

*Periodic global update on exceptional disease events of terrestrial wildlife reported to WOA
Situation report period covered – June 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 listed 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.

Objectives of this periodic situation report.

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.

Potential bias/limitations.

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 number of diseases listed by WOA 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.

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.

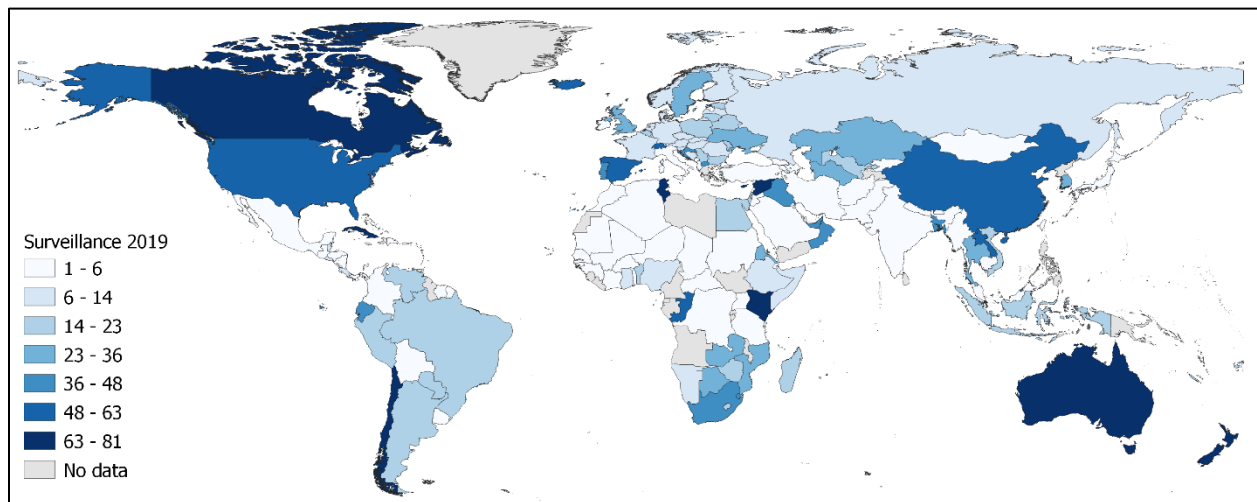


Figure 1. Number of diseases listed by WOA for which surveillance is reported in terrestrial wildlife (data referring to situation reported by countries to WOA in 2019 – being the most recent year with almost all countries having sent reports).

Recent exceptional disease events in terrestrial wildlife (which were reported for the month covered by this report: June 2023)

In total **1,174 new outbreaks** with **6,514 cases** of [exceptional disease events](#)⁴ (Figure 2) were reported in terrestrial wildlife during the period, through WOA's early warning system.

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

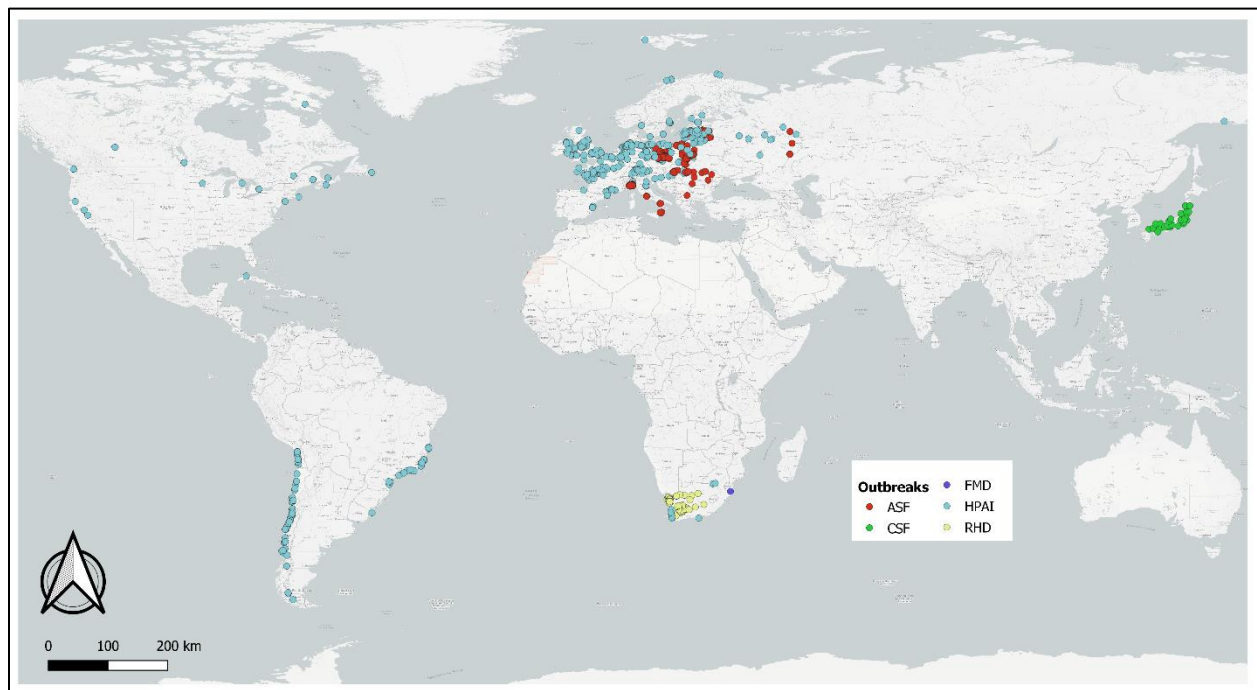


Figure 2. New outbreaks of exceptional disease events reported during the period in terrestrial wildlife. ASF= infection with African swine fever, CSF = infection with Classical swine fever, FMD = infection with Foot and Mouth Disease, HPAI = Infection of birds other than poultry, including wild birds,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

Outbreaks were reported in countries in Africa, the Americas, Asia, and Europe (Figure 3), specifically infection with African swine fever (ASF), infection with Classical swine fever (CSF), 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). A higher density of outbreaks was reported in the Europe Region, potentially linked to more extensive wildlife surveillance and/or reporting in the region. The diseases with the highest number of outbreaks reported were ASF and HPAI, followed by CSF and RHD, while only one outbreak was reported for FMD. Cases were reported in 106 different wild species belonging to 17 orders (Table 1, Table 2, and Annex 1).

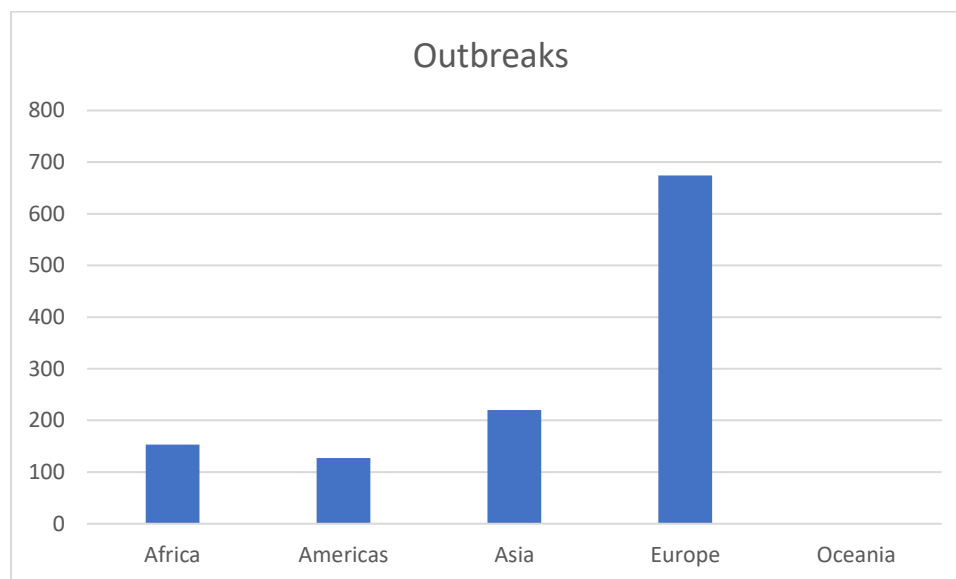


Figure 3: Number of outbreaks reported during the period and split by world region

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

Disease	Outbreaks reported	Zoonotic disease
ASF	354	No
CSF	219	No
FMD	1	No
HPAI	457	Yes
RHD	143	No

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	Sum of cases	Order	Species (scientific name)	Species (common name)	Endangered status*
HPAI	1	Psittaciformes	<i>Ardenna grisea</i>	Sooty Shearwater	NT
HPAI	2	Falconiformes	<i>Falco cherrug</i>	Saker Falcon	EN
HPAI	2	Charadriiformes	<i>Haematopus ostralegus</i>	Eurasian Oystercatcher	NT
HPAI	11	Charadriiformes	<i>Larosterna inca</i>	Inca Tern	NT
HPAI	1	Carnivora	<i>Lontra provocax</i>	Huillin	EN
HPAI	8	Phaethontiformes	<i>Pelecanus thagus</i>	Peruvian pelican	NT
HPAI	32	Trogoniformes	<i>Phalacrocorax bougainvillii</i>	Guanay Cormorant	NT
HPAI	2	Trogoniformes	<i>Phalacrocorax gaimardi</i>	Red-legged Cormorant	NT

HPAI	41	Charadriiformes	<i>Rissa tridactyla</i>	Black-legged Kittiwake	VU
HPAI	3	Strigiformes	<i>Spheniscus humboldti</i>	Humboldt Penguin	VU
ASF	2	Artiodactyla	<i>Sus salvanus</i>	Pygmy hog	EN
FMD	1	Artiodactyla	<i>Syncerus caffer</i>	African buffalo (Cape buffalo)	NT

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

Global and regional impact

Reporting and impact on biodiversity

Out of the 106 species for which cases were reported, 12 of them (11%) have a threatened status according to the IUCN classification. In particular, seven are classified as “Near threaten” (NT), two as “Vulnerable” (VU), and three as “Endangered” (EN) (figure 4). Out of the five reported diseases, HPAI has the highest impact on species with threatened status (10), highlighting the relevant impact of this disease on biodiversity conservation. Of the two remaining species with endangered status, one was impacted by ASF, and one by FMD.

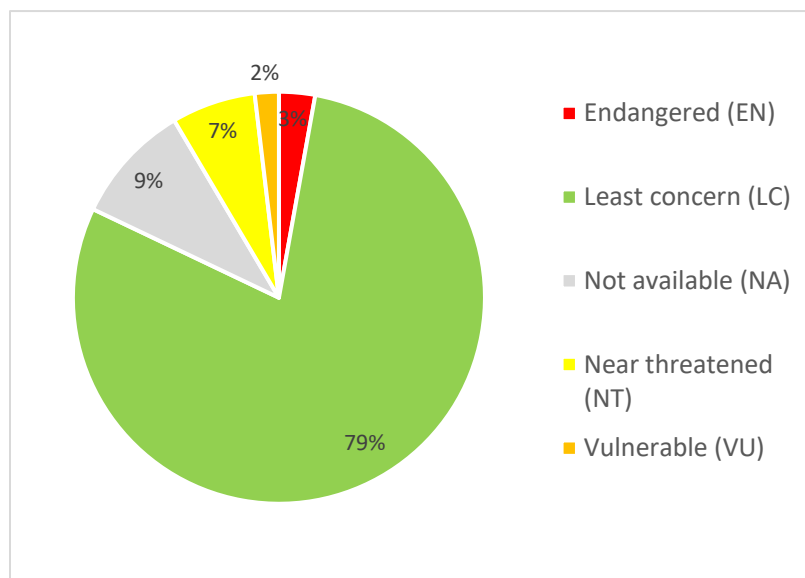


Figure 4: percentage of reported species falling under the different IUCN categories

In particular, regarding the species with endangered status, HPAI was detected in two **wild** Falconiformes (Saker Falcon) in Hungary and one **wild** Carnivora (Huillin) and all these died from the infection. Saker falcon has a population with a decreasing trend estimated in 12 200-29 800 mature individuals; located in Eurasia

and Northern Africa⁵. The species is considered resident in Hungary. On the other hand, the Huillin is a species present in Argentina and Chile. Most inventory on this species have been made based on indirect species detection, hence, there are no estimates of population or subpopulation size, but generally speaking the population shows a decreasing trend⁶. The WOAHP statement on HPAI in wild mammals highlighted the need for better surveillance, reporting, control and genetic sequence sharing⁷ to better anticipate consequences of the ongoing outbreaks.

Finally, ASF has been reported in an endangered wild pig, the Pygmy hog, with two fatal cases in captive wild animals. The cases were reported in Czech Republic, but the species is resident in the wild in India, and with uncertain presence in Bhutan (while it is considered extinct in Bangladesh and Nepal)⁸. Considering the past and current circulation of ASF in most of the countries where wild populations of Pygmy hog still exist, the impact of this disease on severely depleted populations is quite worrying.

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

Reporting and impact on Public health

HPAI has a recognised zoonotic potential. In particular, the occurrence of HPAI cases in seven “unusual hosts”, belonging to Carnivora orders (Domestic cat, Fisher, Huillin, Raccoon (Northern raccoon), Red Fox, South-American sea lion, Striped Skunk), 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 WOAHP](#) 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 mammals⁹.

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

⁵ <https://www.iucnredlist.org/species/22696495/204182473>

⁶ <https://www.iucnredlist.org/species/12305/95970485>

⁷ <https://www.woah.org/en/statement-on-avian-influenza-and-mammals/>

⁸ <https://www.iucnredlist.org/species/21172/44139115>

⁹ [Statement on avian influenza and mammals - World Organisation for Animal Health \(woah.org\)](#)

that currently threatens livestock and food security at global level (for additional information please see 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 livestock¹⁰.

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](#)).

Outbreaks were reported for other diseases with potential impact on domestic animal health like CSF, FMD, and RHD. FMD outbreaks were very localised while several CSF outbreaks were reported from Japan where a significant event is ongoing since 2018. Several RHD outbreaks were reported in South Africa.

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 June 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.
- Deaths and cases in several species with critical conservation status have been reported by countries, highlighting the importance of diseases for the conservation of biodiversity.

¹⁰ <https://www.sciencedirect.com/science/article/pii/S1470160X21010840>

- The widespread detection of ASF and HPAI in wildlife represent a threat to biodiversity conservation (especially HPAI in fragmented bird and mammal populations), livestock, food security, and potentially human health 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 June 2023. The number of cases is 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	1	Accipitriformes	Accipiter cooperii	Cooper's Hawk	LC
HPAI	1	Accipitriformes	Accipiter nisus	Eurasian Sparrowhawk	LC
HPAI	13	Accipitriformes	Accipitridae (incognita)	Accipitridae (unidentified)	NA
HPAI	2	Order undetermined	AI indeterminatum fau	Wildlife (species unspecified)	NA
HPAI	9	Charadriiformes	Alcidae (incognita)	Alcidae (unidentified)	NA
HPAI	10	Anseriformes	Anas acuta	Northern Pintail	LC
HPAI	1	Anseriformes	Anas americana	American wigeon	LC
HPAI	1	Anseriformes	Anas carolinensis	Green-winged Teal	LC
HPAI	2	Anseriformes	Anas flavirostris	Yellow-billed teal	LC
HPAI	18	Anseriformes	Anas platyrhynchos	Mallard	LC
HPAI	7	Anseriformes	Anas rubripes	American Black Duck	LC
HPAI	13	Anseriformes	Anatidae (incognita)	Anatidae (unidentified)	NA
HPAI	5	Anseriformes	Anser caerulescens	Snow Goose	LC
HPAI	1	Psittaciformes	Ardenna grisea	Sooty Shearwater	NT
HPAI	1	Anseriformes	Aythya americana	Redhead	LC
HPAI	3	Anseriformes	Aythya valisineria	Canvasback	LC
HPAI	20	Anseriformes	Branta canadensis	Canada Goose	LC
HPAI	1	Suliformes	Bubo bubo	Eurasian Eagle-Owl	LC
HPAI	3	Accipitriformes	Buteo buteo	Eurasian buzzard (common buzzard)	LC
HPAI	1	Accipitriformes	Buteo lagopus	Rough-legged Hawk	LC
HPAI	1	Accipitriformes	Buteo magnirostris	Roadside Hawk	LC
HPAI	1	Accipitriformes	Buteogallus urubitinga	Great Black-Hawk	LC
HPAI	2	Charadriiformes	Calidris alba	Sanderling	LC
HPAI	2	Falconiformes	Caracara plancus	Crested Caracara	LC
HPAI	6	Accipitriformes	Cathartes aura	Turkey Vulture	LC
HPAI	2	Charadriiformes	Chroicocephalus cirrocephalus	Grey-headed gull	LC

HPAI	3	Charadriiformes	Chroicocephalus maculipennis	Brown-hooded Gull	LC
HPAI	1416	Charadriiformes	Chroicocephalus ridibundus	Black-headed Gull	LC
HPAI	2	Ciconiiformes	Ciconia ciconia	White Stork	LC
HPAI	1	Columbiformes	Columbidae (incognita)	Columbidae (unidentified)	NA
HPAI	2	Accipitriformes	Coragyps atratus	Black Vulture	LC
HPAI	5	Passeriformes	Corvus brachyrhynchos	American crow	LC
HPAI	31	Passeriformes	Corvus corone	Carrion Crow	LC
HPAI	3	Passeriformes	Corvus macrorhynchos	Large-billed Crow	LC
HPAI	5	Anseriformes	Coscoroba coscoroba	Coscoroba Swan	LC
HPAI	98	Anseriformes	Cygnus melancoryphus	Black-necked Swan	LC
HPAI	4	Anseriformes	Cygnus olor	Mute Swan	LC
HPAI	1	Phaethontiformes	Egretta thula	Snowy Egret	LC
HPAI	8	Psittaciformes	Enicognathus leptorhynchus	Slender-billed Parakeet	LC
HPAI	2	Falconiformes	Falco cherrug	Saker Falcon	EN
HPAI	7	Falconiformes	Falco peregrinus	Peregrin falcon	LC
HPAI	2	Carnivora	Felis catus	Domestic cat	LC
HPAI	1	Trogoniformes	Fregata magnificens	Magnificent Frigatebird	LC
HPAI	2	Gruiformes	Fulica armillata	Red-gartered Coot	LC
HPAI	23	Charadriiformes	Gelochelidon nilotica	Gull-billed tern	LC
HPAI	1	Charadriiformes	Haematopus ater	Blackish Oystercatcher	LC
HPAI	2	Charadriiformes	Haematopus ostralegus	Eurasian Oystercatcher	NT
HPAI	2	Accipitriformes	Haliaeetus albicilla	White-tailed Eagle	LC
HPAI	5	Accipitriformes	Haliaeetus leucocephalus	Bald Eagle	LC
HPAI	112	Charadriiformes	Ichthyaeetus melanocephalus	Mediterranean Gull	LC
HPAI	283	Charadriiformes	Laridae (incognita)	Laridae (unidentified)	NA
HPAI	11	Charadriiformes	Larosterna inca	Inca Tern	NT
HPAI	31	Charadriiformes	Larus argentatus	Herring Gull	LC
HPAI	1	Charadriiformes	Larus belcheri	Band-tailed Gull	LC
HPAI	1	Charadriiformes	Larus canus	Mew Gull	LC
HPAI	24	Charadriiformes	Larus dominicanus	Kelp Gull	LC

HPAI	14	Charadriiformes	Larus genei	Slender-billed Gull	LC
HPAI	1	Charadriiformes	Larus hyperboreus	Glaucous Gull	LC
HPAI	2	Charadriiformes	Larus marinus	Great black-backed Gull	LC
HPAI	2	Charadriiformes	Larus michahellis	Yellow-legged Gull	LC
HPAI	1	Charadriiformes	Larus pipixcan	Franklin's Gull	LC
HPAI	102	Charadriiformes	Larus ridibundus	Black-headed Gull	LC
RHD	7	Lagomorpha	Leporidae (incognita)	Leporidae (unidentified)	NA
HPAI	1	Trogoniformes	Leucocarbo atriceps	Imperial Shag	LC
HPAI	1	Charadriiformes	Leucophaeus modestus	Grey Gull	LC
HPAI	1	Carnivora	Lontra provocax	Huillin	EN
HPAI	1	Psittaciformes	Macronectes giganteus	Antarctic Giant-Petrel	LC
HPAI	15	Carnivora	Mephitis mephitis	Striped Skunk	LC
HPAI	2	Falconiformes	Milvago chimango	Chimango caracara	LC
HPAI	1	Trogoniformes	Nannopterum brasilianum	Neotropic cormorant	LC
HPAI	2	Charadriiformes	Numenius phaeopus	Whimbrel	LC
HPAI	7	Carnivora	Otaria flavescens	South-American sea lion	LC
HPAI	1	Accipitriformes	Parabuteo unicinctus	Harris's hawk	LC
HPAI	2	Carnivora	Pekania pennanti	Fisher	LC
HPAI	21	Phaethontiformes	Pelecanidae (incognita)	Pelecanidae (unidentified)	NA
HPAI	2	Phaethontiformes	Pelecanus erythrorhynchos	American White Pelican	LC
HPAI	8	Phaethontiformes	Pelecanus thagus	Peruvian pelican	NT
HPAI	32	Trogoniformes	Phalacrocorax bougainvillii	Guanay Cormorant	NT
HPAI	6	Trogoniformes	Phalacrocorax brasilianus	Neotropic Cormorant	LC
HPAI	3	Trogoniformes	Phalacrocorax carbo	Great Cormorant	LC
HPAI	2	Trogoniformes	Phalacrocorax gaimardi	Red-legged Cormorant	NT
HPAI	2	Passeriformes	Pica hudsonia	Black-billed Magpie	LC
HPAI	1	Passeriformes	Pica pica	Common magpie	LC
HPAI	1	Procellariiformes	Podiceps cristatus	Great Crested Grebe	LC
HPAI	2	Procellariiformes	Podiceps major	Great Grebe	LC
HPAI	2	Carnivora	Procyon lotor	Raccoon (Northern raccoon)	LC
RHD	1471	Lagomorpha	Pronolagus rupestris	Red Rock hare	LC

HPAI	41	Charadriiformes	Rissa tridactyla	Black-legged Kittiwake	VU
HPAI	3	Charadriiformes	Rynchops niger	Black Skimmer	LC
HPAI	3	Strigiformes	Spheniscus humboldti	Humboldt Penguin	VU
HPAI	3	Charadriiformes	Stercorarius chilensis	Chilean Skua	LC
HPAI	1	Charadriiformes	Sterna dougallii	Roseate Tern	LC
HPAI	10	Charadriiformes	Sterna hirundinacea	South American Tern	LC
HPAI	276	Charadriiformes	Sterna hirundo	Common Tern	LC
HPAI	1	Charadriiformes	Sterna paradisaea	Arctic Tern	LC
HPAI	1	Charadriiformes	Sternula albifrons	Little tern	LC
HPAI	2	Suliformes	Strigidae (incognita)	Strigidae (unidentified)	NA
HPAI	68	Trogoniformes	Sula variegata	Peruvian Booby	LC
HPAI	1	Trogoniformes	Sulidae (incognita)	Sulidae (unidentified)	NA
ASF	2	Artiodactyla	Sus salvanus	Pygmy hog	EN
ASF	543	Artiodactyla	Sus scrofa	Wild boar	LC
CSF	373	Artiodactyla	Sus scrofa	Wild boar	LC
FMD	1	Artiodactyla	Syncerus caffer	African buffalo (Cape buffalo)	NT
HPAI	3	Anseriformes	Tachyeres pteneres	Fuegian steamer duck	LC
HPAI	668	Charadriiformes	Thalasseus acuflavidus	Cabot's Tern	LC
HPAI	2	Charadriiformes	Thalasseus bergii	Swift tern	LC
HPAI	22	Charadriiformes	Thalasseus maximus	Royal Tern	LC
HPAI	553	Charadriiformes	Thalasseus sandvicensis	Sandwich Tern	LC
HPAI	5	Carnivora	Vulpes vulpes	Red Fox	LC

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