



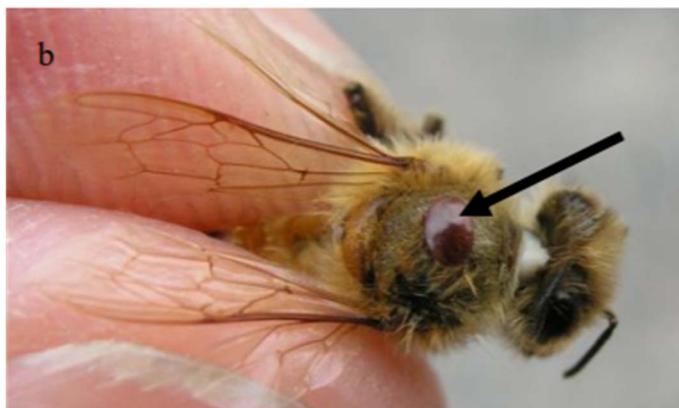
**FINNISH FOOD
AUTHORITY**
Ruokavirasto • Livsmedelsverket

Varroa infestation in Åland Islands, Finland



Varroa destructor

- Category C disease
- 1 × 2 mm mite
- Sucks lymph from adult bees and brood, weakens animals





Background

- Åland Islands have had Varroa free status since 2013
- around 120 beekeepers with about 1200 colonies
- The introduction of honeybees in any stage of their lifecycle, including honeybee brood into Åland Islands is prohibited, except if they come from Varroa-free areas



Background map © Karttakeskus Oy, Helsinki



Annual risk based surveillance programme

- Risk zones of radius 5 km established around main harbors and airport
- Inspection and sampling in:
 - all the apiaries and all the hives in risk zones (17 in 2021, all negative)
 - 10 % of apiaries in other areas (11 in 2021, one positive, 10 negative)
 - A sample consists of 100 adult bees



Map © National land survey of Finland, 2021



Infestation found in 2021

- Routine surveillance revealed one infected apiary in the municipality of Brändö
- Another infected apiary found when inspecting and sampling the apiaries near the 1st positive apiary
- Boths apiaries emptied: bees killed and hives destroyed in one apiary and hives including the bees transferred to the continental Finland from the other infected apiary
- No other infected apiaries found
- The origin of the infection is not known
- Probably some infected bees have managed to travel by a ferry from the continent



Restriction zone

- Municipality of Brändö
- Three apiaries left in the zone
- Others > 15 km away
- Eradication program under planning



Map © National land survey of Finland, 2021

Surveillance after positive case

- Apiaries 1, 2 positive and destroyed
- Apiaries 3-5,7 destroyed (same beekeeper)
- Apiary 8 has been empty all summer
- Apiaries 6, 9, 10 inspected and sampled with negative results 19.7. and 17.8. (third sampling in September if possible)
- The annual surveillance plan for 2022 will be revised





Lessons learned

- Registration of the apiaries of hobbyists is incomplete
- Hobbyists skills to recognize Varroa should be improved
- High-risk zones will be modified / increased for the future to include areas near the continent
- Plans under way to improve registration and beekeepers' ability to recognise varroa in cooperation with the local beekeepers' association
- Information will also be targeted on the general public, both residents and tourists, to prevent unintentional transmission of varroa to Åland

FINNISH FOOD AUTHORITY

Ruokavirasto • Livsmedelsverket

