**Canis lupus**

**System:** Terrestrial

<table>
<thead>
<tr>
<th>Kingdom</th>
<th>Phylum</th>
<th>Class</th>
<th>Order</th>
<th>Family</th>
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<tbody>
<tr>
<td>Animalia</td>
<td>Chordata</td>
<td>Mammalia</td>
<td>Carnivora</td>
<td>Canidae</td>
</tr>
</tbody>
</table>

**Common name**
Haushund (German), feral dog (English), domestic dog (English), kuri (Maori, New Zealand), guri (Maori), kurio (Tuamotuan), uli (Samoan), peto (Marquesan), pero (Maori)

**Synonym**
Canis dingo, Blumenbach, 1780
Canis familiaris, Linnaeus, 1758

**Similar species**

**Summary**
Canis lupus (the dog) is possibly the first animal to have been domesticated by humans. It has been selectively bred into a wide range of different forms. They are found throughout the world in many different habitats, both closely associated with humans and away from habitation. They are active hunters and have significant negative impacts on a wide range of native fauna.

**Species Description**
Domestic dogs are believed to have first diverged from wolves around 100,000 years ago. Around 15,000 years ago dogs started diverging into the multitude of different breeds known today. This divergence was possibly triggered by humans changing from a nomadic, hunting based-lifestyle to a more settled, agriculture-based way of life (Vilà et al. 1997). Domestic dogs have been selectively bred for various behaviours, sensory capabilities and physical attributes, including dogs bred for herding livestock (collies, shepherds, etc.), different kinds of hunting (pointers, hounds, etc.), catching rats (small terriers), guarding (mastiffs, chows), helping fishermen with nets (Newfoundlands, poodles), pulling loads (huskies, St. Bernards), guarding carriages and horsemen (Dalmatians), and as companion dogs. Domestic dogs are therefore extremely variable but the basic morphology is that of the grey wolf, the wild ancestor of all domestic dog breeds.
Notes
Dogs were possibly the first animal to be domesticated by humans around 15,000 years ago. There are estimated to be 400,000,000 dogs present in the world.
Dogs taken to the Pacific islands by the early Polynesians may have been about the size of a small collie, but shorter in the leg (Anderson 1990). They have long since been replaced by, or crossed with, various breeds from Europe.
Reviewed by Mech (1974, Mammalian Species, 37) Canis familiaris has page priority over Canis lupus in Linnaeus (1758), but both were published simultaneously, and C. lupus has been universally used for this species [excerpted from Mammal Species of the World, 3d Edition, p. 281] (ITIS, 2004).

Uses
Domesticated dogs have been bred to assist humans in a wide range of activities including farming, hunting and companionship.

Habitat Description
Dogs are usually closely associated with humans so can potentially be found in all habitats. Feral and ranging domestic dogs may be found far from human habitation.

Reproduction
Placental, sexual. 4-12 puppies per litter. Both males and females become sexually mature at around 6-12 months.

Nutrition
Mainly carnivorous but may eat plant material and invertebrates
General Impacts
In Israel, free-ranging feral dogs are a major threat to populations of endangered mountain gazelles (see _Gazella gazella ssp. gazella_ in IUCN Red List of Threatened Species) (Manor and Salz, 2004). Canine Distemper Virus (CDV) is thought to have caused several fatal epidemics within the Serengeti-Mara ecosystem in East Africa. The source of the CDV was probably domestic dogs in the local villages surrounding the park. The canids affected included silver-backed jackals (_Canis mesomelas_) and bat-eared foxes (_Otocyon megalotis_) in 1978 and endangered African wild dogs (see _Lycaon pictus_ in IUCN Red List of Threatened Species) in 1991. The Serengeti lion population (see _Panthera leo_ in IUCN Red List of Threatened Species) which remained unaffected during these two epidemics was hit by an epidemic in early 1994, caused by a morbillivirus which is closely related to CDV. Later that year the epidemic had spread north to lions, hyenas, bat-eared foxes and leopards in the Maasi Mara National reserve. This epidemic claimed at least 30% of the lion population (estimated at 3000 in Serengeti at that time). It is suggested that the possible route of transmission from domestic dogs was the spotted hyena that range through human habitation and travel long distances within the park (Roelke-Parker et al. 1996).

Uncontrolled domestic dogs can be equally as damaging as truly feral animals. In New Zealand, during study of kiwi (see _Apteryx australis_; _Apteryx haastii_; _Apteryx mantelli_; and _Apteryx owenii_ in IUCN Red List of Threatened Species) in a Northland forest, the loss of 13 out of 23 kiwi fitted with transmitters was found to be the result of predation by one German shepherd dog. It was estimated that this single dog alone had killed 500 out of 900 birds, although this estimate was considered to be possibly conservative (Taborsky 1988). Seabirds and mammals are included among the prey taken by feral dogs (e.g. Dickman, 1996, Stevenson and Woelher, 2007).

Management Info
The principal techniques to control wild dogs are exclusion fencing, shooting, trapping and poisoning. Poisoning using 1080 is the most cost-effective means of reducing populations of wild dogs over large areas of remote or inaccessible country. New techniques such as the use of livestock guarding dogs, poison ejecting devices and toxic collars have been suggested as alternatives to current methods.

The Australian Bureau of Rural Sciences (BRS) in cooperation with the Vertebrate Pests Committee of the Standing Committee on Agriculture and Resource Management (SCARM) has published guidelines for managing the impacts of dingo and other wild dogs (C._l. familiaris__) as part of the Managing Vertebrate Pests series. Please follow this link to view and download Fleming, P., Corbett, L., Harden, R. and Thomson, P. (2001) Managing the Impacts of Dingoes and Other Wild Dogs., Bureau of Rural Sciences, Canberra.

Pathway

Principal source:

Compiler: IUCN SSC Invasive Species Specialist Group (ISSG) with support from the Overseas Territories Environmental Programme (OTEP) project XOT603, a joint project with the Cayman Islands Government - Department of Environment
FULL ACCOUNT FOR: Canis lupus

Review:

Publication date: 2010-09-15

ALIEN RANGE

[3] TURKS AND CAICOS ISLANDS  [8] UNITED STATES

Red List assessed species 191: EX = 8; CR = 28; EN = 52; VU = 53; NT = 31; DD = 4; LC = 15;

Aepypodius bruijnii EN
Amblysomus corriae NT
Anas wyvilliana EN
Aplonis santovestris VU
Apteryx haastii VU
Aramidopsis plateni VU
Ardeotis nigriceps CR
Atelocynus microtis NT
Brachypteracias squamiger VU
Camarhynchus pauper CR
Capreolus capreolus LC
Celestus anelpistus CR
Charadrus melodus NT
Charadrus sanctaeelenae CR
Chrysocyon brachyurus NT
Coturnix novaezelandiae EX
Ctenosaura bakeri CR
Cuon alpinus EN

Alauda razae CR
Anas chlorotis EN
Anolis longiceps VU
Apteryx australis VU
Apteryx mantelli EN
Arctocephalus galapagoensis EN
Arvicola sapidus VU
Atelopus guanujo CR
Burhinus grallarius NT
Canis simensis EN
Casuarius bennetti NT
Celestus warreni CR
Charadrius obscurus EN
Chlamyphorus truncatus DD
Conilurus penicillatus NT
Crypторcfa ferox VU
Ctenosaura palenris EN
Cyclura carinata CR
Cyclura collei  CR
Cyclura lewisi  CR
Cyclura ricordii  CR
Dasyurus hallucatus  EN
Dasyurus spartacus  NT
Dipodomys margaritae  CR
Ducula pickeringii  VU
Eudyptes pachyrhynchus  VU
Eurynomorhynchus pygmeus  CR
Fossa fossana  NT
Galidia elegans  LC
Galidictis grandieri  EN
Gallicolumba sanctaecrucis  EN
Gallowa silvestris  CR
Galirallus dieffenbachii  EX
Galirallus okinawae  EN
Galirallus sylvestris  EN
Gazella cuvieri  EN
Grus antiquus  VU
Gymnocrex rosenbergii  VU
Habroptila wallaci  VU
Hippocamelus antisensis  VU
Hypogeomys antimena  EN
Iguana delicatissima  EN
Laterallus spilonotus  VU
Lepidocheles olivacea  VU
Lycaon pictus  EN
Macrotarsomys ingens  EN
Mallophus istapantap  LC
Mazama nana  DD
Megapodius bernsteinii  VU
Megapodius lapereou  EN
Megapodius pritchardi  EN
Mesitornis unicolor  LC
Microperoryctes longicauda  LC
Monias benschi  VU
Mysateles prehensilis  NT
Neotoma bryanti  EN
Numeniurus tahitiensis  VU
Papagomys armandvillei  NT
Pentalagus furnessi  EN
Petrogale persephone  EN
Phalacrocorax harrisi  VU
Phascolarctos cinereus  LC
Philiorus frosti  CR
Pitta anerythra  VU
Plagiodontia aedium  EN
Cyclura cornuta  VU
Cyclura pinguis  CR
Dasyurus hybridus  NT
Dasyurus maculatus  NT
Diplothrix legata  EN
Dorcopsulus vanheurni  NT
Eliurus myoxinus  LC
Eupleres goudoti  NT
Felis margarita  NT
Fulica alai  VU
Galidictis fasciata  NT
Gallicolumba salamonis  EX
Gallinula pacifica  CR
Galirallus calayanensis  VU
Galirallus lafresnayanus  CR
Galirallus roviana  NT
Gallotia simonyi  CR
Geocapromys browni  VU
Grus paradisea  VU
Gymnomyza aubryana  CR
Hemicops polyergus  VU
Hippocamelus bisulcus  EN
Hypsiprymnodon moschatus  LC
Larus fuliginosus  VU
Leiopterus ocellata  VU
Litoria caerulea  LC
Macaca sylvanus  EN
Mallomys gunung  EN
Mazama gouazoubira  LC
Megapodius inepta  NT
Megapodius geevinkianus  VU
Megapodius nicobariensis  VU
Mergus australis  EX
Microgoura meeki  EX
Moho bishopi  EX
Mungotictis decemlineata  VU
Nesodon sikimensis  LC
Nesocleopos woodfordi  NT
Ozotoceros bezoarticus  NT
Pelecanoides garnotii  EN
Petrogale penicillata  NT
Phalacrocorax featherstoni  EN
Phalacrocorax onslowi  CR
Phascolosorex doriae  LC
Phoebastria immutabilis  NT
Pitta superba  VU
Pluvianellus socialis  NT
Porphyrio kukwiedei EX
Pororou longipes EN
Prococellaria parkinsoni VU
Pseudolopex fulvipes CR
Pseudomys fumeus EN
Pterodroma axillaris EN
Pterodroma brevipes VU
Pterodroma hasitata EN
Pterodroma phaeopygia CR
Pteropus pselaphon CR
Pudu puda VU
Puffinus heinrothi VU
Puffinus opisthomelas NT
Rallina leucospila NT
Rattus richardoni VU
Rhionaeschna galapagoensis EN
Rhynchosetis jubatus EN
Scolopax mira VU
Solenodon cubanus EN
Spheniscus mendiculus EN
Sturna albostrata EN
Suta flagellum LC
Sylvilagus varynaensis DD
Tamias palmeri EN
Tarsius lariang DD
Tarsius tarsier VU
Thinornis rubricollis NT
Tokudaia osimensis EN
Tupaiia nicobarica EN
Vermivora crissalis NT
Zalophus wolfebaeki EN
Porzana sandwichensis EX
Potorous tridactylus LC
Procyon pygmaeus CR
Pseudobulweria rostrata NT
Psittirostra psittacea CR
Pterodroma barau EN
Pterodroma externa VU
Pterodroma longirostris VU
Pterodroma sandwichensis VU
Pudu mephistophiles VU
Puffinus creatopus VU
Puffinus newelli EN
Rallina canningi NT
Rallus semiplumbeus EN
Reithrodontomys spectabilis CR
Rhynchomeles prattorum EN
Sarcophilus harrisii EN
Sminthopsis butleri VU
Solodon paradoxus EN
Spilogale pygmaea VU
Sterna nereis VU
Sylvilagus bachmani LC
Syrmanticus soemmerringii NT
Tarsius dentatus VU
Tarsius pelengensis EN
Terrapene carolina VU
Thomomys mazama LC
Tokudaia tokunoshimensis EN
Uratelornis chimaera VU
Vestiaria coccinea VU

BIBLIOGRAPHY
38 references found for Canis lupus

Management information

Summary: This report reviews available information on the adverse effects of 14 alien vertebrates considered to be significant invasive species on islands of the South Pacific and Hawaii, supplementing the authors' experience with that of other workers.


Summary: The IUCN Red List of Threatened Species provides taxonomic, conservation status and distribution information on taxa that have been globally evaluated using the IUCN Red List Categories and Criteria. This system is designed to determine the relative risk of extinction, and the main purpose of the IUCN Red List is to catalogue and highlight those taxa that are facing a higher risk of global extinction (i.e. those listed as Critically Endangered, Endangered and Vulnerable). The IUCN Red List also includes information on taxa that are categorized as Extinct or Extinct in the Wild; on taxa that cannot be evaluated because of insufficient information (i.e. are Data Deficient); and on taxa that are either close to meeting the threatened thresholds or that would be threatened were it not for an ongoing taxon-specific conservation programme (i.e. are Near Threatened).


Summary: This compilation of information sources can be sorted on keywords for example: Baits & Lures, Non Target Species, Eradication, Monitoring, Risk Assessment, Weeds, Herbicides etc. This compilation is at present in Excel format, this will be web-enabled as a searchable database shortly. This version of the database has been developed by the IUCN SSC ISSG as part of an Overseas Territories Environmental Programme funded project XOT603 in partnership with the Cayman Islands Government - Department of Environment. The compilation is a work under progress, the ISSG will manage, maintain and enhance the database with current and newly published information, reports, journal articles etc.

K?rtner, G. 2007. 1080 aerial baiting for the control of wild dogs and its impacts on spotted-tailed quoll (Dasyurus maculatus). Wildlife Research 34: 48-53

Summary: Spotted quolls were radio-tracked to assess the effect an aerial poison operation to control wild dogs may have on quoll survival. The result suggested most quolls are able to survive baiting campaigns


Summary: The Bureau of Rural Sciences National Feral Animal Control Program under the Natural Heritage Trust has supported the Pest Animal Control CRC in cooperation with the University of Canberra to develop a comprehensive, interactive and freely available website, Feral.org.au on pest animals. The site aims to make information on past and current research readily accessible and to interpret and pull together relevant data to assist end-users in making management decisions.

The website is available from http://www.feral.org.au/content/general/about.cfm

This page is available from: http://www.feral.org.au/content/species/dog.cfm


Summary: This database compiles information on alien species from British Overseas Territories.

Available from: http://www.jncc.gov.uk/page-3660 [Accessed 10 November 2009]

General information


Consequences to the biodiversity of New Caledonia of the introduction of plant and animal species.

Synthèse des introductions d’espèces de vertébrés en Nouvelle-Calédonie et évaluation de leurs impacts.

Personal communication with Benoît de Thoisy from the association Kwata, an expert of the vertebrate fauna

Dogs were found to impact endangered gazelle populations


Inventaire national du Patrimoine naturel, site Web, Les espèces Panthera leo deaths caused by dogs attacks at a high


Personal communication with Jean Yves Meyer, from the Délegation à la Recherche of French Polynesia


Abstract only online,

An online database that provides taxonomic information, common names, synonyms and geographical

jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the

Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.


Byologcal Conservation 119:231-236.


