

## **Scrapie eradication in Fjárborg, Reykjavík**

The scrapie disease was first diagnosed in LANDNÁMSHÓLF (Protection Zone nr.1, gray tag colour) in 1966, more precisely in a small flock of sheep on the peninsula of Seltjarnarnes bordering on the western area of Reykjavík. It was considered most likely that the disease had been transmitted by hay bought in a known scrapie area in N-Iceland. Sheep from Seltjarnarnes and Reykjavík shared the same common, rangeland grazings in summer. However, scrapie was not confirmed in Reykjavík until after 1970 and then in Fjárborg where hobby sheep owners in Reykjavík were allowed to build their sheep houses and hay barns on 1000 square metre plots located on the former farmland of Hólmur, in the easternmost part of the city. The total area of Fjárborg was 5 hectares, at 105-110 metres above sea level, divided by two streets. By 1974 a total of 34 sheep houses had been built there, with most flocks ranging from 30-50 winterfed sheep, the total being 1.000 sheep, reaching a maximum of 1.200 in 1978 when scrapie had spread at an alarming rate in Fjárborg and was of great concern, both there and outside, not least in neighbouring farming communities.

After much discussion at several meetings in October 1978, mainly attended by sheep owners in Fjárborg and veterinary authorities, it was decided that in stead of slaughtering all the sheep there an experiment of eradicating infected and suspected flocks would be carried out. The veterinarian Sigurður Sigurðarson initiated and designed the experimental protocol and supervised the project which was supported, at the onset reluctantly, by Páll Agnar Pálsson the Chief Veterinary Officer for Iceland, both scrapie specialists working at Keldur. They would have preferred the slaughter of all the flocks in Fjárborg. Thus this experiment was a compromise based on several documented rules and conditions applying to all sheep owners there. In 1978 there were sheep flocks in 30 houses in Fjárborg. All sheep from 13 of these flocks were slaughtered, 11 in November 1978 and 2 in the autumn of 1979. According to the agreed experimental rules the 13 flock owners were obliged to clean their sheep houses and hay barns and replace soil by their houses by clean gravel. This included getting first rid of any hay and dung, dicarding of water bowls and wooden partitions as well as washing walls, floors and ceilings using a pressure hose, and the broad spectrum virucidal disinfectant Virkon(S) was applied. This was a major operation financed by public funds, secured by the Ministry of Agriculture, and included money for

restocking after a period of at least one year. 8 of the 13 sheep owners did not restock with sheep but those 5 who did received their lambs, mainly on 19 October 1979, all from Seglbúðir Farm in Vestur-Skaftfellssýsla (Zone nr. 21). Sigurður Sigurðarson secured regular inspection visits to all sheep flocks in Fjárdborg for several years, especially before lambing, often with assistants. It proved important that all concerned established good relationships with the sheep owners through excellent cooperation. Furthermore, special attention was paid to sheep health in autumn after communal, rangeland grazing, both in Reykjavík and neighbouring areas, for at least 20-30 years. Imports of hay and live sheep into Fjárdborg were also under strict control and to avoid inbreeding problems AI was applied and ram lambs could be purchased from scrapie-free areas ["live lamb selling zones"], for several years only from Zone nr. 5 in W-Iceland. Now, in 2024, there is only one flock left in Fjárdborg of those restocked with sheep from Seglbúðir Farm 45 years ago.

The eradication of Scrapie in Fjárdborg, beginning as an experiment in 1978, was already attracting attention in 1986 when a nationwide eradication scheme was implemented. A number of flocks in Fjárdborg **never** had scrapie. Of those flocks there is only one left, namely in Ásagata, 1RF, with a known origin before 1970. It is of interest to recall that amongst the scrapie-flocks was the one in the next house of Ásagata, 3RF, and quite close were the three flocks where scrapie was most virulent in the Fjárdborg village, namely in 6RF, 7RF and 9RF. Horses are now kept in the majority of the 40 houses in Fjárdborg, sheep flocks being in only 11 of them, a total of 200 winterfed animals. It is worth noting that a few goats were kept in Fjárdborg in the early years but there was no evidence of the scrapie disease in them.

( Compiled in the autumn of 2024 by Ólafur R. Dýrmundsson PhD, with reference to his book on sheep farming in Reykjavík: *Sauðfjárdbúskapur í Reykjavík – Fjáreigendafélag Reykjavíkur; Hið íslenska bókmenntafélag 2023*).