

INTRODUCTION

In Wales, goats are mainly kept: to produce milk, meat or fibres (mohair and cashmere); for showing; or as pets and companion animals. There are no reliable data on goat numbers in Wales although holdings are more common in the south of the country. In the UK as a whole there are approximately 88,000-93,000 goats including 30,000 breeding female goats (does) being used for milk production. This leaflet focuses on keeping goats for milk production.

BREEDS

The four commonest pure breeds used for goat dairying are: British Saanen; Anglo Nubian; British Toggenburg; and British Alpine. However, crossbred does, most often British Saanen crosses, are more common than pure bred does.



British Saanen



Anglo-Nubian



British Toggenburg



British Alpine

The breed of goat a producer will choose depends on a number of factors, including personal preference, availability of stock and, perhaps most importantly, the intended end use of the milk. Reported yield figures for the various breeds vary hugely, a rough average value per lactation is 1,000kg, with yields of up to nearly 3,000kg having been recorded for some British Alpines. In general, the British Saanen breed (and its crosses) and the British Toggenburg are both capable of producing relatively high milk yields and protein contents which is ideal for the liquid milk market. By contrast, the total milk yield from Anglo Nubians is generally lower, but the milk contains more milk solids, making it ideal for cheesemaking. It takes roughly 100kg of milk to make 10kg of hard cheese or 15kg of soft cheese. The Anglo Nubian also produces offspring which are more suited to the meat market. Table 1 shows approximate milk yields and milk compositions of the most common breeds. The British Alpine is smaller than the other breeds which accounts for its relatively lower milk yield when compared with the British Saanen and its cross breeds. Its milk is of higher quality and more suited for free range grazing. It is notable that, kg for kg, goats are capable of producing more milk than cows. There are no quotas governing goat milk production.

Table 1. Lactation data for major dairy goat breeds in Wales

Breed	Milk yield (kg) / Lactation	Fat %	Protein %
Crossbred	1200	3.5	2.8
British Saanen	1240	3.6	2.8
Anglo-Nubian	1040	4.5	2.7
Toggenberg	1170	3.3	3.5
British Alpine	1099	3.5	3.0

GOATS' MILK

The overall composition of goats' milk (see Table 1) is similar to that of cows' milk. However, goats' milk contains a higher proportion of small fat globules than cows' milk and this makes it more digestible – particularly for the very young, the elderly and the infirm. Goats' milk is also believed to be beneficial in relieving the symptoms of asthma and eczema. It should be noted that the lactose in goats' milk is identical to that in cows' milk and the milk is not suitable for people with lactose intolerance.

When compared to cows' milk, goats' milk has higher levels of Vitamin A and niacin, but lower levels of Vitamins B₆, B₁₂ and folic acid.

The market for goats' milk and goats' milk products appears to be growing slowly. Producers have a choice of either selling their milk to a processor (the opportunities for this are very dependent on location) or establishing their own processing facilities to add value to the product, by producing products such as cheese and yoghurt.

OESTRUS and LACTATION CYCLES

Oestrus in goats is cyclical and, under natural lighting conditions, it will be brought on by declining day lengths in the autumn. The goat's gestation period is approximately five months. Lactation can continue for up to two years following parturition in a non-pregnant goat, but this longer lactation will result in a lower yield than if the doe is bred again the following autumn. In order to achieve a more even distribution of milk production throughout the year, artificial lighting and / or hormone sponges can be used to influence the oestrus cycle.

MALE OFFSPRING

As with dairy cows, an important consideration for dairy goat producers is what will happen to male offspring. In Wales, it is usual for the male young to either be reared for meat (either on the same farm or sold on to a specialist meat producer) or humanely destroyed.

FEED and WATER

An adequate balanced diet is essential for the health, well-being and productivity of any animal. As goats are ruminants, it is important that a high proportion (at least 50% on a dry weight basis) of their food is supplied as forage (most usually hay or silage). The energy demands on a lactating doe are considerable and professional advice should be sought to ensure that an appropriate ration is being provided.

As with dairy cattle, it is possible to influence the composition of the milk, particularly the fat content, by adjusting the goats' diets. As with cattle, a higher fibre content leads to a higher milk fat content.

Water intake is of critical importance for dairy goats, especially for the lactating does if optimal milk yields are to be achieved. As goats do not like drinking very cold water, their intake of water during cold weather may decline, resulting in a decrease in milk yield.

HOUSING

Goats, particularly the dairy breeds, are natural browsers. Unlike sheep, they cannot thrive by grazing alone. Therefore, it is common for goats to be housed, at least part of the time. This allows the goats to be fed and watered. In addition, goats do not like to be cold and damp and it is essential that they have permanent access to a dry and draught-free shelter. An area of 1.5sq metres per goat should be allowed and the housing needs to have sufficient height that the goats can exhibit their natural behaviour of standing on their hind legs.

HEALTH

Professional advice should always be sought regarding the health of goat herds. Particular areas of concern for goats include: foot rot and overgrown hooves; worms (helminths); bacterial diseases, particularly pulpy kidney disease – caused by clostridial bacteria; and tetanus. It is very important to understand and comply with legislation regarding the withdrawal of milk from human consumption following the use of certain drugs.

LEGISLATION

Increasing legislative requirements since the mid-1990s have led to a decrease in the number of goats kept in Wales. Potential producers must give careful consideration to the legislative requirements. Of particular importance are the Dairy Products (Hygiene) Regulations of 1995. It is illegal to sell milk for human consumption if you do not have a licence to do so.

Legislation covering the identification and tracing of goats came into force in February 2003: any goat born after 01/01/2002 must be marked with a flock / herd mark. Since 01/02/2003 each individual goat must have a unique number, in addition to the flock / herd mark.

It is a legal requirement to report the death of any goat of more than 18 months of age by telephoning 0800 525890.

FOR FURTHER INFORMATION

Further information on legislation affecting goats can be found on the agricultural pages of the Assembly's website.

For more information on practical aspects of goat husbandry and business management, the British Goat Society have a range of leaflets and an informative website – www.allgoats.com.