

Canis lupus  正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Carnivora	Canidae

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.



[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, 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 They have long since been replaced by, or crossed with, various breeds from Europe.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.



GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: *Canis lupus*

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 (OTEP) project XOT603, a joint project with the Cayman Islands Government - Department of Environment

Review:

Publication date: 2010-09-15

ALIEN RANGE

[1] ANGUILLA	[1] ANTIGUA AND BARBUDA
[1] AUSTRALIA	[1] BAHAMAS
[3] CAYMAN ISLANDS	[2] COOK ISLANDS
[1] DOMINICAN REPUBLIC	[2] ECUADOR
[5] FIJI	[1] FRENCH GUIANA
[11] FRENCH POLYNESIA	[1] GERMANY
[1] GUAM	[1] HAITI
[1] JAMAICA	[9] KIRIBATI
[1] MADAGASCAR	[1] MARSHALL ISLANDS
[1] MASAI MARA RESERVE	[1] MEXICO
[3] MICRONESIA, FEDERATED STATES OF	[1] NAURU
[4] NEW CALEDONIA	[2] NEW ZEALAND
[1] NIUE	[3] NORTHERN MARIANA ISLANDS
[1] PAPUA NEW GUINEA	[2] SAINT HELENA
[1] SAINT LUCIA	[1] SAINT MARTIN (FRENCH PART)
[1] SERENGETI-MARA ECOSYSTEM	[1] SOLOMON ISLANDS
[1] TOKELAU	[2] TONGA
[3] TURKS AND CAICOS ISLANDS	[8] UNITED STATES
[1] UNITED STATES MINOR OUTLYING ISLANDS	[2] VIRGIN ISLANDS, BRITISH

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

Aepyodius bruijnii EN	Alauda razae CR
Amblysomus corriae NT	Anas chlorotis EN
Anas wyvilliana EN	Anolis longiceps VU
Aplonis santovestris VU	Apteryx australis VU
Apteryx haastii VU	Apteryx mantelli EN
Aramidopsis plateni VU	Arctocephalus galapagoensis EN
Ardeotis nigriceps CR	Arvicola sapidus VU
Atelocynus microtis NT	Atelopus guanujo CR
Brachypteracias squamiger VU	Burhinus grallarius NT
Camarhynchus pauper CR	Canis simensis EN
Capreolus capreolus LC	Casuarius bennetti NT
Celestus anelpistus CR	Celestus warreni CR
Charadrius melodus NT	Charadrius obscurus EN
Charadrius sanctaehelenae CR	Chlamyphorus truncatus DD
Chrysocyon brachyurus NT	Conilurus penicillatus NT
Coturnix novaezelandiae EX	Cryptoprocta ferox VU
Ctenosaura bakeri CR	Ctenosaura palearis EN
Cuon alpinus EN	Cyclura carinata CR
Cyclura collei CR	Cyclura cornuta VU
Cyclura lewisi CR	Cyclura pinguis CR
Cyclura ricordii CR	Dasypus hybridus NT
Dasyurus hallucatus EN	Dasyurus maculatus NT
Dasyurus spartacus NT	Diplothrix legata EN
Dipodomys margaritae CR	Dorcopsulus vanheurni NT
Ducula pickeringii VU	Eliurus myoxinus LC
Eudyptes pachyrhynchus VU	Eupleres goudotii NT

Eurynorhynchus pygmeus CR	Felis margarita NT
Fossa fossana NT	Fulica alai VU
Galidia elegans LC	Galidictis fasciata NT
Galidictis grandidieri EN	Gallicolumba salamonis EX
Gallicolumba sanctaerucis EN	Gallinula pacifica CR
Gallinula silvestris CR	Gallirallus calayanensis VU
Gallirallus dieffenbachii EX	Gallirallus lafresnayanus CR
Gallirallus okinawae EN	Gallirallus roviae NT
Gallirallus sylvestris EN	Gallotia simonyi CR
Gazella cuvieri EN	Geocapromys brownii VU
Grus antigone VU	Grus paradisea VU
Gymnocrex rosenbergii VU	Gymnomyza aubryana CR
Habroptila wallacii VU	Henicophaps foersteri VU
Hippocamelus antisensis VU	Hippocamelus bisulcus EN
Hypogeomys antimena EN	Hypsiprymnodon moschatus LC
Iguana delicatissima EN	Larus fuliginosus VU
Laterallus spilonotus VU	Leipoa ocellata VU
Lepidochelys olivacea VU	Litoria caerulea LC
Lycaon pictus EN	Macaca sylvanus EN
Macrotarsomys ingens EN	Mallomys gunung EN
Mallomys istapantap LC	Mazama gouazoubira LC
Mazama nana DD	Megacrex inepta NT
Megapodius bernsteinii VU	Megapodius geelvinkianus VU
Megapodius laperouse EN	Megapodius nicobariensis VU
Megapodius pritchardii EN	Mergus australis EX
Mesitornis unicolor VU	Microgoura meeki EX
Microperoryctes longicauda LC	Moho bishopi EX
Monias benschi VU	Mungotictis decemlineata VU
Mysateles prehensilis NT	Neodon sikimensis LC
Neotoma bryanti EN	Nesoclopeus woodfordi NT
Numenius tahitiensis VU	Ozotoceros bezoarticus NT
Papagomys armandvillei NT	Pelecanoides garnotii EN
Pentalagus furnessi EN	Petrogale penicillata NT
Petrogale persephone EN	Phalacrocorax featherstoni EN
Phalacrocorax harrisi VU	Phalacrocorax onslowi CR
Phascolarctos cinereus LC	Phascolosorex doriae LC
Phylloscopus collybita CR	Phoebastria immutabilis NT
Pitta anerythra VU	Pitta superba VU
Plagiodontia aedium EN	Pluvianellus socialis NT
Porphyrio kukwiedei EX	Porzana sandwichensis EX
Potorous longipes EN	Potorous tridactylus LC
Procellaria parkinsoni VU	Procyon pygmaeus CR
Pseudalopex fulvipes CR	Pseudobulweria rostrata NT
Pseudomys fumeus EN	Psittirostra psittacea CR
Pterodroma axillaris EN	Pterodroma barau EN
Pterodroma brevipes VU	Pterodroma externa VU
Pterodroma hasitata EN	Pterodroma longirostris VU
Pterodroma phaeopygia CR	Pterodroma sandwichensis VU
Pteropus pselaphon CR	Pudu mephistophiles VU
Pudu puda VU	Puffinus creatopus VU
Puffinus heinrothi VU	Puffinus newelli EN
Puffinus opisthomelas NT	Rallina canningi NT
Rallina leucospila NT	Rallus semiplumbeus EN
Rattus richardsoni VU	Reithrodontomys spectabilis CR

[Rhionaeschna galapagoensis](#) EN
[Rhynochetos jubatus](#) EN
[Scolopax mira](#) VU
[Solenodon cubanus](#) EN
[Spheniscus mendiculus](#) EN
[Sterna albobriata](#) EN
[Suta flagellum](#) LC
[Sylvilagus varynaensis](#) DD
[Tamias palmeri](#) EN
[Tarsius lariang](#) DD
[Tarsius tarsier](#) VU
[Thinornis rubricollis](#) NT
[Tokudaia osimensis](#) EN
[Tupaia nicobarica](#) EN
[Vermivora crissalis](#) NT
[Zalophus wolfebaeki](#) EN

[Rhynchomeles prattorum](#) EN
[Sarcophilus harrisii](#) EN
[Sminthopsis butleri](#) VU
[Solenodon paradoxus](#) EN
[Spilogale pygmaea](#) VU
[Sterna nereis](#) VU
[Sylvilagus bachmani](#) LC
[Syrnaticus soemmerringii](#) NT
[Tarsius dentatus](#) VU
[Tarsius pelengensis](#) EN
[Terrapene carolina](#) VU
[Thomomys mazama](#) LC
[Tokudaia tokunoshimensis](#) EN
[Uratelornis chimaera](#) VU
[Vestiarina coccinea](#) VU

BIBLIOGRAPHY

38 references found for *Canis lupus*

Management information

Atkinson, I. A. E. and Atkinson, T. J. 2000. Land vertebrates as invasive species on islands served by the South Pacific Regional Environment Programme. In: *Invasive Species in the Pacific: A Technical Review and Draft Regional Strategy*. South Pacific Regional Environment Programme, Samoa: 19-84.

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.

Bomford, M., 2003. *Risk Assessment for the Import and Keeping of Exotic Vertebrates in Australia*. Bureau of Rural Sciences, Canberra.

Summary: Available from: <http://www.feral.org.au/wp-content/uploads/2010/03/PC12803.pdf> [Accessed August 19 2010]

Fleming, P., Corbett, L., Harden, R. and Thomson, P. 2001. *Managing the Impacts of Dingoes and Other Wild Dogs*. Bureau of Rural Sciences, Canberra.

Summary: Available from: http://www.daff.gov.au/_data/assets/pdf_file/0013/1504111/dingoes-and-dogs.pdf [Accessed 26 June 2010]

Gerber, G. 1997. Nesting Behavior of the Little Cayman rock iguana, *Cyclura nubila caymanensis*. Joint Annual Meeting, American Society of Ichthyologists and Herpetologists/Herpetologists League/Society for the Study of Amphibians and Reptiles. University of Washington, Seattle, U.S.A.

Gerber, G.P. 2000. Conservation of the Anegada Rock Iguana: Field Research Report. Unpublished Report to the British Virgin Islands National Parks Trust, Fauna & Flora

Glen, A.S., Gentle, M.N. and Dickman, C.R. 2007. Non-target impacts of poison baiting for predator control in Australia. *Mammal Review* Volume 37 Issue 3 Page 191-205, July 2007

[IUCN 2010. IUCN Red List of Threatened Species. Version 2010.4.](#)

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).

Available from: <http://www.iucnredlist.org/> [Accessed 25 May 2011]

[IUCN/SSC Invasive Species Specialist Group \(ISSG\), 2010. A Compilation of Information Sources for Conservation Managers.](#)

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.

Körtner, 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

[Lapidge, Bourne, Braysher, and Sarre., 2004- present feral.org.au \[Online\]. Web-based \(http://www.feral.org.au\)](http://www.feral.org.au)

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>

[Pacific Invasives Initiative \(PII\), 2006a. Viwa Island Restoration Project](#)

Summary: Available from: <http://www.issg.org/cii/PII/demo/viwa.html> [Accessed 12 March 2010]

[Pacific Invasives Initiative \(PII\), 2006. Mont Panié Mammal Control Proof-of-Concept Project](#)

Summary: Available from: <http://www.issg.org/cii/PII/demo/mtPanie.html> [Accessed 12 March 2010]

[Varnham, K. 2006. Non-native species in UK Overseas Territories: a review. JNCC Report 372. Peterborough: United Kingdom.](#)

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

Anderson, A. J. 1990. Kuri. In King, C. M. (ed.) The Handbook of New Zealand Mammals. Oxford University Press, Auckland: 281-287.

Barnett, B. D. 1982. Feral dogs of southern Isabela. Noticias Galapagos 35: 15-16.

[Bauer, H. & Nowell, K. 2004. Panthera leo. In: IUCN 2007. 2007 IUCN Red List of Threatened Species](#)

Summary: Available from: <http://www.iucnredlist.org/search/details.php/15951/all> [Accessed 7 February 2008]

[BirdLife International 2004. Apteryx australis. In: IUCN 2007. 2007 IUCN Red List of Threatened Species.](#)

[BirdLife International 2004. Apteryx haastii. In: IUCN 2007. 2007 IUCN Red List of Threatened Species.](#)

Summary: Available from: <http://www.iucnredlist.org/apps/redlist/details/141094/0> [Accessed 12 March 2010]

[BirdLife International 2004. Apteryx mantelli. In: IUCN 2007. 2007 IUCN Red List of Threatened Species](#)

Summary: Available from: <http://www.iucnredlist.org/apps/redlist/details/150471/0> [Accessed 12 March 2010]

[BirdLife International 2004. Apteryx owenii. In: IUCN 2007. 2007 IUCN Red List of Threatened Species](#)

Summary: Available from: <http://www.iucnredlist.org/apps/redlist/details/141093/0> [Accessed 12 March 2010]

[Blank, D.A. 2003. Gazella gazella ssp. gazella. In: IUCN 2007. 2007 IUCN Red List of Threatened Species](#)

Summary: Available from: <http://www.iucnredlist.org/apps/redlist/details/8970/0> [Accessed 12 March 2010]

[CONABIO. 2008. Sistema de información sobre especies invasoras en México. Especies invasoras - Mamíferos. Comisión Nacional para el Conocimiento y Uso de la Biodiversidad. Fecha de acceso.](#)

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]

Spanish:

La lista de especies del Sistema de información sobre especies invasoras de México cuenta actualmente con información acerca de nombre científico, familia, grupo y nombre común, así como hábitat, estado de la invasión en México, rutas de introducción y ligas a otros sitios especializados. Algunas de las especies de mayor riesgo ya tienen una liga directa a la página de alertas. Es importante resaltar que estas listas se encuentran en constante proceso de actualización, por favor consulte la portada (<http://www.conabio.gob.mx/invasoras/index.php/Portada>), en la sección novedades, para conocer los cambios.

Especies invasoras - Mamíferos 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.

[Dickman, C.R. 1996. Impact of exotic generalist predators on the native fauna of Australia. Wildlife Biology 2: 185-195](#)

Summary: Abstract only online,

[Gargominy, O., Bouchet, P., Pascal, M., Jaffre, T. and Tourneau, J. C. 1996. Conséquences des introductions d'espèces animales et végétales sur la biodiversité en Nouvelle-Calédonie. Rev. Ecol. \(Terre Vie\) 51: 375-401.](#)

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

[Hawkins, A.F.A. 2008a. Fossa fossana. In: IUCN 2011. IUCN Red List of Threatened Species. Version 2011.2.](#)

Summary: Available from: <http://www.iucnredlist.org/apps/redlist/details/8668/0> [Accessed 1 February 2012]

[Hawkins, A.F.A. 2008c. Galidictis fasciata. In: IUCN 2011. IUCN Red List of Threatened Species. Version 2011.2.](#)

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

[Hunt, G.R., Hay R., Veltman, C. 1996. Multiple kagu Rhynochetos jubatus deaths caused by dogs attacks at a high altitude site on Pic Ningua, New Caledonia. International Bird Conservation, 6 : 295-306.](#)

[ITIS \(Integrated Taxonomic Information System\), 2004. Online Database Canis lupus](#)

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.

Available from: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=180596 [Accessed 14 January 2008]

[Macdonald, D. W. and C. Sillero-Zubiri. 2004. Biology and conservation of wild canids. Oxford University Press, UK.](#)

Manor, M. and Saltz, D. 2004. The impact of free-roaming dogs on gazelle kid/female ratio in a fragmented area. *Biological Conservation* 119:231-236.

Summary: Dogs were found to impact endangered gazelle populations

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

Summary: Personal communication with Jean Yves Meyer, from the Délégation de la Recherche of French Polynesia [Muséum national d'Histoire naturelle \[Ed\]. 2003-2006. *Canis familiaris*. Inventaire national du Patrimoine naturel, site Web : <http://inpn.mnhn.fr>. Document téléchargé le 28 mars 2008.](#)

Summary:

Available from:

http://inpn.mnhn.fr/isb/servlet/ISBServlet?action=Espece&typeAction=10&pageReturn=ficheEspeceDescription.jsp&numero_taxon=162663 [Accessed March 2008]

Pascal, M., Barré, N., De Garine-Wichatitsky, Lorvelec, O., Frétey, T., Brescia, F., Jourdan, H. 2006. Les peuplements néo-calédoniens de vertébrés : invasions, disparitions. Pp 111-162, in M.-L. Beauvais *et al.*, : Les espèces envahissantes dans l'archipel néo-calédonien, Paris, IRD éditions, 260 p. + cdrom

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

Roelke-Parker, M.E.; Munson, L.; Packer, C.; Kock, R.; Cleaveland, S.; Carpenter, M.; O'Brien, S.J.; Pospischil, A.; Hofmann-Lehmann, R.; Lutz, H.; Mwamengele, G.L.M.; Mgasia, M.N.; Machange, G.A.; Summers, B.; Appel, M.J.G., 1996. A canine distemper virus epidemic in Serengeti lions (*Panthera leo*). *Nature* [0028-0836]:1996 vol:379 iss:6564 pg:441

[Sillero-Zubiri, C., M. Hoffman, and D. W. Macdonald \(eds.\). 2004. *Canids: foxes, wolves, jackals and dogs. Status survey and conservation action plan*. IUCN/SSC Canid Specialist Group. Gland, Switzerland and Cambridge, UK. Sillero-Zubiri, C., M. Hoffman, and D. W. Macdonald \(eds.\). 2004. *Canids: foxes, wolves, jackals and dogs. Status survey and conservation action plan*. IUCN/SSC Canid Specialist Group. Gland, Switzerland and Cambridge, UK.](#)

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

Taborsky, M. 1988. Kiwis and dog predation: observations in Waitangi State Forest. *Notornis* 35: 197-202.

Vila, C., Savolainen, P., Maldonado, J.E., Amorim, I.R., Rice, J.E., Honeycutt, R.L., Crandall, K.A., Lundeberg, J. and Wayne, R.K. 1997. Multiple and ancient origins of the domestic dog. *Science* 276: 1687-1689