

*Periodic global update on exceptional disease events of terrestrial wildlife reported to WOA
Situation report period covered – March / May 2023*

Wildlife co-exists alongside humans and domestic animals around the world. Each species contributes to the careful balance of the ecosystems in which they live. The health of wildlife is deeply entwined with the health of other animals, the environment and humans. By protecting wildlife health, we safeguard biodiversity and invest in a healthier, more sustainable future.

The World Organisation for Animal Health (WOAH) closely monitors the situation of select diseases in terrestrial wildlife, based on reports provided by Members. They are legally bound to provide disease information when they become members of the Organisation. This includes about 80 diseases listed by WOA¹, as well as emerging diseases². Members can also send, on a voluntary basis, information to WOA on relevant events for other diseases.

The objective of the periodic situation report is to provide better visibility to exceptional disease events in wildlife for communication purposes through mandatory reporting to WOA for listed and emerging diseases and voluntary reporting of any other relevant information³. The events highlighted in this report represent exceptional changes in global disease dynamics in wildlife, that have been detected and reported by National authorities. Stable situations of wildlife diseases are not in the scope of this report. This data may have some bias, by being either incomplete or presenting variations in data granularity (depending on the Member reporting). However, it is the official global reference of animal health information reported by national authorities, using a standard template and a standard data format. Data used to produce this report are available upon request.

Surveillance activities in wildlife

Accurate reporting on disease situations in wildlife relies on a proper surveillance system in place at country level. National resources allocated to surveillance of diseases in wildlife are sometimes limited and this has an impact on the accuracy of the information reported. To provide background information on surveillance in wildlife and enable a better understanding of the quality and gaps in reporting, a map showing the

¹ https://www.woah.org/en/what-we-do/standards/codes-and-manuals/terrestrial-code-online-access/?id=169&L=1&htmlfile=chapitre_oie_listed_disease.htm

² means a new occurrence in an animal of a disease, infection or infestation, causing a significant impact on animal or public health resulting from: a) a change of a known pathogenic agent or its spread to a new geographic area or species; or b) a previously unrecognised pathogenic agent or disease diagnosed for the first time.

³ Although Member Countries are only required to notify listed diseases and emerging diseases, they are encouraged to provide the OIE with other important animal health information.

number of diseases listed by WOAHA for which surveillance is reported in wildlife among the 81 diseases listed in 2019, is provided in figure 1. In 2019, 165 Members and non-Members reported surveillance activity in wildlife for at least one listed disease. On average countries report surveillance for 19 listed diseases in wildlife (minimum = 0; maximum = 81) with significant differences among and within regions.

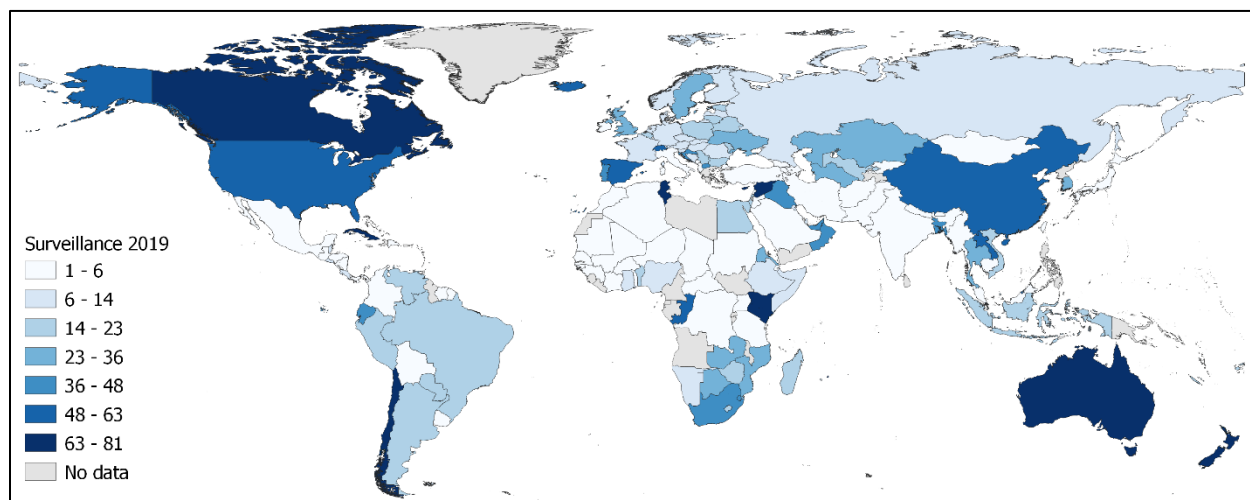


Figure 1. Number of diseases listed by WOAHA for which surveillance is reported in terrestrial wildlife (data referring to situation reported by countries to WOAHA in 2019 – being the most recent year with almost all countries having sent reports).

Recent exceptional disease events in terrestrial wildlife (which were reported for the three months covered by this report: from March to May 2023)

In total 3,692 new outbreaks with 14,864 cases of [exceptional disease events](#)⁴ (Figure 2) were reported in terrestrial wildlife during the period, through WOAHA's early warning system.

⁴ Based on the criteria listed in Article 1.1.3.1 of the WOAHA Terrestrial Animal Health Code

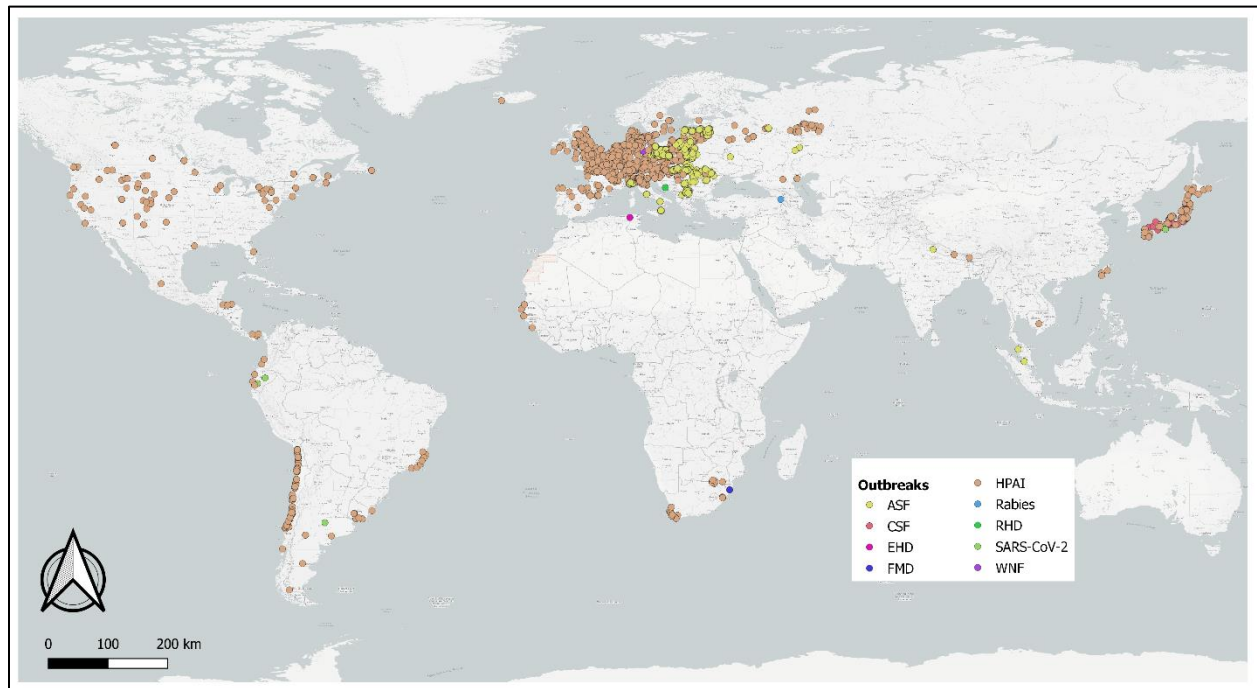


Figure 2. New outbreaks of exceptional disease events reported during the period in terrestrial wildlife. ASF stands for infection with African swine fever, CSF stands for infection with Classical swine fever, EHD stands for infection with Epizootic Hemorrhagic Disease, FMD stands for infection with Foot and Mouth Disease, HPAI stands for Infection of birds other than poultry, including wild birds, with influenza A viruses of high pathogenicity, RHD stands for Rabbit Haemorrhagic Disease, WNF stands for West Nile Fever.

Outbreaks were reported in countries in Africa, the Americas, Asia, and Europe (Figure 3), specifically of infection with African swine fever (ASF), infection with Classical swine fever (CSF), infection with Epizootic hemorrhagic disease (EHD), infection with Foot and mouth disease (FMD), Infection of birds other than poultry, including wild birds, with influenza A viruses of high pathogenicity (HPAI), Rabbit haemorrhagic disease (RHD), infection with Rabies virus (rabies), infection with SARS-CoV-2 in animals (SARS-CoV-2), West Nile Fever (WNF). A higher density of outbreaks can be observed in the Europe Region, potentially linked to more extensive wildlife surveillance and/or reporting in the region. The diseases with higher number of outbreaks reported were ASF and HPAI, while only one outbreaks was reported for each of the following diseases: EHD, FMD, RHD, rabies, and WNF. Cases were reported in 192 different wild species belonging to 22 orders (Table 1, Table 2, and Annex 1).

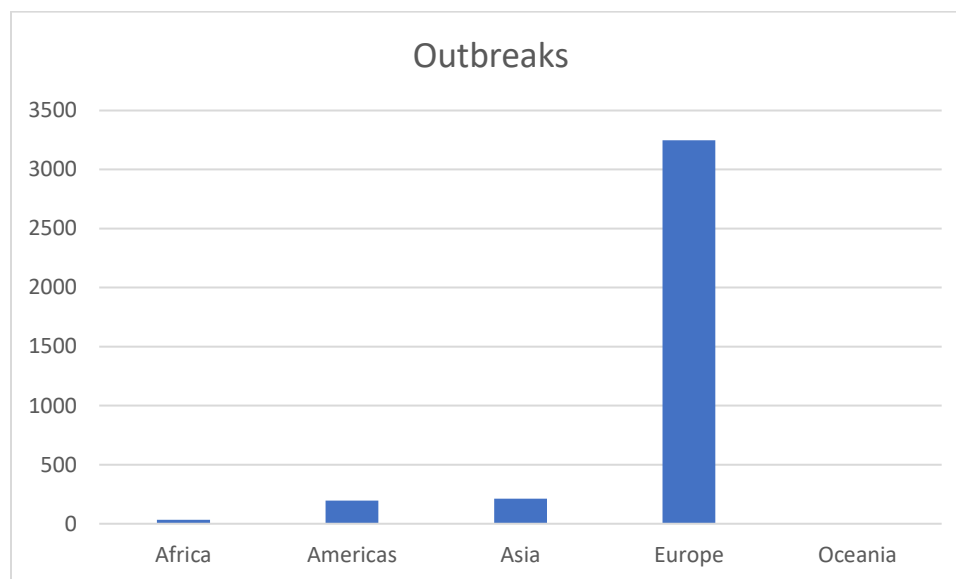


Figure 3: Number of outbreaks reported during the period and split by world region

Table 1 – Number of outbreaks reported by disease and information on zoonotic potential of the disease.

Disease	Outbreaks reported	Zoonotic disease
ASF	1962	No
CSF	95	No
EHD	1	No
FMD	1	No
HPAI	1626	Yes
RHD	1	No
Rabies	1	Yes
SARS-CoV-2	4	Yes
WNF	1	Yes

Table 2 - Number of cases reported by order, and animal species; conservation status of each species, based on IUCN red list of threatened species (database accessed on 06 July 2023) This table provides the list of species with threatened status. The full list of species reported is provided in annex 1.

Disease	Cases	Order	Species (scientific name)	Species (common name)	Endangered status*
HPAI	1	Accipitriformes	<i>Aquila heliaca</i>	Imperial Eagle	VU
SARS-Cov-2	16	Primates	<i>Ateles fusciceps</i>	Black-headed Spider Monkey	EN
HPAI	3	Suliformes	<i>Bubo scandiacus</i>	Snowy Owl	VU
HPAI	1	Charadriiformes	<i>Fratercula arctica</i>	Atlantic Puffin	VU
HPAI	23	Gruiformes	<i>Grus monacha</i>	Hooded crane	VU
HPAI	4	Charadriiformes	<i>Haematopus ostralegus</i>	Eurasian Oystercatcher	NT
HPAI	2	Carnivora	<i>Lontra felina</i>	Marine otter	EN

HPAI	13	Trogoniformes	<i>Morus capensis</i>	Cape gannet	EN
HPAI	2	Charadriiformes	<i>Numenius arquata</i>	Eurasian Curlew	NT
SARS-Cov-2	2	Carnivora	<i>Panthera leo</i>	Lion	VU
HPAI	32	Phaethontiformes	<i>Pelecanus thagus</i>	Peruvian pelican	NT
HPAI	1717	Trogoniformes	<i>Phalacrocorax capensis</i>	Cape cormorant	EN
HPAI	2	Phaethontiformes	<i>Platalea minor</i>	Black-faced spoonbill	EN
HPAI	1	Charadriiformes	<i>Rissa tridactyla</i>	Black-legged Kittiwake	VU
HPAI	2	Anseriformes	<i>Somateria mollissima</i>	Common Eider	NT
HPAI	89	Strigiformes	<i>Spheniscus demersus</i>	Jackass Penguin	EN
HPAI	2	Strigiformes	<i>Spheniscus humboldti</i>	Humboldt Penguin	VU
FMD	10	Artiodactyla	<i>Syncerus caffer</i>	African buffalo (Cape buffalo)	NT
HPAI	3	Charadriiformes	<i>Thalasseus elegans</i>	Elegant Tern	NT

*NT=Near threatened; VU=vulnerable; EN: endangered

Global and regional impact

Reporting and impact on biodiversity

Out of the 192 species for which cases were reported, 19 of them (10%) have a threatened status according to the IUCN classification. In particular, six are classified as “Near threaten” (NT), seven as “Vulnerable” (VU), and six as “Endangered” (EN) (figure 4). Out of the nine reported diseases, HPAI has the highest impact on species with threatened status (16), highlighting the relevant impact of this disease on biodiversity conservation. Of the three remaining species with endangered status, two were impacted by SARS-CoV-2, and one by FMD.

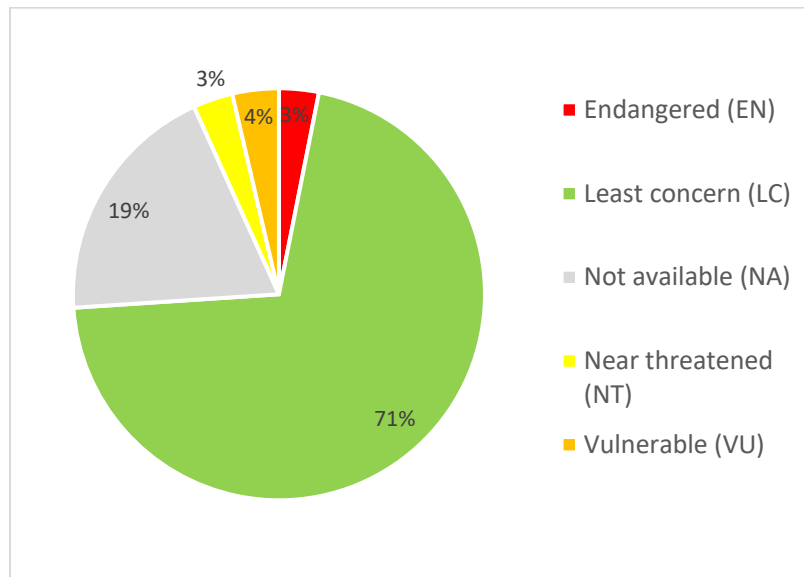


Figure 4: percentage of reported species falling under the different IUCN categories

In particular, regarding the species with endangered status, SARS-CoV2 was detected in **captive** wild Black-headed Spider Monkey (*Ateles fusciceps*), and two of them died for the infection. The species has no accurate global estimated population, with a severely fragmented range in Colombia, Ecuador, and Panama⁵. No subpopulation larger than 50 individuals have been found. Further population decline in the future is probable due to deforestation, fragmentation and hunting pressure. On the other endangered species, all impacted by HPAI, it is worth highlighting the Cape cormorant (*Phalacrocorax capensis*), with 1290 deaths reported out of a constantly declining population currently estimated at 234,000 mature individuals⁶ (0.5% of the population), and the Jackass Penguin (*Spheniscus demersus*) with 89 cases reported in South Africa (no details on the number of deaths provided). Jackass penguins are found in a few southern African countries with a global population of only 41,700 mature individuals⁷. Another endangered bird species affected by HPAI was the Black-faced Spoonbill (*Platalea minor*), with a global estimated population of only 2,250 mature individuals⁸. Finally, HPAI has been also reported in an endangered marine mammal species, the marine otter (*Lontra felina*), present in Argentina, Chile and Peru. The WOA statement on HPAI in wild mammals highlighted the need for better surveillance, reporting, control and genetic sequence sharing⁹ to better anticipate consequences of the ongoing outbreaks. The

⁵ <https://www.iucnredlist.org/species/135446/191687087>

⁶ <https://www.iucnredlist.org/species/22696806/132594943>

⁷ <https://www.iucnredlist.org/species/22697810/157423361>

⁸ <https://www.iucnredlist.org/species/22697568/119347801>

⁹ <https://www.woah.org/en/statement-on-avian-influenza-and-mammals/>

potential impact of infectious diseases on such fragmented species is significant, emphasizing the importance of surveillance and disease management in these species.

Although not affecting endangered wild species in this report, African swine fever and classical swine fever could potentially threaten endemic wild pig species leading to local population extinction, and cause generate tension for top predators that rely on wild boar as a main source of food.

Reporting and impact on Public health

Three of the diseases reported in this report have a recognised zoonotic potential: HPAI, rabies and WNF. In particular, the report of HPAI cases in 16 “unusual hosts”, belonging to Carnivora and Didelphimorphia orders (American Black Bear (black bear), American marten, Bobcat, Domestic cat, European Polecat, Gray Seal, Harbor Seal, Marine otter, North American river otter, Puma, Raccoon (Northern raccoon), Red Fox, South American Coati, South-American sea lion, Striped Skunk, Virginia Opossum), highlights the increased risk of transmission to mammals (including humans). This confirms a trend (increased number of HPAI cases reported in unusual hosts) observed since 2021 (for additional information, see the [HPAI situation reports](#)). This trend has led to a statement of WOAHA on avian influenza in mammals to increase awareness, monitoring and analysis of wild mammals, acknowledging the risk that H5N1 avian influenza may become better and better adapted to mammals¹⁰.

Rabies is one of the deadliest infectious diseases in humans, with a fatality rate of 100%. The occurrence of rabies in a new area in a fox population of Armenia can constitute a significant public health risk if human exposure is not controlled.

Finally, WNV infection is mostly asymptomatic, but a range of clinical forms and symptoms have been reported for humans, horses and birds. In humans, around 20% of cases develop influenza-like symptoms (WNF), while less than 1% develop West Nile neuroinvasive disease (WNND), with encephalitis, meningitis and acute flaccid paralysis, occasionally resulting in death.

Reporting and impact on domestic animal's health and welfare

During the period most of the outbreaks of non-zoonotic diseases reported were related to the occurrence of African swine fever in wild boar in Europe. African swine fever represents one of the main animal diseases that currently threatens livestock and food security at global level (for additional information please see

¹⁰ [Statement on avian influenza and mammals - World Organisation for Animal Health \(woah.org\)](#)

also the [African swine fever situation reports](#)). The major impact of African swine fever is linked to the establishment of a wildlife cycle that makes disease eradication challenging. Reduction of wild boar density may have indirect effects also on increase predation of livestock¹¹.

Regarding the occurrence of HPAI, it is relevant to highlight that the dynamics of the disease at the poultry/wildlife interface can also impact food security (for additional information please see also the [HPAI situation reports](#)).

A few outbreaks were reported for other diseases with potential impact on domestic animal health like CSF, EHD, FMD, and RHD. These outbreaks were mainly localised with the exception of CSF where several outbreaks were reported from Japan where a significant event is ongoing since 2018. This ongoing event represents a threat for the livestock sector.

Key messages

For a century, WOAHP has managed repositories for animal health disease monitoring data from its Members. By providing a common tool through the World Animal Health Information System (WAHIS), that is homogenous across countries, and founded on a basis of shared definitions and standards, we ensure that reporting is standardised and centralised. The information provided in this report on surveillance implementation in terrestrial wildlife shows major gaps in several parts of the world, which suggests that the number of cases reported to WOAHP is significantly under-detected and underestimated. This summary however provides a picture of what has been detected and is useful to the international community.

The information provided in this monthly situation report highlights that:

- Surveillance activities reported in wildlife is largely variable among countries and regions.
- The reporting of exceptional events affecting wildlife in March-May concerned mainly ASF and HPAI in several regions.
- Several countries reported outbreaks for ASF and HPAI, which shows the widespread existence of surveillance activities for these two diseases.
- The number of infectious diseases reported has evolved from 3 to 9 compared to the two previous reports of January and February 2023. However, the current report covers a longer timespan.

¹¹ <https://www.sciencedirect.com/science/article/pii/S1470160X21010840>

- Deaths and cases in several species with critical conservation status have been reported by countries, highlighting the importance of sharing this information for disease events that can threaten the conservation of biodiversity.
- The widespread detection of ASF and HPAI in wildlife represent a threat to biodiversity conservation (especially HPAI in fragmented bird and mammal populations), livestock and food security at global level.

More information and resources

- [Statement on avian influenza and mammals](#)
- [Avian Influenza and Wildlife: Risk Management for People Working with Wild Birds](#)
- [African swine fever in wild boar ecology and biosecurity](#)
- [African swine fever awareness and technical resources](#)
- [In-country wildlife disease surveillance report 2021](#)

For any press inquiry on diseases in wildlife, you can email us at media@woah.org

Annex 1

Complete list of species for which cases were reported in March - May 2023. The number of cases are reported by order, and animal species; conservation status of each species, based on IUCN red list of threatened species (database accessed on 06 July 2023).

Disease	Sum of cases	Order	Species (scientific name)	Species (common name)	Endangered status*
HPAI	3	Accipitriformes	Accipiter cooperii	Cooper's Hawk	LC
HPAI	6	Accipitriformes	Accipiter gentilis	Northern Goshawk	LC
HPAI	4	Accipitriformes	Accipiter nisus	Eurasian Sparrowhawk	LC
HPAI	51	Accipitriformes	Accipitridae (incognita)	Accipitridae (unidentified)	NA
HPAI	4	Anseriformes	Aix galericulata	Mandarin Duck	LC
HPAI	27	Anseriformes	Aix sponsa	Wood Duck	LC
HPAI	763	Order undetermined	All indeterminatum fau	Wildlife (species unspecified)	NA
HPAI	1	Charadriiformes	Alca torda	Razorbill	LC
HPAI	1	Anseriformes	Alopochen aegyptiaca	Egyptian Goose	LC
HPAI	1	Anseriformes	Anas acuta	Northern Pintail	LC
HPAI	3	Anseriformes	Anas carolinensis	Green-winged Teal	LC
HPAI	1	Anseriformes	Anas clypeata	Northern Shoveler	NA
HPAI	11	Anseriformes	Anas discors	Blue winged teal	NA
HPAI	4	Anseriformes	Anas penelope	Eurasian Wigeon	NA
HPAI	17	Anseriformes	Anas platyrhynchos	Mallard	LC
HPAI	4	Anseriformes	Anas rubripes	American Black Duck	LC
HPAI	1	Anseriformes	Anas strepera	Gadwall	NA
HPAI	176	Anseriformes	Anatidae (incognita)	Anatidae (unidentified)	NA
HPAI	2	Anseriformes	Anser albifrons	Greater White-fronted Goose	LC
HPAI	11	Anseriformes	Anser anser	Greylag Goose	LC
HPAI	11	Anseriformes	Anser brachyrhynchus	Pink-footed Goose	LC
HPAI	60	Anseriformes	Anser caerulescens	Snow Goose	LC
HPAI	1	Anseriformes	Anser fabalis	Bean Goose	LC
HPAI	1	Anseriformes	Anser rossii	Ross's Goose	LC
HPAI	1	Accipitriformes	Aquila heliaca	Imperial Eagle	VU
HPAI	4	Phaethontiformes	Ardea alba	Great Egret	LC
HPAI	7	Phaethontiformes	Ardea cinerea	Grey Heron	LC
HPAI	2	Phaethontiformes	Ardea herodias	Great Blue Heron	LC

HPAI	4	Phaethontiformes	Ardeidae (incognita)	Ardeidae (unidentified)	NA
HPAI	1	Suliformes	Asio flammeus	Short-eared Owl	LC
SARS-Cov-2	16	Primates	Ateles fusciceps	Black-headed Spider Monkey	EN
HPAI	1	Anseriformes	Aythya marila	Greater Scaup	LC
HPAI	125	Anseriformes	Branta canadensis	Canada Goose	LC
HPAI	5	Anseriformes	Branta hutchinsii	Cackling Goose	LC
HPAI	13	Anseriformes	Branta leucopsis	Barnacle Goose	LC
HPAI	4	Suliformes	Bubo bubo	Eurasian Eagle-Owl	LC
HPAI	3	Suliformes	Bubo scandiacus	Snowy Owl	VU
HPAI	16	Suliformes	Bubo virginianus	Great Horned owl	LC
HPAI	41	Accipitriformes	Buteo buteo	Eurasian buzzard (common buzzard)	LC
HPAI	18	Accipitriformes	Buteo jamaicensis	Red-tailed Hawk	LC
HPAI	5	Accipitriformes	Buteo japonicus	Eastern Buzzard	LC
HPAI	2	Accipitriformes	Buteo lagopus	Rough-legged Hawk	LC
HPAI	1	Accipitriformes	Buteo swainsoni	Swainson's Hawk	LC
HPAI	7	Charadriiformes	Calidris alba	Sanderling	LC
HPAI	1	Charadriiformes	Calidris alpina	Dunlin	LC
Rabies	1	Carnivora	Canis lupus	Wolf (gray wolf)	LC
HPAI	1	Pelecaniformes	Carduelis carduelis	European Goldfinch	LC
HPAI	25	Accipitriformes	Cathartes aura	Turkey Vulture	LC
EHD	2	Artiodactyla	Cervus elaphus	Red deer	LC
SARS-Cov-2	3	Cingulata	CHAETOPHRACTUS VILLOSUS	Big hairy armadillo	LC
HPAI	1	Charadriiformes	Chlidonias hybrida	Whiskered tern	LC
HPAI	1	Anseriformes	Chloephaga melanoptera	Andean Goose	LC
HPAI	45	Charadriiformes	Chroicocephalus cirrocephalus	Grey-headed gull	NA
HPAI	1	Charadriiformes	Chroicocephalus hartlaubii	Hartlaub's gull	NA
HPAI	1889	Charadriiformes	Chroicocephalus ridibundus	Black-headed Gull	NA
HPAI	12	Ciconiiformes	Ciconia ciconia	White Stork	LC
HPAI	2	Ciconiiformes	Ciconiidae (incognita)	Ciconiidae (unidentified)	NA
HPAI	3	Columbiformes	Columba palumbus	Common Wood-Pigeon	LC
HPAI	1	Columbiformes	Columbidae (incognita)	Columbidae (unidentified)	NA
HPAI	1	Passeriformes	Corvidae (incognita)	Corvidae (unidentified)	NA
HPAI	51	Passeriformes	Corvus brachyrhynchos	American crow	LC

HPAI	2	Passeriformes	Corvus caurinus	Northwestern Crow	LC
HPAI	5	Passeriformes	Corvus corax	Common Raven	LC
HPAI	3	Passeriformes	Corvus cornix	Hooded Crow	NA
HPAI	7	Passeriformes	Corvus corone	Carrion Crow	LC
HPAI	68	Passeriformes	Corvus macrorhynchos	Large-billed Crow	LC
HPAI	4	Passeriformes	Corvus monedula	Eurasian Jackdaw	LC
HPAI	20	Passeriformes	Corvus splendens	House Crow	LC
HPAI	5	Anseriformes	Coscoroba coscoroba	Coscoroba Swan	LC
HPAI	1	Passeriformes	Cyanocitta cristata	Blue jay	LC
HPAI	2	Psittaciformes	Cyanoliseus patagonus	Burrowing parrot	LC
HPAI	37	Anseriformes	Cygnus (incognita)	Cygnus (unidentified)	NA
HPAI	3	Anseriformes	Cygnus buccinator	Trumpeter Swan	LC
HPAI	6	Anseriformes	Cygnus columbianus	Tundra Swan	LC
HPAI	7	Anseriformes	Cygnus cygnus	Whooper Swan	LC
HPAI	91	Anseriformes	Cygnus melancoryphus	Black-necked Swan	LC
HPAI	403	Anseriformes	Cygnus olor	Mute Swan	LC
HPAI	1	Didelphimorphia	Didelphis virginiana	Virginia Opossum	LC
HPAI	1	Phaethontiformes	Egretta garzetta	Little Egret	LC
HPAI	1	Psittaciformes	Enicognathus ferrugineus	Austral parakeet	LC
HPAI	3	Psittaciformes	Enicognathus leptorhynchus	Slender-billed Parakeet	LC
HPAI	63	Falconiformes	Falco peregrinus	Peregrin falcon	LC
HPAI	1	Falconiformes	Falco rusticolus	Gyrfalcon	LC
HPAI	2	Falconiformes	Falco tinnunculus	Common Kestrel	LC
HPAI	4	Falconiformes	Falconidae (incognita)	Falconidae (unidentified)	NA
HPAI	2	Carnivora	Felis catus	Domestic cat	NA
HPAI	1	Charadriiformes	Fratercula arctica	Atlantic Puffin	VU
HPAI	3	Trogoniformes	Fregatidae (incognita)	Fregatidae (unidentified)	NA
HPAI	8	Gruiformes	Fulica atra	Common Coot	LC
HPAI	2	Charadriiformes	Gallinago gallinago	Common Snipe	LC
HPAI	2	Gruiformes	Gallinula chloropus	Common Moorhen	LC
HPAI	1	Passeriformes	Garrulus glandarius	Eurasian Jay	LC
HPAI	1	Charadriiformes	Gelochelidon nilotica	Gull-billed tern	LC
HPAI	1	Gruiformes	Gruidae (incognita)	Gruidae (unidentified)	NA
HPAI	1	Gruiformes	Grus leucogeranus	Siberian Crane	NA
HPAI	23	Gruiformes	Grus monacha	Hooded crane	VU

HPAI	4	Charadriiformes	Haematopus ostralegus	Eurasian Oystercatcher	NT
HPAI	7	Accipitriformes	Haliaeetus albicilla	White-tailed Eagle	LC
HPAI	21	Accipitriformes	Haliaeetus leucocephalus	Bald Eagle	LC
HPAI	1	Carnivora	Halichoerus grypus	Gray Seal	LC
HPAI	49	Charadriiformes	Hydroprogne caspia	Caspian Tern	LC
HPAI	7	Charadriiformes	Ichthyaetus melanocephalus	Mediterranean Gull	NA
SARS-Cov-2	1	Primates	Lagothrix lagotricha	Common woolly monkey	NA
HPAI	3450	Charadriiformes	Laridae (incognita)	Laridae (unidentified)	NA
HPAI	51	Charadriiformes	Larus argentatus	Herring Gull	LC
HPAI	14	Charadriiformes	Larus belcheri	Band-tailed Gull	LC
HPAI	79	Charadriiformes	Larus brunicephalus	Brown-Headed Gull	NA
HPAI	4	Charadriiformes	Larus cachinnans	Caspian Gull	LC
HPAI	1	Charadriiformes	Larus californicus	California Gull	LC
HPAI	5	Charadriiformes	Larus canus	Mew Gull	LC
HPAI	1	Charadriiformes	Larus delawarensis	Ring-billed gull	LC
HPAI	38	Charadriiformes	Larus dominicanus	Kelp Gull	LC
HPAI	2	Charadriiformes	Larus fuscus	Lesser Black-backed Gull	LC
HPAI	3	Charadriiformes	Larus glaucescens	Glaucous-winged Gull	LC
HPAI	3	Charadriiformes	Larus ichthyaetus	Great Black-headed Gull	LC
HPAI	7	Charadriiformes	Larus marinus	Great black-backed Gull	LC
HPAI	7	Charadriiformes	Larus michahellis	Yellow-legged Gull	LC
HPAI	2	Charadriiformes	Larus pipixcan	Franklin's Gull	LC
HPAI	238	Charadriiformes	Larus ridibundus	Black-headed Gull	LC
HPAI	10	Charadriiformes	Larus smithsonianus	American Herring Gull	LC
RHD	1	Lagomorpha	Lepus europaeus	Brown hare (European Hare)	LC
HPAI	12	Charadriiformes	Leucophaeus modestus	Grey Gull	NA

HPAI	1	Carnivora	<i>Lontra canadensis</i>	North American river otter	LC
HPAI	2	Carnivora	<i>Lontra felina</i>	Marine otter	EN
HPAI	2	Anseriformes	<i>Lophodytes cucullatus</i>	Hooded Merganser	LC
HPAI	1	Carnivora	<i>Lynx rufus</i>	Bobcat	LC
HPAI	1	Carnivora	<i>Martes americana</i>	American marten	LC
HPAI	1	Suliformes	<i>Megascops choliba</i>	Tropical Screech-Owl	LC
HPAI	20	Carnivora	<i>Mephitis mephitis</i>	Striped Skunk	LC
HPAI	1	Anseriformes	<i>Mergus merganser</i>	Common Merganser	LC
HPAI	1	Anseriformes	<i>Mergus serrator</i>	Red-breasted Merganser	LC
HPAI	2	Accipitriformes	<i>Milvus milvus</i>	Red Kite	LC
HPAI	3	Trogoniformes	<i>Morus bassanus</i>	Northern Gannet	LC
HPAI	13	Trogoniformes	<i>Morus capensis</i>	Cape gannet	EN
HPAI	2	Carnivora	<i>Mustela putorius</i>	European Polecat	LC
HPAI	19	Carnivora	<i>Nasua nasua</i>	South American Coati	LC
HPAI	5	Anseriformes	<i>Netta rufina</i>	Red-crested Pochard	LC
HPAI	2	Charadriiformes	<i>Numenius arquata</i>	Eurasian Curlew	NT
HPAI	25	Carnivora	<i>Otaria flavescens</i>	South-American sea lion	NA
SARS-Cov-2	2	Carnivora	<i>Panthera leo</i>	Lion	VU
HPAI	3	Pelecaniformes	<i>Passer domesticus</i>	House Sparrow	LC
HPAI	5	Pelecaniformes	<i>Passer montanus</i>	Eurasian Tree Sparrow	LC
HPAI	1	Galliformes	<i>Pavo cristatus</i>	Indian Peafowl	LC
HPAI	1	Phaethontiformes	<i>Pelecanus erythrorhynchos</i>	American White Pelican	LC
HPAI	445	Phaethontiformes	<i>Pelecanus occidentalis</i>	Brown Pelican	LC
HPAI	33	Phaethontiformes	<i>Pelecanus onocrotalus</i>	Great White Pelican	LC
HPAI	32	Phaethontiformes	<i>Pelecanus thagus</i>	Peruvian pelican	NT
HPAI	1	Trogoniformes	Phalacrocoracidae (incognita)	Phalacrocoracidae (unidentified)	NA
HPAI	7	Trogoniformes	<i>Phalacrocorax auritus</i>	Double-crested cormorant	NA
HPAI	66	Trogoniformes	<i>Phalacrocorax bougainvillii</i>	Guanay Cormorant	NA
HPAI	2	Trogoniformes	<i>Phalacrocorax brasilianus</i>	Neotropic Cormorant	NA
HPAI	1717	Trogoniformes	<i>Phalacrocorax capensis</i>	Cape cormorant	EN
HPAI	2	Trogoniformes	<i>Phalacrocorax carbo</i>	Great Cormorant	LC
HPAI	11	Trogoniformes	<i>Phalacrocorax gaimardi</i>	Red-legged Cormorant	NA
HPAI	1	Trogoniformes	<i>Phalacrocorax magellanicus</i>	Rock shag	NA
HPAI	1	Carnivora	<i>Phoca vitulina</i>	Harbor Seal	LC

HPAI	8	Passeriformes	Pica hudsonia	Black-billed Magpie	LC
HPAI	2	Phaethontiformes	Platalea minor	Black-faced spoonbill	EN
HPAI	3	Procellariiformes	Podiceps cristatus	Great Crested Grebe	LC
HPAI	6	Carnivora	Procyon lotor	Raccoon (Northern raccoon)	LC
HPAI	14	Carnivora	Puma concolor	Puma	LC
HPAI	1	Gruiformes	Rallidae (incognita)	Rallidae (unidentified)	NA
HPAI	1	Charadriiformes	Rissa tridactyla	Black-legged Kittiwake	VU
HPAI	2	Charadriiformes	Rynchops niger	Black Skimmer	LC
HPAI	2	Anseriformes	Somateria mollissima	Common Eider	NT
HPAI	89	Strigiformes	Spheniscus demersus	Jackass Penguin	EN
HPAI	2	Strigiformes	Spheniscus humboldti	Humboldt Penguin	VU
HPAI	1	Charadriiformes	Stercorarius parasiticus	Arctic Jaeger	LC
HPAI	1	Charadriiformes	Sterna hirundinacea	South American Tern	LC
HPAI	113	Charadriiformes	Sterna hirundo	Common Tern	LC
HPAI	2	Suliformes	Strigidae (incognita)	Strigidae (unidentified)	NA
WNF	1	Suliformes	Strigidae (incognita)	Strigidae (unidentified)	NA
HPAI	3	Suliformes	Strix aluco	Tawny owl	LC
HPAI	1	Suliformes	Strix uralensis	Ural Owl	LC
HPAI	2	Suliformes	Strix varia	Barred Owl	LC
HPAI	1	Trogoniformes	Sula leucogaster	Brown Booby	LC
HPAI	55	Trogoniformes	Sula variegata	Peruvian Booby	LC
ASF	3090	Artiodactyla	Sus scrofa	Wild boar	LC
CSF	324	Artiodactyla	Sus scrofa	Wild boar	LC
FMD	10	Artiodactyla	Syncerus caffer	African buffalo (Cape buffalo)	NT
HPAI	1	Procellariiformes	Tachybaptus ruficollis	Little Grebe	LC
HPAI	4	Anseriformes	Tadorna tadorna	Common Shelduck	LC
HPAI	5	Pelecaniformes	Taeniopygia guttata	Zebra Finch	LC
HPAI	8	Charadriiformes	Thalasseus acuflavus	Cabot's Tern	NA
HPAI	2	Charadriiformes	Thalasseus bergii	Swift tern	LC
HPAI	3	Charadriiformes	Thalasseus elegans	Elegant Tern	NT
HPAI	337	Charadriiformes	Thalasseus maximus	Royal Tern	LC
HPAI	2	Pelecaniformes	Turdus merula	Eurasian Blackbird	LC

HPAI	1	Suliformes	Tyto alba	Barn Owl (Common Barn-Owl)	LC
HPAI	1	Charadriiformes	Uria aalge	Common Murre	LC
HPAI	1	Carnivora	Ursus americanus	American Black Bear (black bear)	LC
HPAI	51	Carnivora	Vulpes vulpes	Red Fox	LC

*LC= Least concern; NT=Near threatened; VU=vulnerable; EN: endangered