

Documenting Freedom From Disease And Re-Establishing a Free Status After a Breakdown Aleutian Disease (*Plasmacytosis*) in Farmed Mink in Iceland

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Due to the changes in rules governing international trade in animals and animal products, eradication of diseases and surveys to substantiate freedom from diseases are becoming increasingly important. The general features of a disease that make it feasible for eradication include: The disease must be of such importance that eradication is economically justified; the disease should have features that make detection and surveillance possible; there should be methods available for halting disease transmission and reinfection.

Aleutian Disease (AD) or plasmacytosis

Aleutian Disease (AD) or *plasmacytosis* in farmed mink is an example of a disease that fulfills these criteria and that has been successfully eradicated in Iceland. Mink farming started again in Iceland in 1970, after having been prohibited for more than 20 years. Soon AD became widespread and caused serious economic losses to the industry due to low breeding results and poor pelt production. Every attempt by the farmers to control the disease by using the Iodine Agglutination Test (IAT) was without any success and most of them gave up farming. When the Counter Current Electrophoresis test (CCE) was introduced in 1979 the percentage of infected minks on those few farms that were left in the country was found to be very high (between 85 and 94%). It was then decided

to pelt all minks on these farms and replace them with CCE negative animals after a thorough cleaning up and disinfection of the farms. This was done gradually during the years 1982-1984 and has been followed up with an annual CCE testing program on every farm.

Reinfection was not detected on any farm during the first twelve years. In 1996 one infected farm was found. Reinfection there was most probably caused by wild mink but they have been shown to be infected by AD virus. All mink on the farm were pelted down, the farm disinfected and new mink bought from a disease free farm. The farm was kept in quarantine for 18 months and the animals tested regularly with CCE.

Because of the possibility of reinfection from the wild fauna it will be necessary to test all farms regularly with CCE test in the future. Absence of clinical signs is not enough as a proof of a disease free status. More accurate proof requires the testing of every animal in the population. As this is not feasible, a testing program including fewer animals that provides necessary assurance must be based on knowledge of the disease. Testing of all barren females and females with few kits on each farm during the summer (15-20% of the breeding stock) provides after our meaning the required level of proof of freedom or presence of the disease with minimum costs.