear tearing and loss, plastic tags should be of appropriate size. The shape of the tag is more important than the material in causing injuries; loop tags result in more injuries.⁽¹²⁾

If ewes and lambs are marked to address a problem of mismothering, use non-toxic colour markers.⁽⁹⁾

Shearing

Shearing on an annual basis is necessary for the well being of sheep but the restraint required, as well as noise and contact of the shearers is stressful. It should be done quickly and carefully by skilled operators to avoid cuts. Shearing should also be conducted when there will be no negative effects as a result of exposure to wet conditions, severe cold or intense sunlight.⁽⁷⁾ If shearing in winter, ewes will require additional feed or bedding for the first week post shearing. Fleece should be 15-20 mm in length before turning out on grass. If shearing in summer, sheep will require access to shade to prevent sunburn.

If animals are to be confined in a barn in winter for lambing, failure to shear beforehand can result in high moisture levels and health problems. Shearing of pregnant ewes less than 6 weeks prior to lambing is not recommended. Crutching, the removal of long or soiled wool around the rear end and on the belly, can be beneficial, helping young lambs find the teats and reducing the risk of fly strike.

Angora goats should be shorn every 6 months.⁽¹⁾

Paragraph 6.7.4 prohibits the withholding of medical treatment for sick or injured livestock to preserve their organic status.

Guidance 6.7.4

Individual animals in need of medical treatment **must** be treated to prevent deterioration in health, increase in distress and prolonged or acute suffering. Producers are encouraged to develop a plan for positive health to prevent the need for such treatment.

According to paragraph 6.7.9 there must be a comprehensive plan to minimize internal parasite problems in livestock. Operators may only use parasiticides when preventative measures fail and individual animals need to be treated – details of this derogation is detailed in 6.7.9b.

Guidance 6.7.9

For sheep and goats, failure to control internal parasites can be a major welfare issue. Producers should understand the lifecycle of the parasites which are a problem in their region. Good nutrition, proper bedding management and removal, as well as regular pasture rotations are necessary to prevent the build up of parasite populations. Producers are encouraged to read publications and reports on the subject such as the COG publication "Living with Worms in Organic Sheep Production" and the articles on the OACC website http://www.oacc.info/AnimalWelfare/aw_sheep.asp

6.8 Livestock Living Conditions

Paragraph 6.8.1 requires the operator of an organic livestock operation to establish and maintain animal living-conditions that accommodate the health and natural behaviour of all animals.

6.8.1a states that the living conditions must include access to the outdoors, shade, shelter, rotational pasture, exercise areas, fresh air and natural daylight suitable to the species, its stage of production, the climate and the environment.

Guidance 6.8.1a

Sheep and goats are prone to respiratory diseases if confined indoors. Access to fresh air and outdoor exercise areas is recommended at all times of the year but shelter must be provided year round to protect goats from adverse weather conditions. Outside yards or places where goats gather should be located to avoid problems such as seasonal flooding or extreme snowfall.

When lambing or kidding in cold weather, newborns need shelter and bedding to keep them dry as well as protection from draughts. Use straw or hay bales as a wind break if lambing on pasture. Supplemental heat may be required if temperatures are less than -10C but should only be used until lambs are dry and nursing.⁽¹⁾

Animals must also have access to fresh water and high-quality feed according to their needs.

Guidance 6.8.1b

Know the quality of your feed. Testing will provide useful information for ration formulation and for determining if supplements are needed.

Dairy goats waiting in holding pens prior to and following milking should have ready access to water. Water bowls and troughs must be sized and positioned so lambs and kids are protected from drowning.⁽⁴⁾

In addition, there must be sufficient space and freedom to lie down in full lateral recumbency, stand up, stretch their limbs and turn freely, and express normal patterns of behaviour.

Guidance 6.8.1c

Wool biting may be a sign of insufficient space, uncomfortable environment or nutrient imbalance as well as a sign that lice are present.⁽¹⁾

If shade is provided to prevent heat stress there must be enough space for access of all animals simultaneously.⁽⁴⁾

Kids housed in the same pen should be of similar size and age. Separation of the sexes should occur prior to 3 months of age.⁽²⁾ The maximum recommended group size for orphaned lambs is 10-12; pen size must allow each to have uninhibited access to creep feed and milk.⁽¹⁾

Space is needed for subordinates to escape from dominant animals- sheep and goats will fight less dominant herd mates.⁽¹⁾

Space allowances must be appropriate for livestock health as well as feed production capacity, soil nutrient balance and environmental impact.

Guidance 6.8.1d

Overcrowding is a risk factor for disease and increases the level of aggressive behaviour.

There must be appropriate resting and bedding areas in accordance with the needs of the animal. The floor must not be entirely of slatted or grid construction and must be covered with a thick layer of dry bedding that can absorb excrement.

Guidance 6.8.1f

Areas for rest and rumination should be well drained. Flooring inside sheep and goat barns should provide secure footing. Slatted floors are not recommended for sheep and goats; they increase ammonia concentrations and lead to increased respiratory problems.⁽¹⁾

Guidance 6.8.1.h Outdoor stocking densities must be low enough to prevent soil degradation and overgrazing. Overstocking can also lead to the build up of parasites on pasture.

Guidance 6.8.1**Buildings**

Adequate ventilation and good air quality is important to prevent respiratory problems. Ammonia should not exceed 25ppm averaged over an 8 hour period and levels of inhalable dust should not exceed 19mg/m³ at animal height.

When goats are housed, barns should be lit to a level comparable with natural light for the length of time corresponding to the normal period of daylight hours. ⁽⁴⁾

Fencing

Fences should be well maintained to prevent entanglement and to protect lambs and kids from predators. Electric mesh fencing should not be used for horned animals.

6.8.7 allows for an exception to the pasture requirement for breeding males.

Guidance: 6.8.7

Individual bucks and rams should not be kept in solitary isolation; it leads to extreme stress. At a minimum they should be housed within sight of other sheep or goats.

6.8.9 specifies the minimum indoor and outdoor pen space requirements for sheep and goats (1.5m²/head plus 0.35 m² head for each lamb/kid and 2.5 m² for outside runs plus 0.5 for each lamb/kid)

Guidance: 6.8.9

Sheep in full fleece need more space than shorn animals. Pregnant animals need more space than open animals.

Determine space according to age, size and class of stock. Total floor space for goats should not be less than 1.5 times their minimum lying area.

Minimum floor space /animal

Group housing of orphaned lambs/kids 0.6 -0.8 m²

Group housing of weaned lambs and kids 0.8-0.9 m²

Recommendations for goats ⁽⁴⁾

Adult does up to 105kg: 1.7 m²;

Young kids up to 5 month or 4-34 kg - 0.7-0.9 m²; and

Bucks 75-120kg: 2.8-3.7m²

Lactating meat goats require more space than lactating dairy goats because kids are with them.

Dairy ^(2, 9)

Ewes and does should not wait in the holding area for extended periods. Pen and parlour gates should open freely with a minimum of noise. Ensure milking machines are kept in good working order. Carry out good milking practices with careful handling, high levels of hygiene, examination of foremilk and avoidance of excessive stripping. Negative experiences will contribute to stress and hinder milk release.

Dairy Sheep can be susceptible to foot problems and require particular attention to the level of nutrition during pregnancy and lactation. ⁽⁹⁾

Guidance was obtained from the following documents:

(1) Canadian Council on Animal Care (CCAC), (2009). CCAC guidelines on: the care and use of farm animals in research, teaching and testing ***pp Ottawa ON: CCAC. Will be available at:

www.ccac.ca/en/CCAC_Programs/Guidelines_Policies/GDLINES/Guidelis.htm.

(2) CARC 2003, Recommended code of practice for the care and handling of farm animals: Goats.

(3) CARC 1995, Recommended code of practice for the care and handling of sheep.

(4) Dairy, Fibre and Meat Goats. Humane Farm Animal Care, Animal Care Standards March 2005

(5). Loretz, C. et al. 2004. A comparison of space requirements of horned and hornless goats at the feed barrier and in the lying area. Applied Animal Behaviour Science 87: 275-283

(6) The emergency euthanasia of Sheep and Goats. Booklet by Pam Hullinger DVM and Carolyn Stull PhD, UC Davis Veterinary Medicine Extension, School of Veterinary Science 1999 Available at: http://www.vetmed.ucdavis.edu/vetext/INF-AN/INF-AN_EMERGEUTH-SHEEPPGOAT.HTML

(7) Harold Gonyou, 2004. Welfare Issues for Sheep and Goats <http://ars.sdstate.edu/animaliss/sheppgoat.html>.

(8) Defra, (Dept of Environment, Food and Rural Affairs), 2003 Lameness in Sheep, 29pp; www.defra.gov.uk <http://www.defra.gov.uk/animalh/welfare/pdf/sheeplameness.pdf>

(9) Defra, 2000. Code of Recommendations for the Welfare of Livestock: Sheep, 32 pp

(10) Defra, 2004, Improving lamb survival <http://www.defra.gov.uk/animalh/welfare/farmed/sheep/pdf/lambsurvival.pdf>

(11) Richardson, C. 2001/02. Avoiding Heat and cold stress in transported sheep OMAFRA

(12) Gonyou, H.W., The Welfare of Sheep: Review of recent Literature (to 1999) http://prairieswine.usask.ca/porkinsight/welfare_issues/pdf/sheep.pdf

(13) Vaart M., Roderick S., Lund, V. and W. Lockeritz, Eds. 2004. Animal Health and Welfare in Organic Agriculture. CABI publishing.

(14) New Zealand Ministry of Agriculture, 1996, Code of recommendations and minimum standards for the Welfare of Sheep.

<http://www.biosecurity.govt.nz/animal-welfare/codes/sheep/index.htm>

Appendix: Examples of Body Condition Scoring Systems.

A. Sheep

From: Stockdale & Macey 2008, Living with Worms in Organic Sheep Production, Canadian Organic Growers.

Figure 13:

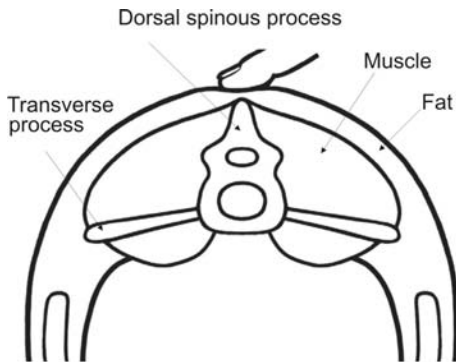
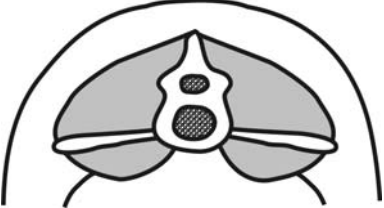


Figure 14: **Body Condition Scoring**

1		Sheep extremely thin with no fatty tissue detectable between skin and bone. Easy to feel the top (dorsal) part and the side (lateral) part of the vertebrae with little muscle filling the angle. Ewes weak and unthrifty.
2		Sheep thin. Dorsal process prominent but not sharp.
3		Limited fat deposits; angle filled with smooth rounded muscle – average body condition. Need hard pressure to push fingers under edge of lateral process.
4		Moderately fat, hard to feel dorsal process, smooth external appearance. Cannot feel lateral process.

5		<p>Obese. Rolling fat over muscle and bone; the dorsal part of the vertebrae cannot be felt. Productivity impaired.</p>
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B Goats

The Humane Farm Animal Care Standards note that for goats the standard technique of assessing lumbar fat and muscle may be inaccurate. They recommend also checking the bones of the sternum. Scoring is on a scale of 0: extremely emaciated to 5: obese.

See also

http://www.dairygoatjournal.com/issues/82/82-3/Donna_Meyers-

**Body Condition Scoring Table for Meat goats from
[http://bedford.extension.psu.edu/agriculture/goat/Body Condition](http://bedford.extension.psu.edu/agriculture/goat/Body_Condition)**

Score	Spinous process	Rib cage	Loin eye
BCS 1 Very thin	Easy to see and feel, sharp	Easy to feel and can feel under	No fat covering
BCS 2 Thin	Easy to feel, but smooth	Smooth, slightly rounded, need to use slight pressure to feel	Smooth, even fat cover
BCS 3 Good Condition	Smooth and rounded	Smooth, even feel	Smooth, even fat cover
BCS 4 Fat	Can feel with firm pressure, no points can be felt	Individual ribs can not be felt, but can still feel indent between ribs	Thick fat
BCS 5 Obese	Smooth, no individual vertebra can be felt	Individual ribs can not be felt. No separation of ribs felt	Thick fat covering, may be lumpy and "jiggly"