

Wildlife disease surveillance in Sweden 2025



SVA report 137

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The Swedish Veterinary Agency, SVA, is an expert authority that, with diagnostic services, research and advisory competence, strengthens the capability in Sweden to eradicate animal diseases that constitute a threat to critical socioeconomic functions.
Healthy animals - Safe Humans



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Introduction

This annual report is an account of the work done with funds received from the Wildlife Management Fund for 2025, which mainly have been used to run the general wildlife disease surveillance programme, a major part of all work at SVA involving wildlife. The report also summarizes all activities regarding wildlife at SVA this year, where projects and research studies within the Wildlife Disease Surveillance Program are reported, as well as other activities that have been carried out with the aim of fulfilling the part of SVA's instruction stating “..to follow and analyse the development of the disease situation in wild animals...” in Sweden. A very big thank you to all volunteers in the general public and the hunters especially, who have reported findings of dead or sick wildlife on our online form rapporteravilt.sva.se or by phone or email. You are our eyes and ears in the field, making it possible for SVA to have data and samples to perform our work with wildlife disease surveillance!

Uppsala 31 March 2026

Head of sections Erik Ågren, Wildlife Section and Aleksija Neimanis, Research and Development

IMAGE 1. The outbreak of highly pathogenic avian influenza H5N1 at the end of 2025 led to a massive number of reports and images of dead wild birds on the online form rapporteravilt.sva.se here an eerily beautiful photo of a dead swan.



Summary

In 2025, 1 400 cases of fallen wildlife were registered at SVA, with almost 800 mammals, 600 birds, and very few amphibians and reptiles. Among these, there were 106 cases of contagious infectious diseases reportable to the Board of Agriculture, and 114 cases of WOAH non-listed diseases affecting wildlife. The wildlife work at SVA has been ongoing for 78 years and gives a good overview of the disease situation in wildlife. In Sweden, there are, with a few exceptions, no serious contagious diseases affecting wildlife.

In 2025, the most significant wildlife disease event was the start of a major outbreak of highly pathogenic avian influenza towards the end of the year. In summary, the results from this year show that Sweden continues to have a generally good health situation regarding wildlife. Endemic infections and diseases occur, such as salmonella in wild boar and passerines, tularaemia mainly affecting hares, and *Echinococcus* in red foxes. Some infections are serious for the individual but do not affect wildlife populations in general, but a few are zoonotic infections that can affect humans. With continuous monitoring, knowledge is obtained about when and where outbreaks or changes in diseases in wildlife occur, and if new infections are introduced in the country.

In 2025, SVA received carcasses or samples from 687 large carnivores (brown bear, lynx, wolf and wolverine). This are fewer than previous years, 872 cases were registered in 2024 and 1,165 in 2023. SVA is the receiver of all large carnivores that are found dead or are killed during hunting or under other circumstances. The results show that

these large carnivore populations have a good health situation in general.

The programme for health and disease surveillance of marine mammals has at SVA, in collaboration with the Swedish Museum of Natural History, necropsied 52 harbour porpoises and seals in 2025. The programme contributes to the knowledge on marine mammals and the environment in which they live. A stranded Sowerby's beaked whale was also examined during the year.

WILDLIFE DISEASE SURVEILLANCE

The surveillance is based on necropsies and ancillary testing of found dead or euthanized sick wildlife. From these cases and targeted surveillance samples are analysed for various disease agents and diagnoses are made. Monitoring wildlife diseases on an international scope and reports from the public contributes with information and samples. Focus is on contagious diseases that may affect domestic animals, humans, or wildlife, especially threatened populations.

Wildlife cases 2025

The Wildlife Section registered 1,400 cases of fallen wildlife, i.e. found dead or euthanised sick animals, for the general wildlife disease surveillance.

The fallen wildlife cases are listed in descending number of cases per wildlife species; a total of 794 mammals, 593 birds, four reptiles (two turtles, one lizard, and one snake) and eight amphibians (four toads, one frog, and two salamanders).

Of 1,400 cases, 1,139 (81 %) were entire carcasses. The case load was 21 % lower than the year before, a conscious restriction of admitted cases due to budget issues.

Wild boar was the most common mammal, reflecting the continued focus on and efforts to monitor African swine fever. Of the 100 otters received, 26 were examined at SVA. Most of those killed in traffic or drowned in fishing gear were sent directly to the Swedish Museum of Natural History. Carcasses in an excessively decomposed state were destroyed without examination. Cervids are commonly examined game species, totaling 144 cases during the year. Also, 81 large carnivores, 101 hares and wild rabbits, and 59 insectivores, i.e. hedgehogs, bats and shrews, were common groups of examined animals. Birds of prey made up 29% of the avian species received, as most are species that belong to the state when found dead. In all, 204 (26%) of the mammals and 128 (22%) of the birds were Wildlife of the State.

Other cases that are received but not listed here are samples for targeted health and disease surveillance from hunter harvested game, as well as wildlife from game farms, i.e. animals with animal owners.

Some wildlife samples are sent to and analysed at other laboratories within or outside SVA, mainly this applies to *Trichinella* parasite analyses.

TABLE 1. Number of received fallen mammals 2025.

| Mammal sp. | No./sp. |
|---|---------|
| Wild boar | 182 |
| Otter | 100 |
| Moose | 97 |
| European brown hare | 70 |
| Lynx | 62 |
| Hedgehog | 47 |
| Roe deer | 40 |
| Red fox | 34 |
| Wild rabbit | 25 |
| Harbour porpoise | 20 |
| Grey seal | 17 |
| Red squirrel | 16 |
| Harbour seal | 15 |
| Wolf | 10 |
| Bat | 9 |
| Mountain hare | 8 |
| Brown bear | 6 |
| Fallow deer | 5 |
| Ringed seal | 4 |
| Wolverine | 2 |
| Pine marten, Shrew | 3 |
| Arctic fox, Red deer, Mouse, Rat, Water vole | 2 |
| Beaver, Badger, Hare, Ermine, Dog, Ferret, Mink, Sowerby's beaked whale, Weasel | 1 |

TABLE 2. Number of received birds 2025.

| Bird sp. | No./sp. |
|---|----------------|
| White-tailed sea eagle | 58 |
| Barnacle goose | 28 |
| Mallard | 25 |
| Jackdaw, Rock pigeon | 24 |
| Blackbird | 20 |
| Bull finch, Siskin | 18 |
| Mute swan | 16 |
| Guillemot | 15 |
| Goshawk, Green finch | 14 |
| Blue tit | 13 |
| Sparrow hawk | 12 |
| Black-headed gull | 11 |
| Herring gull, Crow, Greater spotted woodpecker, Kestrel | 10 |
| Eagle owl, Golden eagle, Buzzard, Woodpigeon | 9 |
| Song thrush | 8 |
| Greylag goose, Northern gannet, Canada goose, Tawny owl, Great grey owl, Red kite, Ural owl | 7 |
| Pheasant, Hazel grouse, Goldcrest | 6 |
| Eider, Peregrine falcon, Magpie, Crane, White stork | 5 |
| Dove, Osprey, Long-eared owl, Grey heron, Wax-wing, Hawfinch, Cormorant | 4 |
| Green woodpecker, Black-backed gull, Woodcock, Nuthatch, Whooper swan, Great tit, Swift | 3 |
| Fieldfare, Chaffinch, Seagull, Yellowhammer, Hobby, Rook, Scoter, Coot, Black and white flycatcher, Kittywake, Collared dove | 2 |
| Brambling, Honey buzzard, Bluethroat, Unknown, Spotted flycatcher, Red-necked grebe, Grey-headed woodpecker, Cuckoo, Hawk owl, Goldeneye, Kingfisher, Red crossbill, Gull, Tree sparrow, Brent goose, Red-breasted merganser, Pygmy owl, Pink-footed goose, Black woodpecker, Golden finch, Merlin, Black-throated loon, Goosander, Curlew, Oyster catcher, Greater spotted eagle, Mediterranean gull, Coal tit, Bean goose, Capercaille, Black guillemot, Lapwing, Razorbill, Tufted duck, Montagu's harrier, Lesser whitethroat | 1 |



IMAGE 2. A Canada goose with avian influenza, a case for the general wildlife disease surveillance and monitoring of contagious diseases in Sweden. Photo: SVA

Notifiable wildlife diseases

SVA reports all diagnosed cases of notifiable animal diseases to the Swedish Board of Agriculture, for further reporting to WOAAH.

In 2025, SVA diagnosed 106 cases of notifiable diseases in 27 different species of wild animals that were reported to the Swedish Board of Agriculture and then to the EU and WOAAH, the World Health Organization for Animal Health (Table 3). There is also voluntary reporting to WOAAH for other interesting non-listed affecting wildlife (Table 4), with 114 cases in 2025, which gives an overall picture of infections that occur in the country.

No newly introduced infectious diseases were noted in the country during the year. Highly pathogenic avian influenza (H5N1) reappeared in the country towards the end of the year and was the beginning of a major outbreak that continued into 2026.

A targeted follow-up investigation of the *Echinococcus multilocularis* tapeworm in red fox samples from Uppsala in 2025 showed several additional positive cases and a new area with established infection could be noted.

The number of reported diseases in wildlife only reflects how many diagnoses have been found among the cases that have been sent to SVA or another laboratory and does not tell how common the disease is in a wildlife population. However, the general disease surveillance allows us to capture when and where outbreaks do occur or when new infections or diseases are introduced.



IMAGE 3. Wild rabbit with myxomatosis. A virus causes the typical swollen eyelids and causes high mortality in wild rabbits. Photo submitted by a private person on the SVA reporting form rapporteravilt.sva.se 2025.

TABLE 3. Number of cases of notifiable diseases in wildlife reported to the Board of Agriculture in 2025.

| Listed disease | Species | Total | |
|--|--|---------------|---|
| Pigeon paramyxovirus | Dove | 4 | |
| | European brown hare 16, | | |
| Tularaemia | Mountain hare 1 | 17 | |
| Highly pathogenic avian influenza | Phaasant 1, Greylag goose 6, Herring gull 4, Mallard 1, Northern gannet 2, Black-backed gull 2, White-tailed sea eagle 2, Canada goose 4, Mute swan 5, Buzzard 2, Peregrine falcon 2, Bean goose 1, Pink-footed goose, Curlew 1, Greater spotted eagle 1, Mediterranean gull 1, Whooper swan 2, Lapwing 1, Kestrel 1, Crane 3, Barnacle goose 21 | 64 | |
| | Rabbit viral haemorrhagic disease | Wild rabbit | 9 |
| | Myxomatosis | Wild rabbit | 3 |
| | Chlamydia | Yellowhammer | 1 |
| | Echinococcus multilocularis | Red fox scats | 8 |

TABLE 4. Number of cases of WOAH non-listed diseases affecting wildlife 2025.

| Non-listed disease | Species/No. | Total | |
|-------------------------------------|--|-------------------------------|----|
| Lead poisoning | White-tailed sea eagle 12, Canada goose, Golden eagle | 15 | |
| | Botulism | Mallard | 10 |
| Circo virus | Rock pigeon | 2 | |
| Avian malaria | Blackbird | 2 | |
| European brown hare syndrome | European brown hare | 4 | |
| Pasteurellosis | Fallow deer, Red squirrel, European brown hare, Wild boar | 4 | |
| | Pseudotuberculosis | European brown hare, Roe deer | 2 |
| Sarcoptic mange | Lynx 9, Red fox 3, Wolf 3, Wild boar 10 | 25 | |
| Salmonellosis | Bull finch 9, Siskin 6, Hedgehog 2, Black-headed gull, Greater spotted woodpecker 2, Razorbill, Wild boar 24 | 45 | |
| | Toxoplasmosis | European brown hare | 3 |
| | Trichomoniasis | Wood pigeon | 2 |



IMAGE 4. Lead poisoning is not unusual in White-tailed sea eagles. One source of lead is gut-piles from hunted

game, if lead ammunition has been used.
Photo: SVA.

Follow the case, from the field to SVA

This is the story about an interesting wildlife case of a malignant tumour in a fallow deer and describes how SVA conducts the general wildlife disease surveillance, which is the main routine work of following and analysing disease conditions in wildlife. Follow a case from the field to a diagnosis! ID 23849, SVA ID 25-VLT001107



IMAGE 4. A very thin fallow hind that moved abnormally and held its head at an angle was photographed and filmed before euthanasia. Photo: Private/SVA

The Observation

Niklas observed an unshy and emaciated free-ranging fallow deer hind that stayed near his housing in mid-July. The hind appeared to be generally impaired and apathic, walked with the head abnormally tilted at an angle, one eye was more protruding than the other, and the gait was not normal. The deer was put down with a rifle shot, as she was assessed to be seriously ill. This is also allowed when hunting for doves is not taking place in July, with the support of

the Hunting Ordinance §40C, which concerns killing for animal welfare reasons.

The report

As Niklas knew about SVA's work with wildlife diseases, he filled out a report form on the website rapporteravilt.sva.se and attached photographs and a video of the live animal. After reporting the finding, Niklas received a confirmation that the report had been submitted and a rapporteravilt-ID for traceability of the case.



IMAGE 5. The rapporteravilt.sva.se form in the mobile

The wildlife veterinarian's assessment

The report was received by SVA for assessment by the wildlife veterinarian on call. The case was interesting for SVA as the excellent description as well as photos and film showed an obviously sick animal with abnormal behaviour. The hind was obviously wasting with visible ribs and marked hip bones. In the video, it was apparent that the left ear was hanging limp and only the right ear was moving. An important factor to submit this case was also the fresh carcass suitable for examination. Decayed tissues make diagnostics impossible.

Transport

The wildlife pathologist contacted Niklas to hear what material was available and discuss how suitable samples could be sent to SVA. The carcass was already packed in double plastic bags, but weighed over 20 kg, which is the maximum weight to ship to SVA with PostNord. Since Niklas is a hunter, the problem could be solved by him taking out relevant samples from the carcass.

A flat package with a cardboard box, tape, three strong transparent plastic bags, cable ties, absorbent pads and a pre-written address label for free shipping, packing instructions and contact to PostNord for parcel collection, as well as a form for fallen wildlife were mailed out by SVA's logistics staff.



IMAGE 6. SVA-cardboard box for samples must be packed correctly to ensure leak-proof shipment. Up to 20 kg can be shipped in the largest box.



IMAGE 7. Instructions on how to ship samples in SVA cardboard boxes.

The package material was picked up by Niklas at his local post office, after which he assembled and taped the box together. After removing the head with part of the neck to include what could be of most interest to SVA, this was packed according to the instructions so that the PostNord requirement of at least four layers of packaging to protect against leakage was met.

After filling out the SVA form with the rapportera-vilt-ID to connect the package with the submitted report, as well as contact information so that the pathology investigation result can be e-mailed back, PostNord was called to pick up the package. Pick-up is ordered for the beginning of a workweek, preferably no later than a Wednesday so that samples do not risk being kept at room temperature over a weekend.

At SVA

Mail is delivered to SVA normally the day after collection, although Gotland and Norrland's inland areas can take an extra day. On arrival at SVA, the case is registered, each incoming shipment is given an assignment number, and each individual animal is given a wildlife case number, e.g. 25-VLT001234.

Every working day, there is a wildlife veterinarian scheduled for necropsy to deal with the incoming cases of the day, and unfrozen material is usually examined on the same day.



IMAGE 8. The head of the fallow deer in the necropsy room. The right eye was damaged and more protruding than normal. Photo: SVA

The fallow deer hind

At examination of the head, the right eye was partially displaced, pushing out of the eye socket and there was a corneal ulcer. The tear glands and soft tissues around the eye were swollen. When the eye was removed, there was an 8 x 4 cm large dark brown to black firm mass spread out in the eye socket, behind the eyeball that was partially pushed out of the eye socket.

When the skull was opened, the mass growth, suspected to be a tumour, continued along the optic nerve into the skull, where there also was a mass under the brain, about 4 x 4 cm in size.

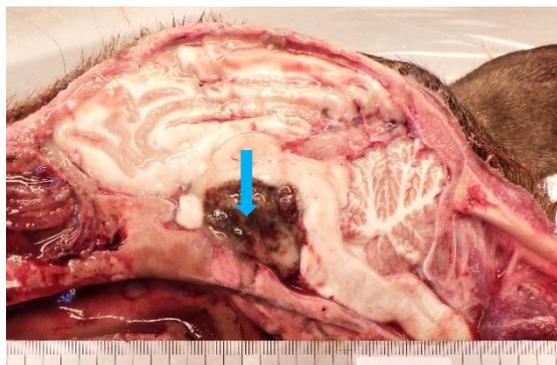


IMAGE 9. A pigment cell tumour (malignant melanoma, blue arrow) had spread from the eye socket, via optic nerves, into the ventral parts of the brain of the fallow deer. Photo: SVA

Histopathology

To look at and assess pathologically altered tissues under a microscope is then done by the veterinary pathologist who had done the necropsy. The mass, eye and brain were examined microscopically after being fixed in formalin for at least a couple of days. These samples had then been cut into centimetre-sized pieces that were processed by dehydration, then embedded into paraffin blocks for cutting into super-thin slices that are attached to glass slides and then colour stained. Under the microscope, the pathologist can assess whether the cells are from a tumour or if there is another cause for the changes seen at necropsy.

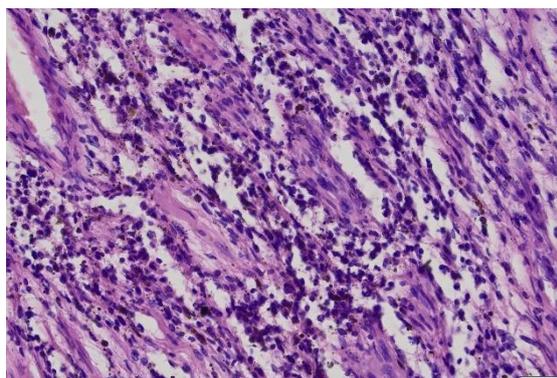


IMAGE 10. The tumour of the fallow deer under the microscope. It becomes a beautiful abstract painting, but the pathologist sees tumour transformation. The abundant brownish-black grains in the image are melanin pigments that the tumour cells form. Photo: SVA

The diagnosis

The mass in the head of the fallow deer turned out to be a tumour originating from pigment-producing cells (melanocytes) and the diagnosis was malignant melanoma as the tumour was considered malignant.

Pigment cell tumours are rare in wildlife. Described cases in the skull region of deer have mainly originated in the iris, within the eye. In this case, pigment cells in the soft tissues within the eye socket had transformed. The tumour had become malignant, i.e. it showed signs of rapid growth and spread, also into the skull cavity where the mass compressed the brain and nerves that control balance and body movements. This explains why the deer was apathic, walked with a head tilt and had difficulties moving around.

In addition to the direct impact of the tumour on the brain and nerves, the tumour would probably also have been painful, given pressure on the eyeball, ulceration of the cornea and inflammation of the soft tissues surrounding the eye. The effect on brain function and pain can explain why the deer was wasting and showed clinical signs of disease.

Replying to the submitter

The wildlife veterinarian responsible for the case then summarized these findings and results in a report that was emailed to the sender, with thanks for good efforts and help, which contributes to the national wildlife disease surveillance!

At SVA, the diagnosis and case data end up in our database, adding to all wildlife cases that have been handled over time, ever since the systematic wildlife disease surveillance began in 1948.

With this accumulated knowledge, we can over time follow trends on health and diseases of our wildlife, what diseases exist or are introduced in the country, where and when disease outbreaks occur and whether there are risks to wildlife populations, domestic animals or humans. And the work is actually mostly based on you and other wildlife interested people contacting SVA when disease or death in wild animals is noted! Thank you for that, all of you reporting to us!

Footnote: We call the reporting person "Niklas", it does not have to be his real name.

IMAGE 11. The general wildlife disease surveillance is conducted with the help of citizen science. Thanks to reports from the public, SVA was able to diagnose this diseased fallow deer hind with a malignant tumour.



An interesting case 2025

Antifreeze liquid is dangerous also for wildlife. This is an interesting fox from 2025.

Glycol poisoning of a red fox

A fox was noted to be walking in circles and convulsing, so it was euthanized. Encephalitis was suspected and the body was sent to SVA to rule out rabies, but also avian influenza that previously has been detected in foxes with abnormal behaviour.

At SVA, the fox was sampled. Analyses were negative for both rabies and influenza viruses. At necropsy, the fox had a good body score. The stomach was completely empty, and the kidneys were paler than normal.

On microscopic tissue examination, no signs of inflammation were seen in the brain, which had been the first suspicion. However, abundant oxalates crystals were seen in the kidney tissue. With polarized light, the refraction from the crystals lights up in a characteristic glow against a black background in the microscope (see image below right).

Oxalate crystals are formed in the kidney most often due to poisoning with ethylene glycol. Glycol is found in coolant and antifreeze liquids and can be drunk by animals as it has a sweet taste. Canids begin to vomit, become ataxic and develop convulsions within a few hours of ingesting glycol. This is consistent with the signs shown by the fox. If the symptoms are not treated immediately, the glycol poisoning eventually leads to death when kidney function fails.

It is of great importance that foxes showing abnormal behaviour are reported. Sweden is free from rabies virus, so ruling out serious infections such as rabies is a very important part of wildlife disease surveillance and allows us to protect other animals and humans from serious diseases.

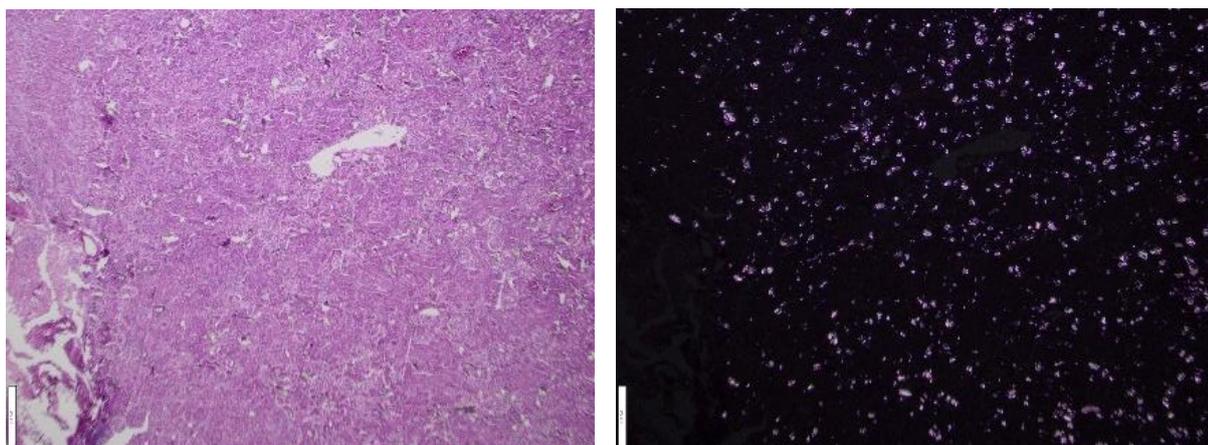


IMAGE 12. Microscopic images of kidney tissue. Oxalate crystals are not visible in normal HE stain (left image) but light up like stars in a black night sky under polarised light (right). Beautiful! Photo: SVA

Swedish sea turtles!

Loggerhead turtles have recent years been found in Swedish waters several times, but these, often young animals, do not seem to be able to cope with Swedish sea and climate conditions and are found dead.

In December 2024, a dead loggerhead sea turtle (*Caretta caretta*) was reported. Three more dead sea turtles of the same species were reported in 2025 along the west coast. Two turtles were collected for examination. The cause of death turned out to be

pneumonia, which was probably caused by a weakened immune system when the turtles had been exposed to the cold northern waters. In one of the turtles, plastic debris was detected in the gastrointestinal tract. Both individuals were juveniles.



IMAGE 13. A loggerhead turtle (*Caretta caretta*) being examined at SVA. Photo: SVA

Avian influenza 2025

Highly pathogenic avian influenza (HPAI) of the H5N1 type continued to circulate among wild birds in Europe, North America and South America in 2025.

In Europe, the year started with slightly fewer cases of avian influenza than in previous years, but in September 2025 a new large-scale outbreak began. Between 6 September and 14 November 2025, 1,443 HPAI cases were reported in wild birds in Europe, which is four times more than in 2024 and ten times more than in 2023 in the corresponding weeks (EFSA 2025). The virus was mainly detected in water birds (ducks, geese and swans), but thousands of cranes also died of avian influenza over large areas stretching from north-eastern to south-western Europe along their migration route.

In Sweden, HPAI was detected in 64 wild birds in 2025. The virus was mainly detected in barnacle geese, but also other geese, swans, cranes, and birds of prey (Table 5). These cases are only a fraction of the total number of affected birds as only a small sample of a very high number of reported cases are submitted and investigated. Over 250 reports of cases or outbreaks came from the southern counties of Skåne and Blekinge alone between 1 November and 31 December 2025. Infected but not sick birds are not detected in passive surveillance. A live, asymptomatic mallard that was sampled at

Ottenby Bird Observatory on Öland in October 2025 carried HPAI-H5N1. These asymptomatic carriers pose a risk for spread and infection of other wild birds and domestic poultry. In December, a single case with a new variant of HPAI for Sweden was detected in a barnacle goose with H5N2 instead of the dominant variant H5N1. Both variants are assumed to have similar pathogenic properties but need further studies.

TABLE 5. Cases of HPAI in Sweden confirmed at SVA in 2025.

| Bird species | No. cases |
|---------------------------|-----------|
| Pheasant | 1 |
| Greylag goose | 6 |
| Herring gull | 4 |
| Mallard | 1 |
| Nothern gannet | 2 |
| Greater black-backed gull | 2 |
| White-tailed sea eagle | 2 |
| Canada goose | 4 |
| Mute swan | 5 |
| Buzzard | 2 |
| Peregrin falcon | 2 |
| Bean goose | 1 |
| Pink-footed goose | 1 |
| Greater curlew | 1 |
| Greater spotted eagle | 1 |
| Mediterranean gull | 1 |
| Whooper swan | 2 |
| Lapwing | 1 |
| Kestrel | 1 |
| Crane | 3 |
| Barnacle goose | 21 |

IMAGE 14. Greylag goose that died of avian influenza in 2025. Reported on rapporteravilt.sva.se. Photo: private/SVA

Echinococcus in Uppsala

A follow-up screening in Uppsala in 2025 showed that fox scats in a limited area in the northern part of Uppsala city contain *Echinococcus multilocularis* tapeworms.

In the second national surveillance of the zoonotic fox tapeworm *Echinococcus multilocularis* during the years 2021 – 2024, a new infected area was found in the northern city of Uppsala in the last year of the survey. This is the first time the parasite has been found in a more densely populated area in Sweden, in a city. There are already two other areas with established infection, in Uddevalla and Gnesta municipality, both in more rural, agricultural landscapes.

In 2025, funding from the Swedish Environmental Protection Agency was used to carry out intensified monitoring around the city of Uppsala. The results of analysis of more than 70 fox scats from green areas in and around the city showed findings of the

parasite's DNA within a rather limited area of about 3 x 2 km at the northern edge of the city. The possibility of eradicating the parasite before it spreads further was also investigated. Studies in other countries with high prevalence of this parasite showed a clear reduction of the infection when fox baits containing anthelmintics were spread for a few years. In Sweden, where the parasite currently seems to be found only in a few and fairly limited geographic areas, a total eradication of the parasite could hopefully be achieved if foxes in and around such an area were dewormed regularly for about three years. A pilot study for deworming in the Uppsala area is planned to be carried out by SVA in 2026, with funding from the Swedish Board of Agriculture.

IMAGE 14. Samples for fox tapeworm analysis can be fox scats or faecal samples from hunter harvested foxes. Photo: SVA



Targeted surveillance

Important infectious diseases that can affect animals or humans are monitored by SVA, usually with funding from the Swedish Board of Agriculture. Wildlife cases from the general wildlife disease surveillance contribute with samples.

Salmonella Choleraesuis

Findings of salmonella in wild boar have continued in 2025.

Of 138 wild boars sampled in the general wildlife disease surveillance in 2025, 19 % were positive for salmonella bacteria. Most, 23 out of 26 positive cases, had *Salmonella Choleraesuis*, the pig-adapted salmonella that was found in Sweden in 2020 and has been monitored ever since. Salmonella is more prevalent in Skåne, Södermanland, and Stockholm counties, among other places, but single findings are made in other counties. This bacterium is found more in wild boar found dead or sick but also in healthy hunter harvested boar. So good slaughter hygiene is very important when dressing and handling shot wild boar as salmonella can be present in the intestines of clinically healthy animals.



Trichinella

In 2025, a single case of *Trichinella* was detected in wild boar.

Of 158,861 wild boar carcasses tested in 2025 in Sweden, only one animal tested positive for *Trichinella*, a wild boar shot in Stockholm county. This parasite occurs very sporadically in Sweden and can appear anywhere in the country. Therefore, it is important to test all wild boar for human consumption. Other wildlife species tested in 2025 were 285 brown bears, 13 badgers, three seals and three beavers, all these were *Trichinella* negative.

TRICHINELLA

- *Trichinella* is a small roundworm that is transmitted when muscle tissue of one infected animal is consumed by another animal, also to humans if such meat is insufficiently heated.
- **Wild boar and brown bear** that are shot during hunting must be examined for *Trichinella* if the carcass is to be sold for human consumption.
- Several laboratories do *Trichinella* screening. All *Trichinella* findings are sent to SVA as the reference lab in Sweden, and then to the EU reference lab in Italy for species typing.

IMAGE 15. A dead young wild boar reported on rapporteravilt.sva.se, a contribution to the surveillance of both salmonella and African swine fever. Photo: private

CWD

All 39 cases with clinical suspicion of CWD in moose in 2025 were negative.

In neighbouring Norway, 11,609 animals were tested for Chronic wasting disease (CWD) in 2025: 2,643 moose, 4,329 wild reindeer, as well as 1,585 roe deer and 1,484 wild deer. It should be added that in Norway, all available cervids are analysed, including healthy hunter harvested animals. Of all deer examined, only three were positive for CWD in 2025, all were adult moose.

Surveillance of CWD in Sweden targets cases suspected of clinical CWD disease, which is any adult cervid with two or more signs of CWD: emaciation, neurological symptoms, behavioural changes, increased salivation or increased urination. Emaciated cervids found dead are also screened unless there is another obvious cause for the emaciation.

Nilfeber- och Usutuvirus

All 167 dead birds analysed for these viruses in 2025 were negative.

The closely related Nile fever viruses and Usutu viruses are spreading in Europe. Both circulate between mosquitoes and birds and can cause serious disease outbreaks and mortality in some bird species. Nile fever virus can also infect horses and other mammals, including humans. SVA has been monitoring these viruses in birds found dead since 2019.

IMAGE 16. Blackbirds found dead are screened for West Nile Fever virus and Usutu virus. Photo: SVA



Remote wildlife necropsy

SVA's wildlife disease surveillance is largely based on necropsies of fallen wildlife submitted by postal services. A maximum parcel weight of 20 kg limits which cases can be submitted. A project for developing remote wildlife necropsies looks at new digital solutions aiming to acquire more diagnoses from our larger wildlife species.

When wild animals over 20 kg are found dead, the possibility of sending whole animal carcasses via standard postal shipment to SVA is limited. Sometimes parts of an animal can be submitted, which can provide some relevant answers, but makes it impossible for a full examination of the animal. In some cases, the carcass may be transported to SVA on a trailer or truck by the finder. Since Sweden has long transport distances and SVA is the only lab for wildlife necropsies, transports can then be unreasonably long. Many large carcasses risk being left in the forest without any diagnostics made.

To meet the challenges of long distances to necropsy facilities, alternative solutions have been developed in some countries. One solution is a digital tool where a suitable person opens the carcass in the field, photographs organs and lesions according to a standardized protocol and send them in by email. A pathologist assesses the images at the lab and can make a tentative classification of type of diagnosis. However, the tool is adapted to farm animals and not wildlife, which means that the tools must be adapted to wildlife in Sweden and the spectrum of known diseases here. So far, knowledge about existing digital systems has been acquired, to see if they can be used for wildlife under Swedish conditions. Standardised protocols have been developed for opening

carcasses in the field for Swedish wildlife and further development of our own digital solutions can now take place. Through ongoing collaboration with the Swedish Hunting and Wildlife Management Association regarding wildlife sampling, we see opportunities for more cost-effective collection of data and samples regarding disease and mortality in wild animals.



IMAGE 17. Preparing for field necropsy and sampling of beef cattle during a study trip in Canada. Carcasses are opened in the field, photographed, and samples for further diagnostics at a regional lab are taken. Photo: Karin Olofsson Sannö, SVA

Rats as disease carriers

Rats can be carriers of zoonotic infectious agents. As they live in proximity with humans, there is a potential risk of spread of disease to both humans and domestic animals. This study, as some previous studies show that Swedish rats in urban areas can carry *Leptospira* bacteria.

What diseases Swedish wild brown rats may carry has previously been relatively unknown and seldom studied. It is very unusual for SVA to receive brown rats for the general wildlife disease surveillance, so the project "Rats as carriers of infection" was started. In collaboration with SLU and Uppsala University, wild brown rats were examined for infections and lesions.

In 2024, 249 trapped rats from Malmö and Uppsala were acquired from regular pest control by the company Anticimex. The rats were sampled for analysis of bacteria such as *Leptospira*, *Salmonella*, *Bartonella* and *Francisella*, and for viruses such as TBE and hepatitis E. In 2025, 80 rats were collected from Gothenburg. For these, results are so far only available regarding *Leptospira*.

The trapped rats were mainly young, immature animals that are probably more easily trapped than older individuals. Only a few animals had lesions, one with pneumonia and one with a generalised bacterial infection, probably from a bite injury, and one with congenital malformation of the spine. Six rats were carriers of *Leptospira interrogans*, a bacterium that

can spread with rat urine to humans, dogs and foxes and cause serious illness. *Bartonella*, TBE and hepatitis E analyses were all negative. Analyses of other zoonotic agents are ongoing.

Previous studies have shown that large, old rats are more likely to have lesions. The large proportion of juvenile rats in this study may have led to an underrepresentation of actual disease prevalence in the studied areas. We conclude that the young rats examined in this study were mostly healthy with few disease findings, and that some carried bacteria with zoonotic potential.



IMAGE 18. Rat trapped in an urban area, examined for contagious diseases at SVA. Photo: SVA

Marine mammals 2025

Nineteen porpoises, a porpoise foetus, 33 seals and a Sowerby's beak whale were investigated within the Programme for Health and Disease Surveillance of Marine Mammals 2025, a long-term effort to be able to find trends regarding health, diseases and causes of death in these hard-to-reach animals.



IMAGE 19. A dead, stranded harbour porpoise (25-VLT002847) was reported to SVA and NRM in 2025. Photo: J. Stedt.

Health and disease surveillance 2025

Below is a summary of the marine mammal work that was done at SVA in 2025. A total of 53 marine mammal carcasses were examined at SVA. Nineteen harbour porpoises and one full-term foetus from a pregnant female, and 33 seals were examined: 14 grey seals, 15 harbour seals and four ringed seals. Two further grey seals were sampled in the field. In addition, 97 sample sets from hunter harvested or by-caught seals were analysed for avian influenza virus. Also, one Sowerby's beaked whale (*Mesoplodon bidens*) was examined during 2025. For more details, and a description of interesting findings, see the report "Health, diseases and causes of death in marine mammals 2025" available at sva.se.

HEALTH AND DISEASE SURVEILLANCE OF MARINE MAMMALS

The Swedish Veterinary Agency (SVA), together with the Swedish Museum of Natural History (NRM), has been running a health and disease surveillance programme for marine mammals since 2020, on behalf of the Swedish Agency for Marine and Water Management (HaV). The surveillance programme covers stranded (found dead with unknown cause of death) and bycaught (accidentally caught in fishing gear) cetaceans, and stranded seals. SVA and NRM collect data to document where, when and why marine mammals die. A number of reported dead animals are taken in for necropsy and sampling to analyse and investigate health, diseases and causes of death. The programme, stored samples and data contribute to our knowledge about our marine mammals and to future research.

Harbour porpoise

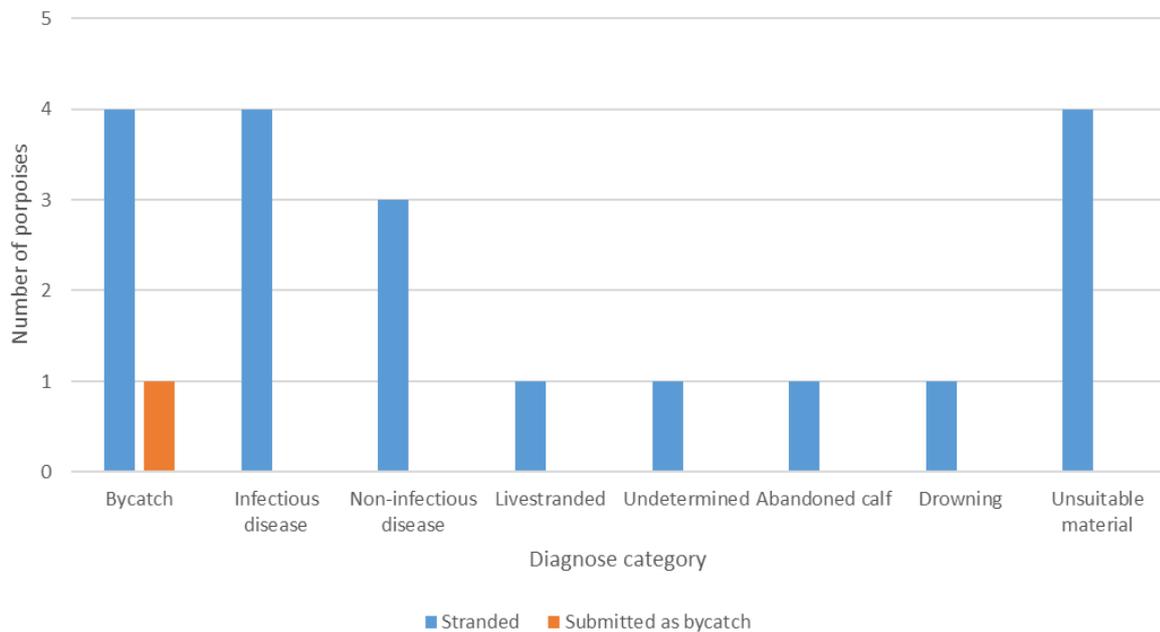
In 2025, 93 stranded, dead porpoises were reported, of which 17 carcasses were in good enough condition to be examined at SVA. One porpoise was submitted as a bycatch by a fisherman. The main cause of death in the porpoises was bycatch (Figure 1).

Avian influenza was not detected in any of the porpoises studied in 2025. In most porpoises that were necropsied in 2025, the tonsils were missing due to scavenging, thus only a few could be tested for erysipelas bacteria (n=8), and all were negative.

IMAGE 20. A young, emaciated harbour porpoise is examined at SVA. Photo: SVA.



FIGURE 1. Primary cause of death or diagnosis for harbour porpoises examined at SVA in 2025.



Other cetaceans

In early August, two Sowerby's beaked whales stranded in the Kungsbacka fjord on the west coast. With the help of local people and the Coast Guard, the whales were pulled free, but one was found dead a few days later in Frillesås. The other whale stranded dead on Laesø, Denmark. The beaked whale in Frillesås was transported to SVA for investigation of the cause of death (Figure 2).

It was a juvenile, immature female in a medium body condition with no signs of disease. A CT scan of the head at SLU's equine clinic was done for examination of inner ears. A few weeks later, another report of a dead beaked whale near the border to Norway. This specimen was too decomposed to be examined.

IMAGE 21. A beaked whale examined by veterinarians at SVA. Photo: SVA



SEALS

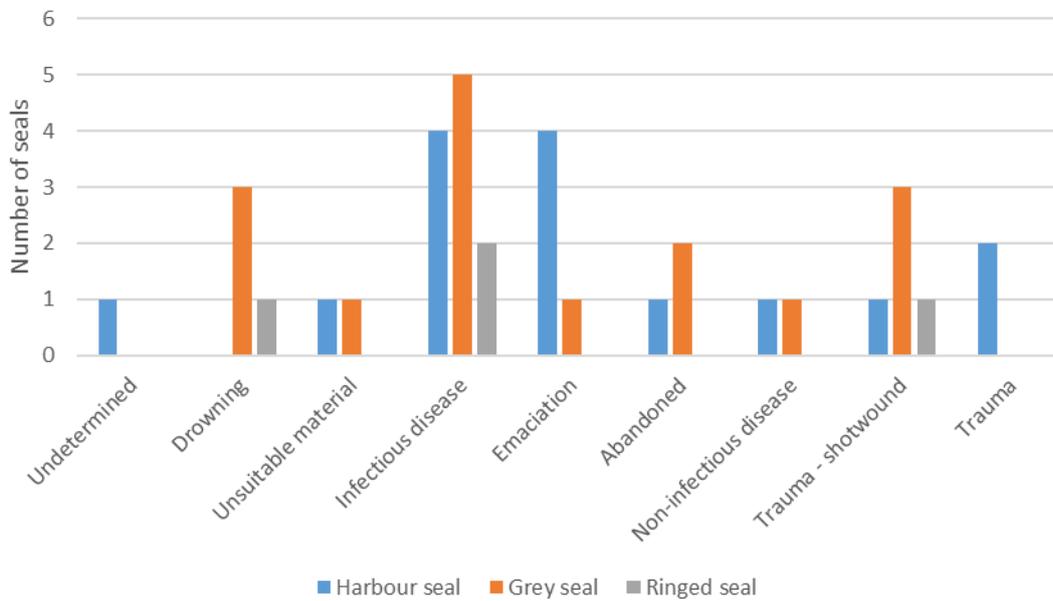
In 2025, 617 reports of dead seals were received via the reporting page. A total of 33 seals were examined at SVA. The most common cause of death was infectious disease, most often caused by bacteria or parasites (Figure 2).

Avian influenza was not detected in examined, stranded seals in 2025 (n=33). However, antibodies were detected in five out of 97 analysed grey seals from the hunted and by-caught seals, indicating previous infection with avian influenza virus. None of the examined seals were positive for phocine distemper virus.



IMAGE 22. A dead ringed seal is examined at SVA. SVA

FIGURE 2. Main cause of death or diagnosis for seals examined at SVA 2025



Large carnivores 2025

SVA works on behalf of the Swedish Environmental Protection Agency with handling and examination of all the large predators bear, lynx, wolf and wolverine that are found dead, culled or hunter harvested, as bodies or samples must be sent to SVA.

SVA handled 687 large carnivores in 2025. The majority are carcasses from licensed hunts or other management-related measures. Secondly, traffic-related deaths are the most common. The most common disease in some large carnivores is sarcoptic mange, which usually leads to emaciation. Forensic investigations are carried out on cases that are part of a criminal investigation.

SVA handles carcasses and samples from these large carnivores by agreement and funding by the Swedish Environmental Protection Agency (EPA) and is a part of the management of the large carnivore populations. The EPA regulations NFS 2002:18 42§ state that any carcasses or animal parts of these species that are found must be reported to the police, who then hand them over to SVA for examination.

When large carnivores are culled during protective hunting or licensed hunts, the carcass is nowadays property of the holder of the hunting rights or the landowner. However, conditions of these hunts usually are that certain parts or samples are handed over to SVA. The large carnivore work at SVA is an important part of investigating the health and disease status of these populations.

With similar monitoring over many years, trends of diseases and causes of death can be followed over time.

Below are summaries of the causes of death and disease issues of bears, wolverines, lynx and wolves examined at SVA in 2025. More details are published in the SVA report on large carnivores 2025, as well as in the reports published after each licensed hunt, in 2025 for wolf, lynx and bear hunts, which can be found on SVA's website sva.se.

TABLE 5. The number of large carnivores submitted to SVA 2021-2025. Source: Annual report large carnivores 2021-2025.

| Art | 2021 | 2022 | 2023 | 2024 | 2025 |
|------------------|-------------|-------------|-------------|-------------|-------------|
| Bear | 596 | 737 | 767 | 557 | 434 |
| Lynx | 168 | 186 | 271 | 216 | 171 |
| Wolf | 57 | 49 | 91 | 64 | 60 |
| Wolverine | 16 | 15 | 36 | 35 | 22 |
| Total | 837 | 987 | 1165 | 872 | 687 |

TABLE 6. The number of large carnivores submitted to SVA per year, for the period 2021–2025, as carcass, part of carcass, or tissue sample set. Source: SVALA and Annual report large carnivores 2021–2025.

| Mortality | | 2021 | 2022 | 2023 | 2024 | 2025 |
|--|--------------|-------------|-------------|-------------|-------------|-------------|
| | Bear | 463 | 623 | 643 | 491 | 413 |
| | Wolf | 27 | 28 | 57 | 35 | 25 |
| Licensed hunt | Lynx | 81 | 106 | 182 | 137 | 83 |
| | Wolverine | - | - | 22 | 23 | 4 |
| | Total | 571 | 757 | 904 | 686 | 525 |
| | Bear | 111 | 87 | 92 | 50 | 15 |
| | Wolf | 18 | 14 | 25 | 19 | 20 |
| Protective hunt (Incl. §28) | Lynx | 26 | 25 | 25 | 19 | 23 |
| | Wolverine | 13 | 9 | 7 | 8 | 15 |
| | Total | 168 | 135 | 149 | 96 | 73 |
| | Bear | 10 | 15 | 15 | 11 | 5 |
| | Wolf | 6 | 7 | 3 | 5 | 7 |
| Fallen wildlife - traffic | Lynx | 42 | 35 | 48 | 48 | 44 |
| | Wolverine | 2 | 2 | 1 | 1 | 1 |
| | Total | 60 | 59 | 67 | 65 | 57 |
| | Bear | 1 | 4 | 5 | 2 | 1 |
| | Wolf | 5 | - | - | 1 | 4 |
| Fallen wildlife – other mortality | Lynx | 14 | 9 | 7 | 12 | 14 |
| | Wolverine | - | 4 | 1 | 2 | 1 |
| | Total | 20 | 17 | 13 | 17 | 20 |
| | Bear | 5 | 4 | 5 | 3 | 4 |
| | Wolf | 2 | 1 | 4 | 4 | 4 |
| Forensic cases | Lynx | - | 2 | - | - | 3 |
| | Wolverine | 1 | - | 3 | 1 | 1 |
| | Total | 8 | 7 | 12 | 8 | 12 |

Brown bear (*Ursus arctos*)

434 carcasses or parts of bear individuals were submitted to SVA in 2025. The majority was from licensed hunting. Five bears were killed in traffic. Four bears were submitted as forensic cases. During the examinations, some cases of old or recent naturally occurring injuries were found. A few minor findings, such as deformities, parasites and dental issues, were made. Based on the surveillance, the bear population is considered to have a good health situation.

Wolverine (*Gulo gulo*)

22 wolverines were received during the year, with 15 from protective hunting and four from licensed hunting (these latter were felled during the 2024 licensed hunt but received by SVA in 2025). A licensed hunt of wolverines did not occur in 2025. One animal had died in train traffic, and one had a diagnosis of undetermined blunt trauma. One female was pregnant with three fetuses (about 2.5 cm in size). Moderate tooth wear, some missing or fractured teeth were noted in four wolverines. One wolverine was submitted as a forensic case. Based on the animals examined at SVA, wolverines can be considered to have a good health condition. Most years, no serious diseases are found.

Lynx (*Lynx lynx*)

171 lynx were received during the year, of which 83 were from licensed hunting and 22 culled in protective hunting. As in previous years, traffic accidents were the most common cause of death in found dead lynx. A few minor findings were noted during the necropsies. Two lynx had an extra adrenal gland and one individual was cryptorchid. Nine lynx had sarcoptic mange, which is the most common serious infectious disease in this population. Otherwise, the health of the lynx population is considered to remain good.

Wolf (*Canis lupus*)

60 wolves were submitted to SVA, the majority had been culled in licensed or protective hunting. In the category of fallen game, six wolves had died in traffic accidents, one wolf was killed by predators, probably by another wolf. Remnants of a canid was found, only some bones and fur. Examination and DNA analysis of the bones confirmed that it was a wolf, and old skeletal injuries were found. Five males were cryptorchids. A few animals had malocclusion or dental defects. Echinococcus tapeworm has not been detected in any of the sampled wolves. Based on the animals examined, the wolf population is considered to have a good health status in general, despite the presence of lesions such as cryptorchidism or minor malocclusions, that usually are not critical for the health of the individual.

IMAGE 23. Wolf with a dental anomaly, overbite. Photo: SVA.



About wildlife disease surveillance in Sweden

The Government instructions to SVA (2009:1394) state that this veterinary expert authority shall follow and analyse the disease situation in Swedish wildlife.



Swedish Veterinary Agency

SVA is the only veterinary laboratory in the country working with systematic disease surveillance of wild animals. The work is mainly based on necropsies of dead wildlife or samples from sick, euthanised animals.

Reports of found dead or sick wildlife are collected from the interested public and appropriate cases are submitted for investigation.

This citizen science is supplemented by media scanning and networking for early warning of approaching new infections and timely need for increased surveillance.

Targeted research projects are carried out to deepen knowledge or to develop and validate new diagnostics for wildlife species.

The wildlife disease surveillance programme SVA-EPA

The wildlife disease surveillance was expanded with a programme adopted in 2006 in collaboration with the Swedish Environmental Protection Agency, EPA as a complement to the existing general wildlife disease surveillance, to also include (more) targeted disease surveillance of wild mammals and birds in Sweden.

Wildlife disease council

are experts and officials from the Swedish EPA and SVA, with the task of exchanging information about wildlife and wildlife disease surveillance and jointly discussing appropriate targeted actions and efforts for SVA in this area. In 2025, the council consisted of Klas Allander, David Schönberg-Alm and Erica Stigblom from the Swedish EPA. From SVA, Dolores Gavier-Widén, Erik Ågren and Aleksija Neimanis have participated, with Henrik Uhlhorn as deputised secretary. During the year there were two meetings with minutes, and email communication.

Financing

The wildlife work at SVA is mainly financed by grants from the Swedish Wildlife Management Fund, the Swedish Environmental Protection Agency, the Swedish Agency for Marine and Water Management, in addition to government grants and targeted project funded by the Swedish Board of Agriculture.

The Wildlife Management Fund

is a research fund based on state wildlife management fees that all persons who participate in hunting in Sweden must pay. SVA received SEK 5 million from the fund for the year 2025. Focus is placed on the health and diseases of game species, although wildlife in general is included in the work at SVA.



Government funding

The prerequisite for conducting wildlife operations is government appropriations that finance infrastructure such as autopsy facilities and destruction facilities. The grant also finances staff for autopsy activities at SVA and other disease surveillance.

The Swedish Environmental Protection Agency

gives a special assignment and funding to SVA for work with large carnivores. The EPA also provides emergency project grants to SVA to investigate emerging disease outbreaks, mortality or other relevant efforts concerning wildlife animals.



The Swedish Board of Agriculture

give grants for targeted surveillance of specific infections in wildlife, after an annual application procedure by SVA. In 2025, funded projects were for monitoring of avian influenza, *Trichinella*, and for salmonella and African swine fever in wild boar.



Swedish Agency for Marine and Water Management

funds the work by SVA and the Swedish Museum of Natural History health and disease monitoring programme for marine mammals. As a part of Swedish environmental monitoring, deaths and strandings of marine mammals is monitored, necropsies, data and sample collection is done for research and management purposes.

Wildlife publications 2025

Below is a selection of scientific publications from SVA concerning wildlife. Names of authors from the Wildlife group or SVA in general are in bold font.

Rolandson, C.M., Kleven, O., Arntsen, L.G., Bergqvist, G., Davey, M.L., Grøntvedt, C.A., Kindberg, J., Odden, J., Rivrud, I.M., Rosvold, J., Horntvedt Thorsen, N., **Ågren, E.** and Mysterud, A. (2025), Using high-density SNP genotyping to determine the origin of wild boar dispersers outside the geographic range margins in Norway. *Wildlife Biology*, 2025: e01342. <https://doi.org/10.1002/wlb3.01342>

Bo Yuan, Cynthia A. de Wit, **Aleksija Neimanis**, and Anna Maria Roos. Tracing Hydrophobic Pollutants in the Deep Sea: A Case Study on Sowerby's Beaked Whales. *Environmental Science & Technology Letters* **2025** 12 (5), 632–639. DOI: 10.1021/acs.estlett.5c00115

Estruch, J., Cavadini, P., Lavazza, A., Capucci, L., Abrantes, J., Lopes, A. M., Almeida, T., **Neimanis, A.**, Lavín, S., Rouco, C., Serrano, E., & Velarde, R. (2025). Pathological and serological insights into Lagovirus diseases dynamics in the European brown hare (*Lepus europaeus*): A nine-year longitudinal study. *Veterinary Microbiology*, 304, 11, <https://doi.org/10.1016/j.vetmic.2025.110478>

Waldo, A., **Neimanis, A.**, **Agren, E.**, **Nöremark, M.**, & Johansson, M. (2025). Understanding People's Motivation to Contribute to Wildlife Disease Surveillance. *Society & Natural Resources*, 38(6), 542-562. <https://doi.org/10.1080/08941920.2024.2449034>

Petitguyot, M. A. C., ...**Aleksija Neimanis**, ... **Jasmine Stavenow Jerremalm**,, ... Pierce, G. J. (2025). European stranding networks as a tool for monitoring marine mammal populations (Part I): towards optimising the functioning of networks. *Ices Journal of Marine Science*, 82(11), 27 <https://doi.org/10.1093/icesjms/fsaf194>

Stedt, J., Brokmar, L., **Neimanis, A.**, Englund, W. F., Carlsson, P., & Roos, A. (2025). Combining DNA metabarcoding with macroscopic analysis increases the number of detected prey taxa in the estimated diet for harbour porpoises [Article]. *Frontiers in Marine Science*, 12, 22, <https://doi.org/10.3389/fmars.2025.1517330>

Spörndly-Nees, Ellinor, Giulio Grandi, **Elina Thorsson**, Tomas N Gustavsson and **Anna Omazic**. 2025. 'An Emerging Role for Ticks as Vector of Tularaemia in Sweden', *Veterinary Medicine and Science*, Vol 1, Issue 1 11:e70094



IMAGE 25. *Ixodes ricinus* female tick, swollen and blood-filled. If it carried an infection such as tularaemia bacteria, it may have transmitted the infection to the next animal or human it bites. Photo: SVA

Reports and popular science publications

Smittläget i Sverige för djursjukdomar och zoonoser 2024. Obduktioner av vilda djur, Echinokockos **E. Ågren**, Tularemi, **H. Uhlhorn**.

SVA annual report 2024. Wildlife. **E. Ågren**

Wildlife disease surveillance in Sweden 2024. SVA report 115/2025. Editor: Erik Ågren

Marine mammal health, disease and causes of death (Hälsa, sjukdomar och dödsorsaker hos marina däggdjur) 2024. SVA report 107/2024. **M. Naalisvaara Engman, A. Neimanis, G. Averhed, N. van de Velde, E. Thorsson**, Anna Roos

Licensed wolf hunt 2025. SVA 110/2025 **E Höök, E Ågren**

Licensed lynx hunt 2025. SVA 120/2025 **E Höök, E Ågren**

Licensed bear hunt 2025. SVA132/2025. **E Höök, E Ågren**

Presentations 2025, selection



36th European Cetacean Society conference, 12-16 May, Ponta Delgada, Portugal

Moa Naalisvaara Engman, Aleksija Neimanis, Elina Thorsson Norbert van de Velde, Gustav Averhed, Julia Tibell, Ulrika Larsson Pettersson Causes of death and pathological findings in stranded in seals in Sweden 2020–2024. Poster presentation.

Aleksija Neimanis, Elina Thorsson, Anna Roos, Moa Naalisvaara Engman, Gustav Averhed, Norbert van de Velde, Eva Watrang, Helena Eriksson, Robert Söderlund. Significance of *Erysipelothrix rhusiopathiae* in free ranging harbour porpoises (*Phocoena phocoena*). Oral and poster presentation.

Mariana Macieira, Linnea Cervin, **Elina Thorsson** Anthropogenic impact on Baltic and Skagerrak seals. Poster presentation.

Bo Yuan, Cynthia de Wit, **Aleksija Neimanis**, Anna Roos. Hydrophobic Pollutants in the Deep Sea: A Case Study on Sowerby's Beaked Whales. Poster presentation.



9th International Moose Symposium, 23 - 27 June, Östersund

Karin Olofsson-Sannö, Erik Ågren, Jonas Malmsten, Gustav Averhed, Caroline Bröjer, Dolores Gavier-Widén, Gete Hestvik, Aleksija Neimanis, Elina Thorsson, Henrik Uhlhorn, Torsten Mörnér. 77 years of moose disease surveillance at the Swedish Veterinary Agency.



WILDLIFE DISEASE ASSOCIATION 2025

73rd Wildlife Disease Association Conference, 27 July - 1 August, Victoria, BC, Canada

Erik O. Ågren, Gustav Averhed, Elina Thorsson, Mats Lindblad, Heléne Duvgren, Kristina Busch, Eva Osterman Lind. From surveillance to action – collaboration to manage *Echinococcus multilocularis* hotspots in Sweden. Poster presentation.

Karin Olofsson-Sannö, Erik O. Ågren, Aleksija Neimanis, Erika Chenais. Community partnership for successful eradication of African Swine Fever: Challenges and lessons learned from the 2023 outbreak in wild boar in Sweden.



ESVP/ECVP conference, Turin, Italien, 27-30 Aug.

Erik Ågren, Emma Höök, Gustav Averhed, Amy Bowman, Henrik Uhlhorn. Neoplasias in free-ranging wolves in Sweden – four cases from 77 years of wildlife disease surveillance. Conference poster.

Outreach

Inspection of large carnivores, course

In June, the annual inspection course was held at SVA together with the organizer Viltskadecenter (SLU), for the County Administrative Board's inspectors who will inspect hunter harvested large carnivores.

Expert opinions

Environmental Protection Agency

Opinion on regulations on wildlife traffic accident search teams (Naturvårdsverkets förslag till föreskrifter om trafikeftersök vid viltolyckor).

Opinion on regulations on baiting for hunting (förslag till föreskrifter om åtling och användning av åtlar vid jakt samt tillhörande vägledning).

Opinion on guidelines on protective hunting of cervids (riktlinjer för beslut om skydds jakt på hjortdjur).

Ministry of Rural affairs and Infrastructure

Opinion on some changes in the legislation regarding hunting (delbetänkande Vissa förändringar i jaktlagstiftningen SOU 2025:32)

Opinion on a new national authority on wildlife management (betänkandet En ny nationell myndighet för viltförvaltning SOU 2025:50)



Continuing education

SVA is a training centre for veterinary specialists in pathology, and wildlife

In 2025, the Wildlife Section has had a veterinary resident in specialist training at ECZM (European College of Zoological Medicine), in the specialty of Wildlife Population Health.

At the Wildlife Section there are two Diplomates within ECZM, now responsible for training and supervision respectively, for this resident. The training is partly funded by the Marie-Claire Cronstedt Foundation.

In addition, the department has four veterinarians with European or American specialist expertise in veterinary pathology (ECVP and ACVP, respectively).

Expert groups

The wildlife sections staff has in 2025 been active in the following expert groups and networks

Wildlife Disease Council

Dolores Gavier-Widén, Erik Ågren, Aleksija Neimanis. Co-opted: Henrik Uhlhorn.

SVA Wildlife Disease Surveillance Council

Karl Ståhl, Maria Nöremark, Erik Ågren, Aleksija Neimanis.

SVA Scientific Council Aleksija Neimanis, Ellinor Spörndly-Nees

SVA Environmental and Climate Committee Emma Höök

SVA Zoonosis Centre Working Group

Henrik Uhlhorn för POV.

SVA R&D Coordination Group

Ellinor Spörndly-Nees

SVA Expert Group African swine fever

Erik Ågren

SVA Poultry Forum Caroline Bröjer

Hoofed Wildlife Council (Board of Agriculture), SVA representative: Gustav Averhed

Board of Agriculture wildlife reference group

SVA representative: Erik Ågren

Reference group for invasive species

(Swedish Association for Hunting and Wildlife Management), SVA representative: Caroline Bröjer

Marine information centrals

SVA representative: Moa Naalisvaara Engman

EWDA European section, Wildlife Disease Association. EWDA Chair: Erik Ågren

EWDA Network for Wildlife Health Surveillance in Europe: Committee member Aleksija Neimanis

NWDA, Nordic section of Wildlife Disease Association: Board member Henrik Uhlhorn

Wildlife Health Community of Practice

Erik Ågren

ECZM European College of Zoological Medicine, Wildlife Population Health specialty

Caroline Bröjer *examination committee, resident programme director*, Erik Ågren *supervisor*

Journal of Wildlife Diseases Associate editors: Erik Ågren, Aleksija Neimanis

WOAH Focal point for wildlife Erik Ågren

HELCOM expert group marine mammals

Aleksija Neimanis, Elina Thorsson, Norbert van de Velde



IMAGE 2.6. Marine mammals necropsied at SVA contribute to SVA's expert knowledge of these species.



Healthy wildlife – Safe humans

The Swedish Veterinary Agency, SVA, is an expert authority that, by diagnostic services, research and advice, strengthens Sweden's ability to combat animal diseases posing a threat to critical societal functions. SVA's motto is: Healthy animals – Safe people.



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