Canis lupus

System: Terrestrial

<table>
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<th>Kingdom</th>
<th>Phylum</th>
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<th>Order</th>
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<td>Animalia</td>
<td>Chordata</td>
<td>Mammalia</td>
<td>Carnivora</td>
<td>Canidae</td>
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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

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.

view this species on IUCN Red List

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, sheepherds, 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 They have long since been replaced by, or crossed with, various breeds from Europe.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 mmesomelas) 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 dingoes (Canis lupus 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 (OTEWP) project XOT603, a joint project with the Cayman Islands Government - Department of Environment
Review:

Pubblication date: 2010-09-15

ALIEN RANGE

[1] ANGUILLA
[1] AUSTRALIA
[3] CAYMAN ISLANDS
[1] DOMINICAN REPUBLIC
[5] FIJI
[1] GUAM
[1] JAMAICA
[1] MADAGASCAR
[1] MASAI MARA RESERVE
[3] MICRONESIA, FEDERATED STATES OF
[4] NEW CALEDONIA
[1] NIUE
[1] PAPUA NEW GUINEA
[1] SAINT LUCIA
[1] SERENGETI-MARA ECOSYSTEM
[1] TOLKELAU
[3] TURKS AND CAICOS ISLANDS
[1] UNITED STATES MINOR OUTLYING ISLANDS

[1] ANTIGUA AND BARBUDA
[1] BAHAMAS
[2] COOK ISLANDS
[2] ECUADOR
[1] FRENCH GUIANA
[1] GERMANY
[1] HAITI
[9] KIRIBATI
[1] MARSHALL ISLANDS
[1] MEXICO
[1] NAURU
[2] NEW ZEALAND
[2] SAINT HELENA
[1] SAINT MARTIN (FRENCH PART)
[1] SOLOMON ISLANDS
[2] TONGA
[2] VIRGIN ISLANDS, BRITISH

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

Aepypodium bruijni EN
Amblysomus corraei NT
Anas wyvilliana EN
Aplonis santovestris VU
Apteryx haasti VU
Aramidopsis plateni VU
Ardeotis nigriceps CR
Atelocynus microtis NT
Brachypteracias squamiger VU
Camarhynchus pauper CR
Capreolus capreolus LC
Celestus anelpistus CR
Charadius melodus NT
Charadius sanctaehelenae CR
Chrysocyon brachyurus NT
Coturnix novaenlandiae 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 guanaju CR
Burhinus grallarius NT
Canis simensis EN
Casuarius bennetti NT
Celestus warreni CR
Charadius obscursus EN
Chlamyphorus truncatus DD
Conilurus penicillatus NT
Cryptoprocta ferox VU
Ctenosaura palaevis EN
Cyclura carinata CR
FULL ACCOUNT FOR: Canis lupus

Cyclura collei  CR
Cyclura lewisi  CR
Cyclura ricordii  CR
Dasyurus hallucatus  EN
Dasyurus spartacus  NT
Dipodomys marginata  CR
Ducula pickeringii  VU
Eudyptes pachyrhynchus  VU
Euryynchus pygmeus  CR
Fossa fossana  NT
Galidia elegans  LC
Galidictis grandideri  EN
Gallicolumba sanctaebrucis  EN
Gallinula silvestris  CR
Gallirallus dieffenbachii  EX
Gallirallus okinawa  EN
Gallirallus sylvestris  EN
Gazella cuvieri  EN
Grus antiquus  VU
Gymnocrax rosenbergii  VU
Habroptila wallaci  VU
Hippocamelus antisensis  VU
Hypogeomys antonina  EN
Iguana delicatissima  EN
Laterallus spilonotus  VU
Lepidocheles olivacea  VU
Lycaen pictus  EN
Macrotarsomys ingens  EN
Mallomys istapantap  LC
Mazama nana  DD
Megapodius bernsteini  VU
Megapodius lapereous  EN
Megapodius pritchardii  EN
Mesitornis unicolor  LC
Microperoryctes longicauda  LC
Monias benschi  VU
Mysateles prehensilis  NT
Neotoma bryanti  EN
Numenius tahitiensis  VU
Papagomys armandvillei  NT
Pentalagus furnessi  EN
Petrogale persephane  EN
Phalacrocorax harrisi  VU
Phascolarctos cinereus  LC
Philoria frosti  CR
Pitta anerythra  VU
Plagiodontia aedium  EN

Cyclura cornuta  VU
Cyclura pinguis  CR
Dasypus hybridus  NT
Dasyurus maculatus  NT
Diplopteryx legata  EN
Dorcopsis vanheurni  NT
Eliurus myoxinus  LC
Eulipes goudotii  NT
Felis margarita  NT
Fulica alai  VU
Galictis fasciata  NT
Gallicolumba salamonis  EX
Gallinula pacifica  CR
Gallirallus calayanensis  VU
Gallirallus lafresnayanus  CR
Gallirallus roviana  NT
Gallotia simonyi  CR
Geocapromys brownii  VU
Grus paradisea  VU
Gymnomyza aubryana  CR
Henicophaps foersteri  VU
Hippocamelus bisulcus  EN
Hypsiprymnodon moschatus  LC
Larus fuliginosus  VU
Leipoa ocellata  VU
Litoria caerulea  LC
Macaca sylvanus  EN
Mallomys gunung  EN
Mazama gouazoubira  LC
Megacrex inepta  NT
Megapodius geevikianus  VU
Megapodius nicobariensis  VU
Mergus australis  EX
Microgoura meeki  EX
Moho bishopi  EX
Mungotictis decemlineata  VU
Neodon sikimensis  LC
Nesoclepsis woodfordi  NT
Ozotoceros bezoarticus  NT
Pelecanoides garnotii  EN
Petrogale penicillata  NT
Phalacrocorax featherstoni  EN
Phalacrocorax onslowi  CR
Phascolosorex doriae  LC
Phoebastria immutabili  NT
Pitta superba  VU
Pluvianellus socialis  NT

Porphyrio kukwiedei EX
Potorous longipes EN
Procellaria parkinsoni VU
Pseudopodiceps fulvipes CR
Psophus 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 richardsoni VU
Rhionaeschna galapagoensis EN
Rhymentoches jubatus EN
Scolopax mire VU
Solenodon cubanus EN
Spheniscus mendiculus EN
Sturna abostraita 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 wollebaeki EN
Porzana sandwichensis EX
Potorous tridactylus LC
Procyon pygmaeus CR
Pseudobulweria rostrata NT
Psittirostra psittacea CR
Pterodroma barbata 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
Rhyynchomys prattorum EN
Sarcophilus harrisii EN
Sminthopsis butleri VU
Solenodon paradoxus EN
Spilogale pygmaea VU
Sternula nereis VU
Sylvilagus bachmani LC
Syrmaticus soemmerringii NT
Tarsius dentatus VU
Tarsius pelengensis EN
Terrapene carolina VU
Thomomys mazama LC
Tokudaia tokunoshimensis EN
Uratelornis ochraena 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?rntner, 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: This 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


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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


Summary: English: The species list sheet for the Mexican information system on invasive species currently provides information related to scientific names, family, group and common names, as well as habitat, status of invasion in Mexico, pathways of introduction and links to other specialised websites. Some of the higher risk species already have a direct link to the alert page. It is important to notice that these lists are constantly being updated, please refer to the main page (http://www.conabio.gob.mx/invasoras/index.php/Portada), under the section Novedades for information on updates.

Invasive species - mammals is available from: http://www.conabio.gob.mx/invasoras/index.php/Especies_invasoras_-_Mam%C3%ADferos [Accessed 30 July 2008]

De Thoisy, pers. comm., 2007

Summary: Personal communication with Benoit de Thoisy from the association Kwata, an expert of the vertebrate fauna of French Guiana.


Summary: Abstract only online,


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


Summary: Available from: http://www.iucnredlist.org/apps/redlist/details/8833/0 [Accessed 1 February 2012]


Summary: 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.


Summary: Dogs were found to impact endangered gazelle populations

Meyer, J.-Y. pers. comm., 2007

Summary: Personal communication with Jean Yves Meyer, from the D?l?gation ? la Recherche of French Polynesia


Galidictis fasciata

Fossa fossana

Canis lupus

Rhynochetos jubatus

Canis familiaris

Canis lupus

Canis lupus

Summary: Available online in PDF format at www.canids.org