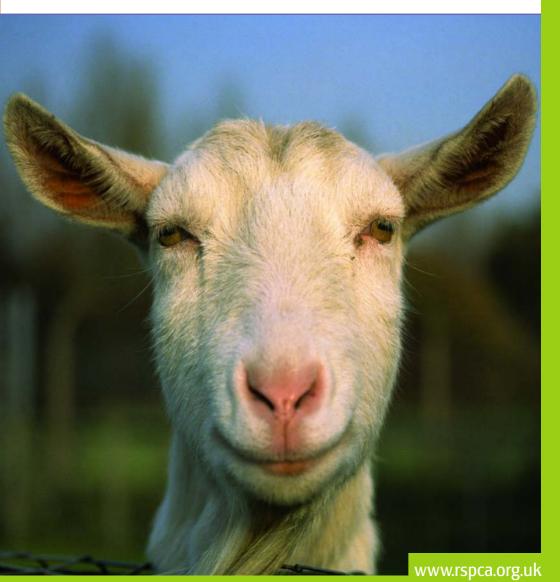
# **Goats** Introduction to welfare and ownership





GOATS CARE

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### An introduction to goat welfare and ownership

#### About this booklet

This booklet provides a general introduction to the ownership and care of goats for novices.

The information provided is primarily intended for owners wishing to obtain a small number of goats for companion animals or as smallholding stock. Those who are considering acquiring/developing commercial herds should consult some of the further information sources provided at the end of this booklet and should seek appropriate expert advice.

Unfortunately it is not possible in a short booklet to cover every aspect of goat ownership, every problem that goat owners might face, or take individual circumstances into account. If owners are in any doubt about the health or welfare of their goats, the correct methods to care for them, or the relevant legal requirements, they should always seek advice from appropriate experts/authorities/bodies. Again, the sources of further information provided at the end of this booklet may be of help.

### Before you get your goats: important considerations

- Under the Animal Welfare Act 2006, goat owners in England and Wales have a legal duty of care to take reasonable steps to ensure that the welfare needs of their goats are met in accordance with good practice.
- Goats are social herd animals and owners must therefore plan to allow at least two goats, that get on well, to live together.
- Goats should not be obtained with the intention of using them as 'lawnmowers'. They require a proper diet of high quality hay, grass, 'browsings', and additional supplements.
- Uncastrated (entire) male goats can display a number of undesirable behaviours and should not be obtained by novice owners.
- Goats need 24 hours-a-day access to dry, well-ventilated housing of sufficient size, construction and containing suitable facilities.
- Fields and paddocks must be carefully (and sometimes expensively) fenced, as goats can be very difficult to confine.
- Goats must not be tethered there is a danger that the goats might become entangled and are at the mercy of bad weather/dogs/children etc.

- Goats need regular veterinary care (vaccination, worming, foot care, general health checks and emergency care) that could prove costly.
- Goats can be destructive to fences, housing and gardens and can call loudly, which neighbours may find a nuisance.
- Goats can live for 12 years or longer.
- Any premises where goats are kept are classed as agricultural holdings and must be registered with the government Department for Environment, Food and Rural Affairs (Defra), with the goats identified in accordance with the law. Licences must be obtained for any movements between premises, with up-to-date records and paperwork maintained.
- Lactating dairy goats need to be milked twice a day and can produce over 4.5 litres/7.9 pints per day. Owners must therefore only acquire dairy goats if they are prepared to put in the work and time needed for milking.
- If bred, goats will often produce twins, triplets or even quads. Owners must take responsibility for the welfare of the offspring, including the humane and legal euthanasia of any kids that cannot be kept or rehomed.

#### Steps to take before deciding to acquire goats

Goat ownership is thoroughly enjoyable and rewarding, but is also time-consuming and can prove to be expensive. We recommend that prospective owners read this booklet carefully, as well as some of the information sources provided in the 'Further information' section (page 34), before deciding whether or not to keep goats. If potential owners still feel that they have the time, facilities, finances, commitment and enthusiasm to care for goats properly, several initial steps are strongly recommended.

First of all, potential owners should join a reputable, recognised goat organisation such as the British Goat Society (BGS) or one of its affiliated clubs, which exist in every part of Great Britain. Local goat societies are an invaluable source of help and information on every aspect of goat ownership. If possible, potential owners should also visit experienced goat owners, to gain an idea as to the amount of time and expense required to care for goats each day. It would also be useful to either observe or help experienced owners carry out some of the management tasks involved, such as feeding. Those thinking about acquiring goats should also try to look at the different breeds that are available to see which ones really appeal and would be most suitable in terms of size and temperament.

Importantly, prospective owners should do nothing in a hurry. Goat ownership is a seven daysa-week, 365 days-a-year commitment which, as long as the owners love goats and enjoy what they're doing, is time well spent.

#### Legal duty of care on goat owners

In England and Wales, the Animal Welfare Act 2006 (the Act) introduces legal requirements for people who are responsible for animals, effectively setting standards of care for those animals. Under the Act, owners, and those responsible for goats on a daily basis if they are not the owners, have a legal duty to take reasonable steps to ensure that the needs of goats in their care are met in accordance with good practice.

#### Defra Codes of Recommendations for the Welfare of Livestock: Goats

Owners and those responsible for goats should be acquainted with and have access to the *Codes* of *Recommendations for the Welfare of Livestock: Goats*, issued by Defra.

#### The Animal Welfare Act 2006 states the needs of an animal to be:

- its need for a suitable environment
- its need for a suitable diet
- its need to be able to exhibit normal behaviour patterns
- e any need it has to be housed with, or apart from, other animals
- its need to be protected from pain, suffering, injury and disease
- any other need of that animal.

These needs provide a basic checklist for any goat owner. Care should not be limited to providing food and water and accommodation that is appropriate to the animal's size. The Act also envisages that, for example, social animals should, where possible, be given the opportunity to interact in appropriate groupings; efforts should be made to provide exercise and mental stimulation; and suitable measures should be taken to prevent the contraction and spread of disease. Owners and those responsible for goats should be aware that they may be committing a welfare offence under the Act if they fail to provide for these needs:

A person commits an offence if he does not take such steps as are reasonable in all the circumstances to ensure that the needs of an animal for which he is responsible are met to the extent required by good practice. (Section 9, Animal Welfare Act)

## Goat biology

Wild goats have a wide distribution and can be found in mountainous regions of South Western Asia, North Western North America, and Europe. It is thought that the goat was the first ruminant (cud-chewing animal) to be domesticated, probably before 7,000 BC. Archaeological remains suggest that the first 'house' goats originated in Asia, in what is present day Iran and Iraq. Today, domesticated goats can be found all over the world and in a wide variety of climates. Traditionally, these adaptable animals have been mainly used to provide meat, milk, leather and fibre.

Baby goats of either sex are known as 'kids', the act of giving birth being known as 'kidding'. Adult female goats are called 'does', with the term 'nanny' often applied to mother goats with kids. Male goats are called 'bucks' or 'billies', or in the case of castrated males 'wethers'.

Adult goats range in size from about 40 to over 100cm tall at the shoulder and are sure-footed with a rough pad on the bottom of their two-toed hooves. They have long, neat heads, wedge-shaped bodies that are widest towards the hips, sloping rumps and, in contrast to sheep, tails that are predominantly held horizontally or upturned. Many goats have long horns, but some breeds are naturally polled (hornless). Both male and female goats often have beards, and many goats also have dangly flaps of skin filled with cartilage on the neck (known as 'toggles', 'wattles', or 'tassels'), which serve no obvious purpose in modern breeds. Goats have coats made of hair and, unlike sheep, which produce an oily secretion (lanolin) into the wool, goats do not have natural waterproofing. Goats therefore do not like to get wet and will seek shelter when it rains. Goats have a two-compartmented udder with large, long teats.



Toggenburg goat with beard and tassels/toggles.

Like cattle and sheep, goats are herbivores and eat only vegetation. However, whereas cattle and sheep have evolved to eat mainly grass (grazers), goats, like deer, are predominantly browsers and also consume shrubs, bushes and hedgerow plants. Goats tend to search upwards for food, rather than downwards as sheep or cattle might, and are able to rear up on their back legs to access vegetation growing above them. Their inclination to move from plant to plant, nibbling selectively, means that goats are naturally inquisitive animals. Goats also tend to use their mouths to explore and learn about their surroundings – healthy goats are always keen to investigate thoroughly their local environment and this inquisitive nature makes them particularly enjoyable, if sometimes difficult, to look after.

Having evolved in a rocky, mountainous terrain, goats are extremely agile and good at climbing. They can climb very steep cliff faces, traverse narrow mountain paths and can even climb trees in order to get to higher vegetation. They are also proficient diggers, with mountain goats often digging shallow depressions in which to dust bathe and rest. Goats have fairly fast growing hooves which, in the wild, would be constantly worn down by their movements and activities on rugged terrain.

Goats are highly social animals that live in herds and will loosely flock together when threatened. In the wild, an alpha female (often the largest mature goat) leads a small family group of between five and 20 females and their kids. Male goats live in bachelor groups and join the females only during the breeding season, the social rank between males being determined by butting. Billy goats have musk glands behind the horns and on the front legs which produce a strong odour that may help to signal dominance to other goats and attract females. Billy goats also frequently urinate over their forequarters to enhance these odours.

Goats are sensitive and curious animals that can make good companions or smallholding stock, but only if provided with the proper environment and care.



Goats are browsers and can rear up to reach foliage.



Goats are good at climbing over rocky terrain.

### Acquiring goats

#### Points to look for when choosing goats

Prospective owners should closely inspect the health of a goat before agreeing to rehome or buy it. The section on *Health* (page 25) gives some indicators of healthy goats to look for. The goats' current owner should be asked about the goats' vaccination history, and a check made that they have been identified in accordance with current legislation (see *Legislation*, page 32).

It is important not to feel pressurised into buying or rehoming goats with health problems, goats of unsuitable breeds, or uncastrated males (see opposite page). If possible, it is useful to be accompanied by an experienced owner when viewing goats, who will be able to offer additional advice.

#### **Sourcing goats**

RSPCA animal centres sometimes have goats in need of good homes (see *Further information* page 34). Reputable goat breeders are another potential source of goats – the British Goat Society should be able to advise on some reputable breeders in the local area. Novices should be cautious about obtaining goats from livestock markets or adverts in non-specialist newspapers and magazines.

#### **Breeds**

A variety of different breeds of goat are available, ranging from dairy breeds such as the Saanen and Anglo-Nubian, to those traditionally reared for meat such as the Boer, to those with fibre coats such as the Angora. The characteristics of the different breeds are described in detail in the BGS book 'Breeds of Goats' (see *Further information* page 34). Each breed has different physical, physiological and behavioural characteristics, and prospective owners should try to spend some time with goats of different breeds, and talk to experienced goat owners, before making a decision as to which they

would like to own. Pygmy goats are often thought to be particularly suitable for novice owners. These naturally tiny goats, which originated in Africa, usually grow to around 40 to 56cm (16 to 22 inches) at the withers (shoulders). They possess a great deal of character and, being small, are easier to handle and manage.



A pygmy goat.

#### Sex Female goats

Female goats can generally make good companion animals, though they can call loudly when in season, which may annoy neighbours. Female goats of the dairy breeds may occasionally start to produce milk spontaneously, without being mated, and will then require twice daily milking, potentially producing up to nine litres (two gallons) a day.

#### Male goats

Entire (i.e. uncastrated) males of any breed are not suitable as pets. They develop an extremely strong odour and frequently spray urine on their underbellies, front legs and faces. Frustrated entire males may also make a great deal of noise during the mating season, display undesirable sexual behaviours and can be boisterous.

In contrast, males that have been castrated **before** they become sexually mature (wethers) can generally make better companion animals, castrated males of the smaller breeds such as pygmy goats being particularly suitable. Potential owners should remember that castrated males of the larger breeds will still grow to become powerful animals that can be difficult to handle. Male kids should always be surgically castrated by a competent veterinary surgeon and, if required, disbudding can often be carried out by the vet at the same time. Castration and disbudding usually prevents the musk glands from developing – these glands are located behind the horns and can contribute to the odour of uncastrated adult males.

#### Age

Goats of any age after weaning (around 12 weeks of age) can generally be considered suitable – healthy goats can live for over 12 years. Ownership of very young kids that have yet to be weaned should be approached with caution by the novice owner, and only considered if advice and support from an expert breeder is readily available, as bottle feeding is a labour intensive process that can be damaging to the goat's health if carried out incorrectly.

#### Horned or hornless/polled?

For novice owners, hornless goats are preferable to horned goats, particularly in the case of larger breeds. Horns can make the goats more difficult to handle, and may be less suitable if children are helping to care for them. It is often advised that horned and hornless goats should not be kept together in the same herd, as the horned goats could potentially dominate or injure the hornless ones. Problems such as ingrowing horns can sometimes make it necessary to have adult goats dehorned, which is a major surgical operation.

#### Size/composition of herd

Goats are social herd animals that do not usually cope well with being kept singly. Potential owners must therefore consider their duty of care under the Animal Welfare Act 2006, and provide goats with suitable social companionship. Owners should plan to allow at least two goats, that get on well, to live together. Ideally, it is best to acquire two or more goats from the same herd that are already companions, as it can be difficult to introduce new individuals to an existing herd (see *Aggression*, page 30).



Goats are highly social animals.

In general, it is acceptable to keep a group consisting only of wethers, only of females, or a mixture of the two. Wethers may display some sexual behaviour towards the females when they are in season, though this should obviously not result in kids.

It is usually possible to keep a mixture of different ages or breeds of goat together so long as care is taken to ensure that particular goats are not being excessively bullied/dominated.

#### Points to consider before and on the day the goats arrive/are collected

- Owners must comply with the relevant legislation governing goat identification, movements, and holding registration (see *Legislation*, page 32). It is a good idea to find out what paperwork needs to be completed well in advance of acquiring the goats.
- All housing, bedding, fencing and feeding facilities must be thoroughly prepared before the goats arrive.
- It is important to have the contact details of a suitable veterinarian to hand in case of an emergency, as well as for routine veterinary care, and preferably also those of a competent and experienced goat owner who could offer advice.
- Owners will need to purchase/hire/borrow a suitable transport vehicle for the journey, and plan the entire journey ahead so as to minimise the potential stress to the animals (see *Transport*, page 28).
- The goats' previous owner should be asked about what and how much the goats are normally fed, and about their vaccination history.

Having moved the goats to their new housing they should be provided with hay and water and given peace and quiet for a few days to allow them to become familiar with, and adjust to, their new environment. During this time owners should approach and care for the goats in a slow, gentle, calm manner.

It is sensible to have any new goats health checked by a veterinarian soon after they are acquired. Owners should be aware that the introduction of new goats can inadvertently bring new diseases into the herd (see *Health*, page 25).

### Providing a good home

Goats need plenty of space and suitable facilities to allow them to browse, exercise, climb, investigate, explore and play in safety. Their environment not only needs to be clean, comfortable and offer suitable protection, but should also provide the goats with mental stimulation. Owners therefore need to consider their duty of care under the Animal Welfare Act 2006, and decide how best to provide their goats with a suitable environment, which allows them to exhibit normal behaviour patterns and protects them from injury and discomfort.

#### **Browsing and exercise**

Essentially, there are three main systems that can be used to provide goats with the opportunity to browse and exercise: free-ranging, rotational pastures, or large yards.

Free-ranging, where the goats are given access to a large, securely fenced area of natural countryside, is probably closest to the way in which goats would live in the wild. The area needs to be large enough so that the foliage is never completely reduced by the goats and so that faeces are sparsely distributed and do not cause ground conditions to deteriorate. Care should be taken that the area does not contain hazards such as poisonous plants, or areas likely to flood. Fencing must be regularly checked.

Rotational pasture systems are appropriate for owners with smaller fields. A field is fenced off into several smaller plots (for example, four) and the goats are then moved in rotation from one plot to the next over the course of the year. This avoids an excessive build up of faeces and allows time for foliage to re-grow before each plot is re-grazed. About <sup>1</sup>/<sub>4</sub> acre needs to be provided per goat on each plot.

Large yard areas can provide an acceptable way of keeping a small number of goats. They have the advantages that the goats' hooves are worn down by the rough surface and internal parasites that live on grass/soil do not proliferate as readily. However, in such systems, all of the goats' food needs to be brought to them and presented in a manner that allows them to fully express their natural browsing behaviour. Enough space must also be provided to allow the



Angora goat exercising.

Goats

goats to play and exercise freely – at least 8.5m<sup>2</sup> of floor space per animal. The yard must be securely fenced and provide the goats with an interesting and comfortable environment (see *Environmental enrichment*, page 21).

With all systems, goats must have access to clean drinking water at all times and supplementary food as necessary. For free-ranging and rotational pasture systems it may also useful to include an additional yard area to allow the goats to exercise, should the ground conditions at pasture deteriorate.

#### Shelters

Because goats have no waxy lanolin in their hair, they cannot tolerate wet conditions and will always try to seek out a dry shelter in bad weather. Whether the goats are free-ranging, on rotational pastures, or in a yard area, they must always have free access to shelter at all times, whatever the season. This could either be the main goat house, if it is feasible for the goats to access it freely, or effective temporary shelters. The latter should be comfortably bedded and large enough for all the goats to shelter at the same time.

#### The goat house

Regardless of the system that is used to allow goats to browse and exercise, all owners will need a main 'goat house'. This should be a safe, permanent home for the goats in which they can be securely housed at night or during bad weather. This accommodation should allow all of the goats to rest and feed comfortably, and allow the owner to inspect, handle and manage them easily. Before acquiring goats, owners therefore need to ensure they can provide appropriate housing space and facilities.

There are many ways of housing goats successfully – it is often a question of sensibly adapting any outbuildings that are already available:

- Buildings can be of wood, stone, concrete or a mixture of these. They should not be constructed of metal – which is too cold in winter and too hot in summer – or contain a large amount of glass which could act as a greenhouse.
- Planning permission may be needed if goats are to be kept in a building near to other human dwellings.
- Owners need to allow at least 2.0 to 2.5m<sup>2</sup> of floor space per goat, allowing at least two goats, that get on well, to live together.
- The roof must be leak-proof and there should be good ventilation, but without draughts.
- There should be a source of light in the house to allow easy inspection of the goats (a good battery light could be kept handy at night).

- Drainage is important. Ideally, floors should have a gentle slope and should be concrete that is easily washed down, or earth with a cinder bed.
- Goats need a clean, dry, warm bed made of straw, wood shavings or peat. A thorough muck-out should generally take place every week or fortnight, depending on the size of the house/number of goats. It is often clear when a muck-out is needed, as the appearance and smell of the bedding begins to deteriorate. If the goat house smells of ammonia, which can predispose goats to pneumonia, mucking-out needs to be carried out more frequently and/or the ventilation needs to be improved.
- Owners need somewhere dry to store bedding and food, that is secure from rodents, and a way of hygienically disposing of soiled bedding.

#### **Tethering**

Goats must not be tethered. There is a danger that they might become entangled or even injure or strangle themselves on the line in an effort to reach a tastier branch or more interesting clump of grass. Sores or injuries can also develop under the collar. Unless shelter is always available, tethered goats will be unable to avoid adverse weather conditions such as rain and hot sunlight. Moreover, tethered goats are at the mercy of any passing strangers, children or predatory animals with malicious intent.

Tethering should therefore never be regarded as more than a short-term, emergency measure, and even under these circumstances the owner should keep the goats under careful observation.

#### Fencing

Goats need exercise and so require access to a fenced area. Because of their highly inquisitive nature and climbing abilities, fencing needs to be very strong, safe and durable. Generally speaking, goats will get through any hedge, however thick, and climb most banks and stone walls. Goats like to rub hard against fences, rear up against them, and can even dig under them, and so all fencing should be checked daily for signs of damage.

- Fencing should be at least 122cm (4ft) above ground level, depending on the height of the goats.
- Vertical posts need to be strong and made of wood (not 'spiked' paling) or metal, with the bases well driven or concreted into the ground.



Goats can become trapped in unsuitable fencing.

#### Goats

- Suitable fencing materials include well-tensioned and secured chain link or stock-proof galvanised wire mesh (at least 12 gauge (2.6mm) diameter wire or thicker, with 50mm or smaller apertures).
- Gaps in the fence need to be small enough so that goats will not get their heads and limbs stuck and so that any small goats cannot squeeze through. Wooden rail fences may need to be reinforced on the inside of the enclosure with suitable wire mesh to prevent goats climbing over them.
- Barbed wire fences must not be used, as goats may try to leap over them, resulting in injury.
- Carefully installed livestock electrical fencing is used by some goat owners in addition to normal fencing to provide extra security for the goats and protection from predators. Care must be taken that the goats cannot routinely contact the electrical fencing or get caught/ tangled in it – netting-type electric fencing should be avoided, particularly for horned goats.

#### **Environmental hazards**

Goats are very inquisitive animals whose curiosity can result in accidents and/or injury. Safety is therefore something that must be taken into consideration in terms of the design of all buildings, doors, gates and fences.

Escaping goats can do a considerable amount of damage to gardens and may, in the process, accidentally poison themselves. If goats manage to access stores of concentrates and consume large amounts this could also prove fatal and so feed bins should always be kept securely locked or a safe distance away from the goats. Goats often manage to open door bolts and tied knots, and so care should be taken to ensure doors and gates are properly secured.

Owners should ensure that there are no projections on which goats could be injured or get caught, such as nails, sharp bits of mesh and door bolts. Anything glass that is within the goats' reach should be reinforced with strong wire mesh or replaced with safety plastic, and any electrical cables and sockets should be suitably protected.

Being browsers, goats tend to inspect and nibble/eat most things in their environment. Care must therefore be taken not to leave items such as plastic bags, cloths, pieces of bailer twine and other small objects in places where goats can access them, as this could lead to the goats choking or suffocating. Fences and woodwork should also not be coated in anything that might be toxic to the goats if consumed.



Care must be taken not to leave objects lying around that goats might consume!

### Food and water

Owners sometimes obtain goats mainly with the intention of using them to keep down areas of grass or overgrown foliage. This is not a good reason for owning goats, which need a carefully prepared diet and will not simply 'eat anything'. Being browsers, they do not make good lawn mowers, as they tend to selectively choose the more succulent stems and blades of grass. Many plants are also poisonous to goats and, like all ruminants, they do not cope well with sudden changes in diet. Owners therefore need to consider their duty of care under the Animal Welfare Act 2006, and decide how best to provide their goats with a suitable diet. Novice owners should seek advice from expert goat owners or their veterinarian as to what would be a suitable diet and feeding regime for their particular goats.

General dietary needs vary depending on the age and sex of the goats, the time of year, and the amount of grazing available but, in general, goats need:

- a constant supply of clean, fresh water
- a year-round supply of good quality hay
- a daily supplement of non-poisonous, seasonal green-stuff
- if necessary, a daily ration of appropriate concentrates
- a daily mineral supplement
- a regular, predictable feeding routine.

#### Water provision

Goats need constant and unlimited access to fresh, clean drinking water. They will often not accept water that is dirty or contaminated so water buckets or troughs should be cleaned and re-filled with fresh water each day. Water containers should be positioned so that the goats cannot accidentally defecate or urinate in them and, should this occur, the water must be changed immediately. Owners should ensure that the water containers are safely secured so that the goats cannot knock them over. Many goats prefer water that is a little warm, or that at least has the chill taken off. Dairy goats can drink up to 18-27 litres (4-6 gallons) a day.

#### **Bulk foods**

A supply of long, fibrous food is needed in order for the goat's rumen to work efficiently. The most important bulk food to supply is well-made hay, free from obvious signs of mould, which should form around 50 per cent of the goats' diet. Additional forage, such as long grass (at least 10cm high), roots, branches and other non-poisonous green-stuff should make up a further 25 per cent to 50 per cent of the diet, depending on the age, sex and reproductive status of the animals. Bulk

foods form the mainstay of the goat's diet and, particularly for goats with access to pasture during the grass-growing season, it should not be necessary to feed them much in the way of additional concentrates (see *Supplementary foods. page 20*), particularly in the case of non-breeding adults. Owners should carefully plan ahead to ensure the supply of fibrous food does not run out at any point during the year.

Goats are browsing animals and prefer not to eat anything that has been on the floor. As they are experts at turning over buckets and tossing hay onto the ground, they can be very wasteful. Hayracks should be used and are available at many agricultural merchants. These need a lid and should be positioned at such a height that they cannot be fouled.



Saanen goats browsing.

If fed in groups, there must be enough space for all the goats to feed at the same time without having to compete for space. Hay nets, commonly used for horses, should never be used, as goats can become dangerously entangled in them.

The diet should also be made as interesting as possible for the goats (see *Environmental enrichment*, page 21). However, it is important that any new foods are introduced very gradually, in small quantities alongside familiar foods, so as to allow the bacteria in the goats' rumens to adjust properly.

#### **Poisonous** plants

Goats greatly enjoy eating certain wild plants and hedgerow cuttings. Some are safe but others must absolutely be avoided, as they can cause fatal poisoning.

**Do not feed:** Alder, yew, rhododendron, laurel, privet, laburnum, honeysuckle, walnut, evergreen shrubs, green-stuff from flowers including delphiniums, hellebores, or any bulbous plants such as daffodils or tulips.

Avoid: hemlock, buttercup, bryony, dog's mercury, ragwort, mayweed, foxglove, celandine, the nightshades and old man's beard.

The golden rule is 'when in doubt, don't feed'. Owners should also take care not to leave clippings from poisonous plants/trees lying around. Over-feeding brassica plants like cabbage, cauliflower or brussel sprouts will affect the taste of the milk, but they are not poisonous to goats.

#### **Supplementary foods**

For growing or milking goats, or when additional forage is in short supply, the diet of bulk foods can be supplemented with a ration of concentrates. Many good quality 'goat mixes', which have additional vitamins and minerals added, are available from agricultural feed merchants. In order to digest these concentrates the goats must always be fed sufficient amounts of long fibrous food (see *Bulk foods*, page 18). Most non-breeding adult goats need only very small quantities of concentrates; feeding too much can cause obesity and, in the case of castrated males, the formation of bladder stones.

Goats should also be given access to a suitable mineral salt lick, which are available in brick-sized blocks that can be secured to the wall.

### **Environmental enrichment**

Goats are inquisitive, playful creatures that like to climb and explore. In both pasture and yard areas some form of environmental enrichment should therefore be provided, such as tree stumps, logs, wooden benches, raised planks, barrels cut in half and upturned, or large tyres.

Goats appreciate some variation in diet and the method by which food is presented, though completely new foods must be introduced gradually to avoid upsetting the digestive system. Although, for goats housed in a yard system, much of their bulk food may be presented in a hayrack, seasonal greenstuffs could additionally be hung at different heights in the yard area. This would provide the goats with an opportunity to perform their natural browsing behaviour, and the interesting challenge of obtaining foliage from the more difficult-to-reach branches.

Owners with larger areas of land may wish to train their goats to walk on a lead, so that they can walk with the owner around the property. This can be good fun for both owner and goat, and several well-trained goats can even be walked together. Collar/harness and lead training is also useful for when the goats are being inspected. Training should ideally begin at an early age, and the goats should be patiently and gently encouraged using only positive reinforcement (such as stroking and a few treats such as raisins – though owners should be careful not to feed too many rich treats).

Goats should be encouraged to walk alongside the owner by, in the first instance, placing a hand on the rump and gently encouraging the goat forward accompanied by the rewards. Goats must never be pulled along on a lead and it is important to choose head collars or body harnesses that will not choke the goats. Biosecurity should also be considered when walking goats, with care taken not to spread disease, or take the goats to areas where they might come into contact with diseases they could bring back to the herd.



Goats appreciate the opportunity to climb.

### Management

#### **Handling goats**

Goats should be handled quietly and confidently but gently at all times. It is important to handle goats regularly from an early age so that they become accustomed to human contact and do not find it stressful.

Goats should be handled or restrained by means of a hand or an arm below the neck with the other arm placed on or around the rear. In order to safely lift a goat, owners should grasp it with their arms around the body just above the tops of the legs, being sure to support the chest and abdomen. Goats must not be caught, lifted or dragged by the hair, head, legs, ears or tail, nor roughly handled by the horns, which can be easily damaged or broken. Heavily pregnant goats should only be handled when absolutely necessary and care should be taken to avoid stress that may result in premature kidding.

Goats do not cope well with being 'upended' onto their rumps, as is common practice when handling sheep, and most routine tasks, including foot care, should be undertaken with the goats standing. It is important always to have facilities available that are suitable for routine handling and management of the goats. Owners will need a strong pen within the goat house, paddock or yard area into which the goats can be easily rounded up and in which they can be closely inspected and handled without danger of them escaping or being injured.

It is also very useful to train the goats from an early age to approach and follow the owner when they shake a bucket of food and call them. To achieve this, owners need to put a few treats or concentrates into a bucket and begin to shake it and call out the same phrase each time when the goats are loose in the pasture or yard area. When the goats approach they should be rewarded by giving them access to the bucket. This procedure needs to be repeated at regular intervals throughout the goats' lives to ensure that they are always extremely keen to approach the owner and bucket. This training can then be used to call the goats into their house or holding pen, and can be used in an emergency to retrieve them if they escape.

#### Foot care

In the wild, a goat's hooves are worn down by continual climbing on rough ground. In domestic conditions, the hooves often grow out of shape, which can cause bad walking posture and even arthritis in older animals. The hooves should therefore be checked regularly and the overgrowth of horn pared away with specially designed foot shears. This is a potentially injurious process, and it is essential that new goat owners receive proper training and instruction from an expert before attempting to trim their own goat's feet. Local goat societies/clubs will often have several days each year when lessons are given on this vital aspect of good goat husbandry.

#### Breeding

The RSPCA recommends that newcomers to goat ownership should avoid attempting to breed their goats. For inexperienced goat owners, the process raises a number of potential difficulties, including:

- Finding another goat owner with a suitable male, and transporting the goats to this male for mating. Novices should not attempt to keep their own, uncastrated male/s.
- Caring for the pregnant goats which, for example, have more specialised dietary needs and may require additional vaccinations.
- Caring for the goats during kidding (giving birth). Difficult births can sometimes occur, and problems such as abnormal presentations of the kid will require assistance from an experienced goat owner or veterinary surgeon.
- Organising and paying for male kids to be castrated and, if not naturally polled, disbudded by a veterinary surgeon. Disbudding is the removal of the small horn buds in very young goats and is less traumatic than dehorning adult goats. Prior to kidding, owners should consult their veterinary surgeon as to the best age to have kids disbudded. As a guide, this should be carried out at under ten days of age.
- Finding good homes for any unwanted offspring. Goats are highly prolific animals and will often produce several kids. Uncastrated males should not be passed on as pets for the reasons outlined earlier (see *Male goats*, page 11). Surplus kids should not be sold through livestock markets, as goats can often suffer a great deal of stress in this situation and owners have no control over their destiny. If circumstances demand it, owners may have to have unwanted kids humanely euthanased by a veterinary surgeon. Ultimately, the owner must take full responsibility for the welfare of all the animals they breed.

If owners are keen to obtain more goats, alternatives to breeding would be to contact RSPCA animal centres to see whether they have any goats that need rehoming or contact a reputable breeder (see *Acquiring goats*, page 10).

#### Milking

Owners of lactating goats will need to milk their animals regularly and show good care and attention to the health of the udders. All breeds of goat can produce milk and, surprisingly, even some male goats of dairy breeds can require occasional milking.



British cross-breed goat with kids.

Novice goat owners should have lessons with an experienced and competent goat owner to ensure that the procedure is effective and that the goat's welfare is not compromised by poor technique. It is vital to maintain the highest standards of dairy hygiene in order to prevent mastitis (see *Health*, opposite) and avoid poor tasting milk.

#### **Shearing and grooming**

The fleece of angora goats grows quickly and the animals will need shearing approximately every six months. This could be carefully carried out by the owner, following appropriate training, with the goats standing in place, or by a professional shearer who specialises in goats. Advice should be sought from an experienced angora owner if in doubt about how to carry out shearing or where to find a suitable professional shearer. Goats, especially fibre breeds, may also need to be groomed occasionally to stop their fleeces becoming matted or dirty.

#### **Rearing goats for meat**

Owners wishing to slaughter their goats for meat should use a licensed slaughterman or send the goats to a licensed slaughterhouse (see *Legislation*, page 32). Owners should not attempt to slaughter the goats themselves. Failure to achieve death swiftly and humanely can result in terrible suffering for the animal and potential prosecution for the owner.

### Health

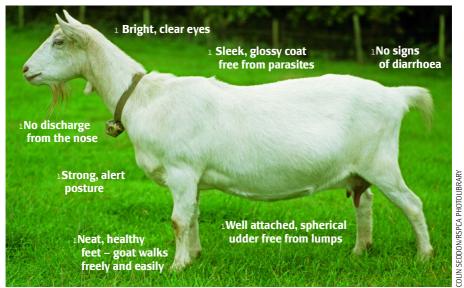
It is clearly impossible in a short booklet to describe all of the various conditions and diseases to which goats are susceptible (see *Further information*, page 34). On the whole, goats are relatively healthy creatures but, if they do succumb to illness, they tend to deteriorate rapidly. Owners should monitor any signs of ill health carefully and, if in any doubt, obtain immediate veterinary advice. It is also a good idea for goats to receive regular checkups from an experienced vet, even if they appear healthy. Owners need to consider their duty of care under the Animal Welfare Act 2006, and take appropriate steps to protect their goats from pain, suffering, injury and disease.

Care should be taken when handling ill goats, as several diseases are zoonotic (transmissible to humans). Good hygiene should be always observed such as hand washing after contact with goats and the use of protective clothing where necessary. It is inadvisable for pregnant women to handle goats.

#### Vaccination

There are currently no vaccines legally authorised for goats in the UK, unless under prescription from a veterinary surgeon. Vaccination against clostridial disease is widely accepted as good practice and, if used, booster vaccination every four to six months is normally recommended. Vaccines are available against other diseases and a veterinary surgeon will be able to advise on their use.

#### **Good health indicators**



#### **General health indicators**

In general, healthy goats have good appetites, strong, glossy coats, and clear, bright eyes. They should move freely and easily and be interested and alert. Owners should frequently check for the problems outlined in this section and any other unusual bumps, lumps, and changes in coat texture or udder appearance.

#### Scouring (diarrhoea)

Goats' faeces should be firm. Diarrhoea is a common ailment and can result from a variety of causes such as sudden changes in diet, internal parasites, ingestion of poisonous plants or substances, and microbial infections. If symptoms persist for more than 24 hours, if the goat is deteriorating rapidly, or if there is blood in the faeces, owners should discuss the problem with their veterinarian. Any diarrhoea or off-colour symptoms in kids should be dealt with immediately as dehydration could kill the animal rapidly.

#### Lameness

Goats that start to limp, favour a leg, become reluctant to stand up and move, or begin to kneel when grazing, should immediately be penned on dry straw, separate from the healthy animals, and have their feet and legs closely inspected. Common causes of lameness include:

- penetration of the feet by foreign bodies (such as stones and thorns) may lead to infection
- compaction of mud or debris under or between the toes
- physical injury to legs or feet bruises, cuts, sprains, dislocations and breakages
- scald an infectious bacterial disease of the skin between the digits that often makes the area look sore and swollen, possibly with greyish scum
- footrot an infectious bacterial disease where the underlying tissues of the sole area begin to degrade or 'rot', producing a foul odour.

In all cases of lameness, novice owners should seek advice from a veterinarian. Infectious diseases must be brought under control as soon as possible as they can rapidly spread to other goats (and sheep), and severely affected animals may need to be humanely euthanased.

#### Mastitis

Udders are intricate organs that are prone to infection, leading to a serious condition known as mastitis. It is vital that steps are taken to prevent mastitis occurring; if not diagnosed and treated immediately the condition may become chronic and the goat/s may have to be humanely euthanased. Mastitis can also easily be spread to others in the herd. The udders of all goats (both male and female) should therefore be regularly checked for signs of infection, indicated by factors such as heat in the udder, any changes in udder size, texture or colour, any signs that the udder might be painful, and blood/deposits/sediment/or changes in quantity/consistency of milk. Any concerns should be discussed with a veterinary surgeon at the earliest opportunity.

For goats that require milking, steps should be taken to reduce the risk of infection occurring or being spread, such as effective hand washing, good milking parlour hygiene and the use of antiseptic teat sprays/dips following milking. Novice owners should discuss their milking regime with a veterinarian.

#### **Internal parasites**

Goats can contract a number of internal parasites ('endoparasites'), such as intestinal nematodes, roundworms, tapeworms, liver flukes, lungworms, and single-celled parasites such as coccidia. Steps must always be taken to minimise the levels of internal parasites, as affected goats will often rapidly lose weight and could die from chronic diarrhoea. Goats do not become immune to parasites as they get older, and so will always need to be protected from them.

It is therefore very important to discuss a worming regime with a veterinarian. Owners should enquire about the possibility of using 'faecal egg count monitoring', in which the number and type of parasite eggs in the goats' faeces are tested in order to determine whether the use of anthelmintic medication is warranted. Based on veterinary advice, owners should then ensure that their goats are wormed at the correct time intervals and given the correct type of drugs and dosage for their weight. It would also be helpful to discuss a rotational grazing regime with a veterinarian, so that parasite eggs do not build up on the pasture.

Although the risk of internal parasites for goats housed in yard systems is reduced, they can still pick up parasites from any foliage they are provided with, and an anti-worm strategy will still need to be put in place.

#### External parasites and other skin conditions

Lice and mite (mange) infestations are a common problem in goats. They can often be seen moving around in the goat's hair, though some mites bury into the skin and require veterinary diagnosis. In general, if goats are scratching or nibbling at any area of their body excessively, including the feet, veterinary advice should be sought.

'Flystrike' occurs when flies lay their eggs on the goats, which subsequently hatch out as maggots. The problem tends to occur in the warmer months, the flies being attracted to wounds, footrot and areas of the goat that are soiled with urine or faeces. To help prevent this, animals with diarrhoea should be cleaned carefully (this may involve clipping the coats of fibre goats) and any wounds should be treated with an antibiotic spray containing fly deterrent, on the advice of a veterinary surgeon.

Goat owners should also be on the lookout for ringworm – a fungal disease that causes round bald patches or crusting legions, and is infectious to humans.

#### Caprine arthritis encephalitis virus (CAEV)

CAEV is an incurable viral disease of goats which, in its later stages, can cause severe welfare problems such as loss of body condition, arthritis and/or mastitis. Owners should ask their veterinarian about having their goats tested for this disease, particularly if aquiring new goats.

#### **Casualty goats**

Should a goat have to be humanely euthanased, this should be performed by a veterinary surgeon or licenced slaughterman.

### Transport

Transport can potentially be stressful for goats, as they are subjected to unfamiliar sights, sounds, smells, movements, and the processes of loading and unloading from the vehicle. Owners should therefore plan the process carefully to ensure that any risks to goat welfare are avoided. The frequency and duration of journeys should be minimised, whilst the conditions during transport should be optimised.

#### The transport vehicle

When the goats are first acquired, and for any subsequent journeys, owners will need to purchase/hire/borrow a suitable transport vehicle, specifically designed for carrying livestock, in which the goats can be comfortably placed in a partitioned compartment. If the trailer has been borrowed it should be cleaned and disinfected before and after use to reduce the likelihood of disease transmission.

To help prevent the goats falling during the journey, the floor of the vehicle should be covered with a non-slip material such as rubber matting. The goats additionally need to be provided with a good provision of straw bedding. Any projections inside the vehicle, such as door handles, protruding bolts, hinges and corners, should be suitably shielded/removed in case the goats bump into them. Care should also be taken to ensure that exhaust fumes do not enter and build up inside the trailer.

#### Loading and unloading the goats

Smaller goats that are accustomed to human handling can be gently lifted into the vehicle (see *Handling goats*, page 22). For larger goats and those unaccustomed to being lifted, a ramp should be provided up to the trailer. This should have a non-slip surface and some means of preventing the goats from falling over the sides. Goats may be more difficult to handle when they are unloaded from the vehicle after the journey.

When loading and unloading goats, owners will also need to prepare in advance a suitable (preferably short) fenced route to and from the trailer to the goat accommodation to ensure that the goats do not escape and can be moved with a minimum of stress. Sudden movements and loud noises should be avoided throughout the process.

#### The journey

Owners should plan a suitable route and time of day in advance of the journey to ensure that the duration is minimised, traffic jams are avoided, and the goats do not suffer from heat stress. During the journey, owners should drive carefully to reduce the likelihood of the goats falling over; accelerating and braking smoothly and driving slowly around corners and over uneven surfaces. Food (hay) and water should not be required during shorter journeys, though the animals should be fed and given access to water as soon as they arrive at their destination. Concentrates should not be fed immediately after a journey.

#### Transport of sick or injured goats

Sick or injured goats should not be transported unless to receive veterinary treatment, though as a rule, the veterinarian should be called out to visit such animals.

#### Legislation

Before transporting goats, owners need to be aware of the legislation regarding goat movements in the UK (see *Legislation*, page 32).

### **Behavioural issues**

Goats' behaviour can tell the owner a great deal about whether they are healthy, and whether their needs are being met. Owners should spend some time observing and interacting with their goats in order to understand the different behaviours and characteristics of each individual animal. As noted previously, healthy goats behave in an interested, alert and playful manner – any changes in behaviour to the contrary should be investigated.

#### Vocalisation

Goats of most breeds are generally quiet animals when contented. However, goats will vocalise loudly in certain situations, such as:

- when they are hungry or thirsty
- if injured or unwell
- females when they are in season or uncastrated males that are frustrated at being unable to access females.

The noise created by goats is something that should be considered before deciding to embark on ownership.

#### **Destructive behaviour**

Goats can be quite destructive, for example chewing at woodwork and rubbing against/climbing on fences until they fall down, which some owners are not prepared for. It is therefore important that all structures in the goats' environment are as strong and reinforced as possible, and not made of substances that are likely to be toxic to the goats if consumed (see *Environmental hazards*, page 17).

#### Aggression/butting

In the wild, goats often organise their social status by butting, or rearing and clashing heads. Such behaviour is to be expected between domestic/pet goats from time to time as they reassert their dominance, but bouts of aggression should normally be short-lived. Owners should observe the goats' behaviour regularly and ensure that particular goats are not receiving excessive amounts of aggression from others.



### Goats

The introduction of a new goat or goats to an existing group can initially result in high levels of aggression, particularly when unfamiliar males are introduced to each other. The new goat may be butted a great deal, and may not be allowed to feed properly at the hayrack. This can often be alleviated by penning the new animal near to the existing group for a few days so that they can familiarise themselves with each other prior to being allowed physical contact. Adding some form of partition in the goat house may also help to reduce aggression by allowing goats the choice to position themselves away from particular herd members.

Goats are not normally aggressive towards humans, providing that butting behaviour has not been encouraged from an early age. Owners should avoid 'play' butting with kids (i.e. pushing on their heads), as the goats will learn that this behaviour is acceptable and may continue to butt as adults.

Owners with excessively aggressive goats should seek advice (for example from the BGS, or the RSPCA farm animals department), as to humane ways of discouraging this behaviour.



Butting often occurs when unfamiliar goats are introduced.

#### Introducing goats to other animals/pets

It is possible to allow goats to browse in the same field as other herbivores such as ponies, sheep, llamas or alpacas. However, care should be taken to allow the animals to first familiarise themselves with each other, for example by keeping them in neighbouring paddocks, before they are mixed.

Goats and dogs should be carefully and gradually introduced, with the dog on a lead at all times, ensuring that the dog does not bark or show aggression towards the goats. Dogs should never be left unsupervised around goats.

#### **Escape attempts**

As noted earlier, goats are adept at escaping through/over/under fences and even by undoing gate latches. Aside from ensuring that all fences and gates are highly substantial, owners should ensure that goats have everything they need in their environment, in terms of food, social companionship and environmental enrichment, to keep them occupied and happy and thus reduce their urge to explore 'beyond the fence'.

### Legislation and codes affecting goat owners

The following information is intended only to highlight some of the areas of goat ownership that are affected by legislation. Owners should always contact their local council or the relevant government department for up-to-date information about current legal requirements. If unsure about legal requirements, owners should, where necessary, obtain suitable expert legal advice.

#### Legislation protecting goats

The Animal Welfare Act 2006 makes owners and keepers responsible for ensuring that the welfare needs of their animals are met in accordance with good practice (see *Legal duty of care on goat owners*, page 6).

The welfare of goats being farmed commercially in England is covered by the Welfare of Farmed Animals (England) Regulations 2007, with similar legislation in Scotland, Wales and Northern Ireland.

#### Defra Codes of Recommendations for the Welfare of Livestock: Goats

Owners and those responsible for goats should be acquainted with, and have access to, these codes – available from Defra.

#### Identification of goats and movement between premises

In order to try to reduce the spread of disease there are strict laws in place in the UK governing the identification of goats, the identification of the premises on which they live, and the movement of goats between premises.

These rules apply regardless of whether owners keep two goats as pets, or a large commercial herd. As a guide, owners must:

- obtain from Defra a holding number for the land where the goats will be kept
- register the goats with Defra
- keep a paper or electronic flock/herd register
- mark the goats for identification purposes in accordance with current legislation
- obtain appropriate licences for any movements of goats between holdings and keep suitable records in accordance with current legislation.

All legal requirements regarding goat identification and movements must be fulfilled before owners move them to their land for the first time, and for all subsequent movements. Owners should contact Defra for up-to-date information about requirements.

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#### **Deceased goats**

As goats are classified as livestock they cannot be buried or cremated on the owner's property. Owners must ensure that deceased goats are dealt with through an approved outlet, according to current legislation (contact Defra or the local Animal Health Office for further information).

#### **Meat and milk**

Owners wishing to rear goats for meat, whether for their own consumption or for supply to others, should be aware of laws covering animal welfare at slaughter and meat hygiene and inspection. Further information is available from the Humane Slaughter Association, Defra and the Food Standards Agency.

Owners wishing to supply milk to others should also be aware of the legislation covering hygiene in this area – further information is available from the Food Standards Agency.

#### **Notifiable diseases**

It should be noted that goat owners are required to immediately notify diseases such as scrapie and Foot-and-Mouth Disease to Defra. Further details of notifiable diseases are available from Defra.

#### **Veterinary medicine records**

Suitable records must be kept of all veterinary medicinal products used, in accordance with current legislation.

### **Further information**

Goat ownership is a specialised activity, and this booklet only covers the basic points which any newcomer needs to consider. If you are thinking of acquiring goats, before making the decision to go ahead, find out as much as possible about their welfare needs and the necessary commitment you will need to make in order to look after them properly.

#### **RSPCA** contact information

#### Other goat related organisations

#### RSPCA

Website: www.rspca.org.uk Telephone: 0300 1234 555 Fax: 0303 1234 555 Postal address: Enquiries service, RSPCA, Wilberforce Way Southwater, Horsham West Sussex RHI3 9RS

#### RSPCA Farm Animals Department

Website: www.rspca.org.uk/ farmanimals E-mail: farm\_animals @rspca.org.uk

 RSPCA animal rehoming Website: www.rspca.org.uk/rehoming British Goat Society
Website: www.allgoats.com

Website: www.allgoats.com Telephone: 01626 833168 Postal address: B.G.S. Secretary, 34-36 Fore Street, Bovey Tracey, Near Newton Abbot, Devon TO13 9AD

 Department for Environment, Food and Rural Affairs (Defra)

> Website: www.defra.gov.uk Telephone: 08459 33 55 77

Pygmy Goat Club Website: www.pygmygoatclub.org  Goat Welfare (information and advice)

> Website: www.bushpark.co.uk/ goatwelfare/goatwelfare.htm Telephone: 01409 221230, 01822 820412

#### • Goat Veterinary Society

Website: www.goatvetsoc.co.uk Telephone: 01531 820074 Postal address: G.V.S. Secretary, 29 Winfield, Newent, Glostershire GL18 1QB

#### **Goat books**

- British Goat Society, Goat keeping – A Beginner's Guide to Goat Keeping (1998)
- British Goat Society, Breeds of Goats
- Mowlem, A., Practical Goat Keeping (Crowood Press, 2001)
- Pygmy Goat Club, Pygmy goats An Introduction to Management and Breeding (2004)
- Harwood, D., Goat Health and Welfare – A Veterinary Guide (The Crowood Press, 2006)
- DEFRA Codes of Recommendation for the welfare of livestock – Goats

#### Videos

Matthews, H. *Goat husbandry and Health*, VHS Video, (Old Pond Publishing, 1996).

### **Goat-related magazines**

- Smallholder Website: devel.smallholder.co.uk Telephone: 01823 365203
- Country Smallholding Website: www.country smallholding.com Telephone: 0870 8304975

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