

# **HPAI H5N1** in fur animals in Finland

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# **Background of fur farming in Finland**

- 450 active fur animal farms
  - 95% of the fur production (1,3 million animals annually) in western Finland (the Ostrobothnia region)
  - Finland has been one of the largest fur producers in Europe
- Animals commercially farmed for fur production:
  - American mink (Neovison vison)
  - Arctic (blue) fox (Vulpes lagopus)
  - Red (silver) fox (Vulpes vulpes)
  - Fox crossbreeds
  - Raccoon dog (Nyctereutes procyonoides)



- Animals are usually kept in side-by-side wire cages in narrow sheds which are only covered by a roof and have no closed walls
- Animals are mainly fed with fresh feed manufactured in feed kitchens, but some farmers make feed themselves
  - Intra-species recycling in foxes and raccoon dogs but not in minks





Fotos: Finnish Fur Breeders' Association FIFUR

# **History of HPAI in Finland**



- First HPAI cases in 2016
  - Only in wild birds (H5N8)
- Cases in wild birds almost every year since then
  - Worst year 2021: 66 cases / 110 positive birds (H5N8 and H5N1)
- Only one poultry case
  - Farmed pheasants in 2021 (H5N8)
- Cases in wild mammals
  - 2021: two red foxes and otter (H5N1)
  - 2022: lynx and otter (H5N1)

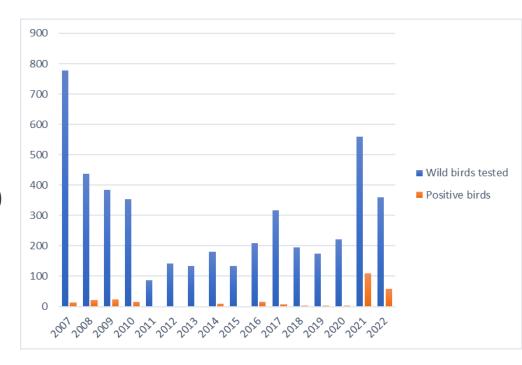




Foto: Niina Tammiranta



# **HPAI H5N1 outbreaks in fur animal farms 2023**

- Dead animals sent for disease investigation due to mortality and clinical signs
- Routine necropsy and microscopic examination were performed
  - Most animals: pneumonia and septicemia
  - Some animals: diarrhea
- Samples for virus detection
  - Organs and swabs
- → First HPAI H5N1 case confirmed on 13 July 2023 (arctic fox)

### **HPAI** cases 2023



- 27 positive farms (situation 29.9.2023):
  - 18 farms with foxes only
  - 4 farms with foxes and minks
  - 3 farms with foxes and raccoon dogs
  - 1 farm with foxes, minks and raccoon dogs
  - 1 farm with raccoon dogs only
- Total number of animals on positive farms: about 255 000
- 31 cases in wild birds
- 2 cases in wild mammals (red fox and otter)

# **Control measures on fur farms**



- Official restrictions to infected or suspected farms
  - Ban of animal movements from and into farm
  - Orders for handling of dead animals, by-products, feed etc.
  - Cleaning and disinfection orders

### Culling

- At the beginning of the outbreak
  - All minks on positive farms were culled
  - Foxes and raccoon dogs on a case-by-case basis depending on the spread of the disease on the farm, detected mortality and symptoms etc.
- Starting 11.9.2023 → <u>all animals</u> on infected farms will be culled
  - The total number of animals that will be culled is about 255 000
  - Carcasses are sent to by-product establishment for destruction



Foto: Lauri Kareinen

### **Further measures**



- Survey on all fur farms in Finland
  - Starting at farms with minks (114 farms)
  - Blood samples for antibody testing, tissue and swab samples for PCR testing → only blood samples
- Improvement of biosecurity on fur farms
- Suspect cases investigated



Foto: Lauri Kareinen



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