

A Lowland Hefting System in the East of England

This case study demonstrates a lowland hefting system in Norfolk, which is irregular across the country. There are 44 hefts owned by one company grazing MOD land. The lowland area consists of grassland, heathland and woodland.

Stanford consists of 10,000 acres of open grassland with small pockets of woodland and larger blocks of forestry plantation. The land is owned by the MOD who use it for training and there is no public access. The grazing is let to a company trading as Stanford Sheep.

6000 sheep graze this land, divided into 44 hefts ranging in size from 85 to 220 and sometimes further divided into cuts. They are managed by three shepherds, each responsible for around 2000 sheep, and a manager. The Sheep are owned, and the staff employed, by Stanford Sheep.



Stanford landscape

The land was acquired by the MOD in 1941, when there was a pressing need for a training area. The inhabitants of five villages were forced to leave their homes: those of Stanford, Buckenham Tofts, West Tofts, Tottington and Sturston. Now virtually all that remains of those villages are ruins, a few remnant hedgerows and the churches. At first it was unimportant that the land was not grazed by livestock because of the high number of rabbits present.

However, in the 1950's the rabbit population was decimated by myxamatoxis and it became clear that sheep were needed to maintain a short sward. Today the rabbits are back but due to the cyclical nature of their population dynamics sheep remain a vital tool in maintaining this environmentally important site.

Stanford is a low lying and relatively flat area, all between 30m and 50m above sea level. The soil is sand lying over chalk and the vegetation is mainly calcaerous grassland, interspersed with patches of dry acid heathland and woodland. The area is designated a SSSI (Site of Special Scientific Interest) and lies within the Breckland ESA (Environmentally Sensitive Area), under which there is an agreement in place on around 1000ha outside the Impact Zone.

Stone Curlew is a notable species present here and some patches are managed as bare areas, by harrowing and spraying, to encourage them to nest. Birch encroachment requires management and bracken control is assisted with ESA grant. The ESA has been in place for 12 years and has the objective of maintaining a close cropped calcaerous grassland Breckland sward. The manager at the time of the initial ESA agreement says, "We really welcomed the ESA because it enabled us to continue grazing this land with a system that would not have been economical otherwise. Without it the sheep would have gone"

The land is very free draining with a tendency to burn off in a dry summer period, when the greatest grass shortages occur. There are sources of natural water over 75% of the hefts but some have to be supplied from a bowser, and the requirement for this increases in dry weather.



Stanford grassland

The main breed of sheep grazed here is the Beulah Speckled Face and a nucleus of pure bred sheep is maintained in five separate flocks, allowing rams from one flock to be used with another. Second quality ewes are crossed with Blue de Maine rams to produce cross bred breeding ewes. These are then put to a terminal sire, usually a Texel, to produce a good finishing lamb.

Cheviots were tried here in the past but did not heft well and more recently Rouge de Maine, Vendeen and Suffolk have been tried with little success. A few mules are bred from the older Beulah Speckled Face ewes, which bear four crops of lambs, the last one to a Blue Faced Leicester ram, before being drafted. The mule ewe lambs are sold on as it has been found that they do not thrive on this land and during a dry time in June or July they quickly lose condition and cannot maintain a milk supply.



Stanford Beulah's

The Beulah Speckled Face that are kept here are of a particular type that has been developed over many years to suit the conditions of the area. The Sire Reference Scheme in Wales, where the breed originates, aims at a different stamp of sheep and so the policy has been developed not to buy in any Beulah rams. It was found that, under Stanford's conditions, the Welsh sire produced big framed lambs that had no flesh on them in a dry summer.

The sheep spend almost their whole lives out on their hefts. There are no physical boundaries to the hefts but the sheep respect their own borders. The stocking rate across the land is fairly even but some land such as wet areas

and woodland is grazed less, although the sheep are free to wander through. However, the sheep are not evenly dispersed across the land but move around their heft in a loose group leaving some areas ungrazed at some times.

The MOD provide a calendar of their plans for firing on different ranges with specified weapons, enabling sheep that would be in any danger to be moved off their heft and held in fields. The hefts are arranged in a layout that coincides with range layout, so that only one heft will need to be moved at a time. Sheep on adjacent areas are quite safe, even though they are not fenced out of the danger zone, they will not cross the invisible boundary of their heft.

No one really knows how the present system of hefting was started at Stanford; it is believed to have largely developed naturally through the territorial instinct of the sheep. One new heft was established a few years ago. This was done by taking lambs at weaning to a new area and holding them there with fencing for a year. After that time the fence was removed and they stayed on their new heft. Despite being born only a short distance away they did not attempt to return there but remained on the heft they had learned.

Sheep from each heft are identified by different coloured marks on their back, hip or shoulder. Lambs are marked with ear notches, in the top edge of the ear for ewes and the lower edge for rams. Ewe lambs are further identified with coloured tags, which relate to the year they were born.

The Texel rams are turned out with the ewes for tugging so ewe lambs are brought into fields from weaning to December. Ewes selected to be put to pure bred rams are tugged in enclosed fields in order to maintain control. During tugging feed is provided daily to those ewes still out on their hefts. This is considered important because the structure of the flock has been disrupted by removing some animals, as described. This might encourage the others to wander, either searching for those removed or to take advantage of the space they leave, so feeding maintains some order as well as boosting conception rates.

Feeding resumes for five weeks before lambing and five weeks after. 18% protein pencils are used and are fed loose on the ground. There is very little wastage. Hefts are often fed at different times of day with no incidence of sheep being drawn to a neighbouring heft, probably because the hefts are so well established.



Stanford sheep on a heft

A lambing percentage of 160% at scanning and 140% at cutting, when the ram lambs are castrated, is usual, producing 7,500 to 8000 lambs. From these, 1500 to 1800 ewe lamb replacements are retained. 500 to 1000 are finished off their hefts, before weaning and others are finished off grass fields and hopper fed cake. The latter are all finished between January and March and there is pressure from farmers who let grass to remove stock as soon as the land is fit to plough, often in February.

A few lambs are sold to a small, local abattoir but they can only take limited numbers. Most have to be transported to Jaspers in Cornwall. The store market is being explored but the aim is to finish all lambs in order to reap the benefits of the time and dedication that has been put into developing ewes to produce quality lamb carcasses.

Stanford is equipped with five sets of permanent handling pens and mobile pens so sheep can be dealt with close to where they live on their hefts. Extra staff are required for shearing and dipping so these are expensive operations but health problems are rare. Ewes are culled if they develop foot problems and remarkably little lameness is evident. Cobalt deficiency has been experienced and consequently a mineral supplement bolus is used. Faecal egg counts are carried out to target worming treatment, focussing on the lambs over the summer. The ewes were all treated in February, for the first time in 18 months.

Shearing is a particularly expensive operation, costing £8,700 for the contract shearers alone in 2007. The wool cheque for that year came to £2,400, representing a substantial net loss. The manager is interested in exploring the potential for woolless breeds, such as Wiltshire Horn. He is keen to look at any options for improving the breeding or management of the sheep, yet recognises the value of the breed development work that has taken place in the past here and the unique and irreplaceable qualities of the existing stock.



Fowlmere, Stanford