



**FINNISH FOOD  
AUTHORITY**  
Ruokavirasto • Livsmedelsverket

# 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)

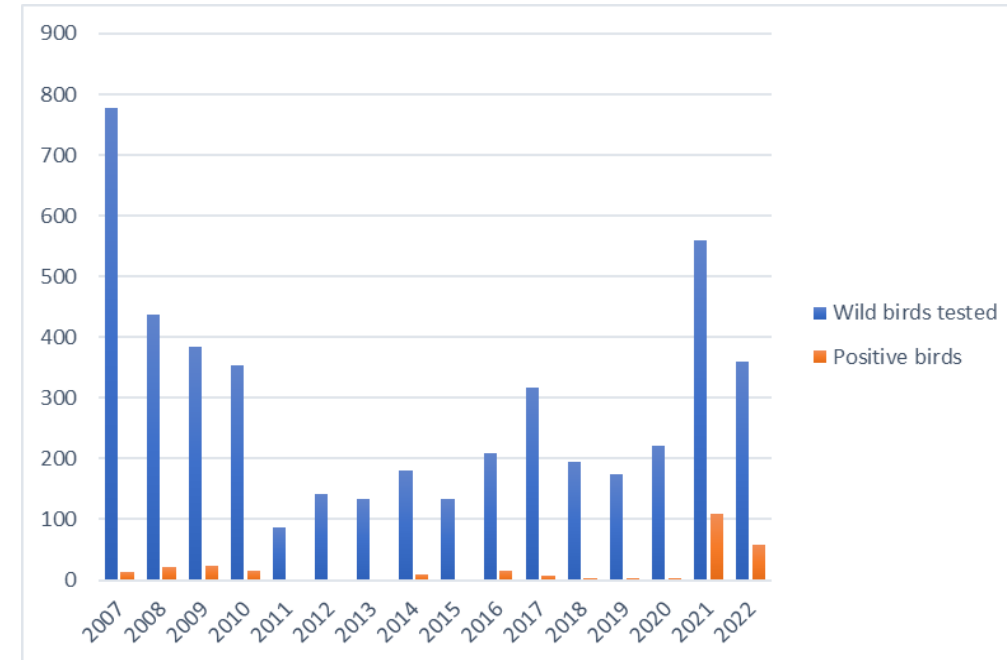


Foto: Niina Tammiranta



# 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 → all animals 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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