

Genetic Improvement: Eryri Group Breeding Scheme



This group of Welsh Mountain sheep breeders is now in the fourth year of their breeding scheme. The five members all farm large flocks of sheep on the Snowdonia range, hence hardiness is an essential attribute that must be retained in their sheep. Breeding is therefore of utmost importance as the sheep must be able to thrive in their natural environment without being fed concentrates and lambs finished off grass.

The group are recording using the Welsh Index with the objective of enhancing maternal ability, growth rate, and carcass quality- although a level of fatness is required to take the animals through the winter in such harsh conditions. All the ewes originally selected in the nucleus flocks have been tested and members are looking to maintain scrapie resistance in their flocks through using only group 1 rams as reference sires.

Originally, the members selected two rams, on appearance, to use as reference rams in the first autumn. For subsequent years the highest index ram from the previous year is used again together with a fresh ram, selected again on appearance. A significant difference has been seen in the index of the progeny from the rams, which has resulted

in the group selecting sires on **index** and **appearance** in subsequent years. The reference rams are used through natural service with breeders bringing fifteen ewes to run with each ram for around five weeks.

Lambing takes place outside during April, and lambs will be recorded as soon as possible after birth, weighed in late June at 8 weeks and scanned for eye muscle depth and back fat in September at around 20 weeks old. Some of the breeders also record an equal number of lambs sired by one of their own rams. This increases the pool of rams and lambs available for selection. The index used will then rank the lambs and adult stock according to Estimated Breeding Values for maternal ability, growth and carcass quality.

As is common in Welsh Mountain flocks, rams are first used as yearlings, the group has now used its own reference rams for two seasons with indexed yearling ewes replenishing the nucleus flocks.

The members are also involved in ram performance tests where ram lambs from the five flocks are wintered together under the same conditions. They are weighed at regular intervals throughout the period from November to April, scanned for eye muscle depth and back fat at the end, and then ranked on index. One of the breeders hosts an on farm sale of rams in the autumn where performance figures are displayed.