

Bos taurus   正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Artiodactyla	Bovidae

Common name Hausrind (German), cattle (English)

Synonym *Bos indicus* , Linnaeus, 1758
Bos primigenius , Bojanes, 1827

Similar species

Summary

Feral cattle (*Bos taurus*) are escaped or released domestic animals. Unless well contained by adequate fences, they form feral herds and wander into native vegetation wherever suitable food is available. They can severely modify native vegetation by browsing, crushing and trampling. In native forests they invariably lay bare the forest floor and eliminate nearly all young trees, shrubs and ferns until only a few unpalatable or browse-resistant species remain. In subalpine environments feral cattle open up clearings by breaking down and browsing low-canopied vegetation.



[view this species on IUCN Red List](#)

Species Description

Feral cattle can be distinguished from domestic stock only by their location and lack of ear marks or tags. Their size and conformation vary greatly depending on sex, age and breed. The male is heavier and larger, particularly around the head and neck. The hair is either straight or curly, and ranges from whitish to black with shades and blotches of red, roan, brown or buff. Both sexes can have horns, which are permanent and hollow, and grow throughout life over bony cores projecting from a prominent ridge on the skull. The horns of bulls are usually shorter and thicker than those of cows (Parkes, 2005).

Uses

Domestic cattle are used for meat, milk, hides and as draft animals. Feral cattle may be hunted for meat and hides.

Reproduction

The oestrus cycle is 3 weeks, and the gestation period about 9.5 months. Feral calves are most commonly born in late spring. Multiple births are unknown in feral herds. Calves are born with their eyes open, they stand and suckle almost at once, and within a few hours can follow their mother. They are usually weaned well before the next calf is born.

Males reach puberty at about 10 months of age, and thereafter are fecund throughout the year, but feral bulls do not mate until strong enough to compete for cows. Domestic cows can conceive at 6-10 months, but apparently very few do so in the wild. Cows may remain fertile for about 12 years and come in-season in spring or about 3 weeks after calving.

Nutrition

In mainland forests feral cattle browse on a very wide range of shrubs and young trees. Feral cattle are afoot at first light, feeding rapidly until the paunch is full, and then they alternate periods of chewing the cud with grazing throughout the day. Normally they ruminate lying down, but in wet weather they may stand with their backs to the wind. In bush country feral cattle will "walk down" tall saplings up to 6m high, straddling the stem in order to bend the tops within reach, and then stripping off the leaves.

General Impacts

Feral cattle can severely modify native vegetation by browsing, crushing and trampling (Aston 1912; Wodzicki 1950). In native forests they invariably lay bare the forest floor and eliminate nearly all young trees, shrubs and ferns, until only a few unpalatable or browse-resistant species remain. In subalpine environments feral cattle open up clearings by breaking down and browsing low-canopied vegetation. On sub-antarctic Enderby Island feral cattle prevented the regeneration of *Poa litorosa* tussock grassland and a variety of endemic sub-antarctic herbs (Parkes, 2005). Scott *et al.* (in Stone 1984) regarded domestic and feral cattle as the "single most destructive agent to Hawai'ian ecosystems, particularly to koa forests". Regeneration of young koa (see [Acacia koaia in IUCN Red List of Threatened Species](#)) trees is completely suppressed in some forests of Hawai'i (Baldwin and Fagerlund 1943; SPREP, 2000).

Degradation of breeding sites by introduced cattle has decreased the range and population of the 'critically endangered' Amsterdam albatross (see [Diomedea amsterdamensis in IUCN Red List of Threatened Species](#)). Across the island (BirdLife International 2007).

Management Info

Preventative measures: Well maintained fences can give adequate protection from cattle to areas of native woody vegetation (Courchamp *et al.* 2003). A fence was used on Amsterdam Island in the Indian Ocean to prevent cattle damaging the breeding grounds of the 'Critically Endangered (CR)' Amsterdam albatross (see [Diomedea amsterdamensis in IUCN Red List of Threatened Species](#)). Cattle were restricted to a small part of the island and eradicated from the rest (Micol and Jouventin, 1995).

Physical: Dogs and shooting are a standard method of control (SPREP, 2000).

Pathway

Particularly important in Hawaii and New Caledonia as the basis for a meat industry.

Principal source: Taylor R. H. (1990) in King C. M. (ed.) The Handbook of New Zealand Mammals

Compiler: IUCN/SSC Invasive Species Specialist Group (ISSG)

Review:

Publication date: 2007-07-03

ALIEN RANGE

[3] CAYMAN ISLANDS

[1] FALKLAND ISLANDS (MALVINAS)

[12] FRENCH POLYNESIA

[1] KIRIBATI

[6] NEW ZEALAND

[1] REUNION

[4] TURKS AND CAICOS ISLANDS

[7] UNITED STATES

[1] ECUADOR

[4] FIJI

[1] FRENCH SOUTHERN TERRITORIES

[2] NEW CALEDONIA

[2] NORTHERN MARIANA ISLANDS

[1] SAMOA

[1] TUVALU

[1] VIRGIN ISLANDS, BRITISH

Red List assessed species 230: EX = 1; EW = 1; CR = 54; EN = 65; VU = 76; LR/nt = 1; NT = 27; DD = 1; LC = 4;

[Abutilon eremitopetalum](#) CR
[Abutilon sandwicense](#) CR
[Acacia koaia](#) VU
[Achyranthes mutica](#) CR
[Acropogon bullatus](#) NT
[Alectryon macrococcus](#) CR
[Arborophila rufipectus](#) EN
[Argyroxiphium kauense](#) CR
[Arytera nekorensis](#) VU
[Aspidoscelis arizonae](#) NT
[Asthenes luizae](#) NT
[Austromyrtus lotoides](#) VU
[Balaeniceps rex](#) VU
[Batrachoseps simatus](#) VU
[Bonamia menziesii](#) CR
[Bos javanicus](#) EN
[Callerya neocaledonica](#) CR
[Calyptrothrix thomasi](#) EN
[Cambarus clivosus](#) VU
[Canavalia veillonii](#) CR
[Celtis balansae](#) VU
[Centaurium sebaeoides](#) CR
[Cephalomappa sinensis](#) VU
[Ceratozamia mexicana](#) VU
[Cherax leckii](#) CR
[Chlorolestes apricans](#) EN
[Cisticola aberdare](#) EN
[Cordia rupicola](#) CR
[Crambe scoparia](#) EN
[Cryptotis nelsoni](#) CR
[Cyanoramphus malherbi](#) CR
[Cymbopetalum torulosum](#) VU
[Darevskia unisexualis](#) NT
[Diomedea amsterdamensis](#) CR
[Dioon califanoi](#) EN
[Diospyros impolita](#) VU
[Diospyros pustulata](#) VU
[Dorcatragus megalotis](#) VU
[Ducula galeata](#) EN
[Eleutherodactylus hypostenor](#) EN
[Engaeus granulatus](#) CR
[Engaeus spinicaudatus](#) CR
[Engaewa pseudoreducta](#) CR
[Engaewa similis](#) LC
[Equus hemionus](#) EN
[Eriocaulon tuberiferum](#) VU
[Eugenia ericoides](#) NT
[Eugenia sp. nov. 'dagostini'](#) EN
[Eugenia sp. nov. 'metzdorfii'](#) EN
[Gallinula pacifica](#) CR
[Geophaps smithii](#) NT
[Grossuana thracica](#) CR
[Haematopus chathamensis](#) EN
[Hemignathus lucidus](#) CR
[Abutilon menziesii](#) CR
[Acacia anegadensis](#) CR
[Aceros everetti](#) VU
[Achyranthes splendens](#) VU
[Albizia guillainii](#) VU
[Apalis karamojae](#) VU
[Ardeotis australis](#) NT
[Arianta chamaeleon](#) EN
[Aschisma kansanum](#) VU
[Assyriella rechingeri](#) CR
[Atractocarpus platyxydon](#) VU
[Avicennia bicolor](#) VU
[Batrachoseps campi](#) EN
[Bettongia lesueur](#) NT
[Boophis tampoka](#) EN
[Cadiscus aquaticus](#) CR
[Callicebus medemi](#) VU
[Camarhynchus pauper](#) CR
[Cambarus cymatilis](#) EN
[Capra caucasica](#) EN
[Cenchrus agrimonioides](#) CR
[Centrocercus urophasianus](#) NT
[Ceratogomphus triceraticus](#) VU
[Cercocebus galeritus](#) EN
[Chinchilla lanigera](#) CR
[Cinnyricinclus femoralis](#) VU
[Commidendrum robustum](#) EN
[Corvus hawaiiensis](#) EW
[Crocidura harenna](#) CR
[Cupaniopsis globosa](#) VU
[Cyclura pinguis](#) CR
[Darevskia clarkorum](#) EN
[Darevskia uzzelli](#) EN
[Diomedea epomophora](#) VU
[Diospyros cherrieri](#) VU
[Diospyros minimifolia](#) NT
[Diplotaxis siettiana](#) CR
[Drepanis funerea](#) EX
[Eleutherodactylus armstrongi](#) EN
[Emmenosperma pantherianum](#) VU
[Engaeus nulloprius](#) DD
[Engaeus sternalis](#) CR
[Engaewa reducta](#) EN
[Engaewa walpolea](#) EN
[Erigeron frigidus](#) EN
[Eudorcas rufifrons](#) VU
[Eugenia sp. nov. 'calcareae'](#) VU
[Eugenia sp. nov. 'lepredourii'](#) CR
[Felis nigripes](#) VU
[Gardenia brighamii](#) CR
[Gomphus sandrius](#) VU
[Guettardella sp. nov. 'durisylvatica'](#) EN
[Heleioporus australiacus](#) VU
[Hibiscus clayi](#) CR

Homalium leratiorum VU	Hyloxalus ruizi CR
Iberolacerta aranica EN	Iberolacerta aurelioi EN
Iberolacerta bonnali NT	Ixora margaretae VU
Jamesoniella undulifolia VU	Jasminum elatum VU
Juniperus brevifolia VU	Justicia pinensis EN
Kobus megaceros EN	Kobus vardonii NT
Laterallus spilonotus VU	Leontodon siculus NT
Leptaxis minor EN	Leptopelis xenodactylus EN
Lipocarpha kernii LC	Litoria pearsoniana NT
Loxioides bailleui CR	Lycodryas citrinus VU
Lygodactylus klemmeri VU	Mandevilla jamesonii CR
Megapodius laperouse EN	Melicope hawaiiensis VU
Mertensiella caucasica VU	Metastelma anegadense CR
Myadestes obscurus VU	Nanger dama CR
Nothura minor VU	Ochotona princeps LC
Opuntia chaffeyi CR	Orculella templorum NT
Oreomystis mana EN	Oreophasis derbianus EN
Oryza neocaledonica EN	Oxera balansae EN
Oxyura australis NT	Ozobryum ogalalense CR
Pezoporus occidentalis CR	Phalacrocorax colensoi VU
Phelsuma standingi VU	Phenacolimax blanci VU
Phyloria kundagungan EN	Phyloria loveridgei EN
Phyloria richmondensis EN	Phyloria sphagnicolus EN
Phyllanthus deplanchei VU	Phyllanthus unifoliatus EN
Pichonia balansana LC	Piliocalyx eugenioides EN
Pinguicula nevadensis EN	Pinus maximartinezii EN
Pisonia artensis VU	Pittosporum brevispinum EN
Pittosporum gatopense VU	Pittosporum tanianum CR
Platanthera praeclara EN	Plethodontohyla fonetana EN
Podonephelium subaequilaterum VU	Polyscias crenata VU
Polyscias nothisii EN	Pristimantis simoteriscus EN
Pristimantis simoterus NT	Protium inconforme VU
Psephotus chrysopterygius EN	Pseuderanthemum incisum VU
Pseudobithynia ambrakis VU	Pseudomys australis VU
Pseudomys oralis VU	Psychotria deverdiana VU
Pterodroma externa VU	Pterodroma longirostris VU
Pterodroma phaeopygia CR	Pterodroma sandwichensis VU
Ptilinopus huttoni VU	Puffinus creatopus VU
Randia pancheriana VU	Rhabdoena mirifica NT
Rhabdoena stokesi NT	Rhabdoena zasiensis NT
Rhinella rubropunctata VU	Ruprechtia apetala LR/nt
Rynchops flavirostris NT	Sceloporus exsul CR
Serapias stenopetala CR	Solanum hugonis EN
Solanum pancheri NT	Solenanthus albanicus EN
Spermodea lamellata NT	Sterna albobstriata EN
Sylvilagus insonus EN	Sylvisorex camerunensis VU
Syzygium pendulinum EN	Syzygium poyanum VU
Syzygium veillonii EN	Tacheocampylaea carotii VU
Tachyoryctes macrocephalus EN	Taoniscus nanus VU
Tapirus terrestris VU	Tephrosia pondoensis VU
Terminalia cherrieri EN	Thalassarche carteri EN
Todiramphus farquhari NT	Todiramphus godeffroyi CR
Tomichia cawstoni CR	Trigonostemon cherrieri CR
Turbina inopinata CR	Turnix melanogaster VU

[Uebelmannia buiningii](#) CR
[Veronica oetaea](#) CR
[Vini ultramarina](#) EN
[Vipera dinniki](#) VU
[Xerocrassa edmundi](#) EN
[Zaedyus pichiy](#) NT
[Zamia restrepoi](#) CR

[Uma parapygas](#) NT
[Vestiarina coccinea](#) VU
[Vipera darevskii](#) CR
[Vipera ebneri](#) VU
[Xylosma grossecrenatum](#) EN
[Zamia loddigesii](#) NT
[Zavattariornis stresemanni](#) EN

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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.

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[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]

Courchamp, F., Chapuis, J.-L., and Pascal, M. 2003. Mammal invaders on islands: impact, control and control impact. Biological Reviews, 78: 347-383.

Summary: Comprehensive review of impacts of mammals on islands using rabbits as a case study

[Klinger, R. C.; P. Schuyler, and J. D. Sterner., 2002. The response of herbaceous vegetation and endemic plant species to the removal of feral sheep from the Santa Cruz Island, California. In Turning the tide: the eradication of invasive species: 381-388. Veitch, C.R. and Clout, M.N.\(eds\). IUCN SSC Invasive Species Specialist Group. IUCN. Gland. Switzerland and Cambridge. UK.](#)

Summary: Eradication case study in Turning the tide: the eradication of invasive species.

[Rauzon, M. J., D. J. Forsell, and E. N. Flint., 2002. Seabird re-colonisation after cat eradication on equatorial Jarvis, Howland, and Baker Islands, USA, Central Pacific. In Turning the tide: the eradication of invasive species: 406 - 414 IUCN SSC Invasive Species Specialist Group. IUCN. Gland. Switzerland and Cambridge. UK.](#)

Summary: Eradication case study In Turning the tide: the eradication of invasive species.

[Rescue Projects of the Rare Breeds Conservation Society of New Zealand: Enderby Island cattle.](#)

Summary: Outlines the effort invested in a rescue project to conserve the rare breed of Enderby Island cattle when conservation values conflicted with historical values.

Snowcraft, P. G. 1983. Tree cover changes in mammane (*Sophora chrysophylla*) forests grazed by sheep and cattle. Pacific Science 37: 109-119.

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Summary: Eradication case study in Turning the tide: the eradication of invasive species.

[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.

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Summary: Available from: <http://www.iucnredlist.org/apps/redlist/details/144900/0> [Accessed March 8 2010]

Butaud, pers. comm., 2007

Summary: Personal communication with Jean François Butaud, an expert naturalist of French Polynesia

Chapuis, J., Boussès, P., & Barnaud, G. 1994. Alien mammals, impact and management in the French Subantarctic Islands. Biological Conservation, 67, 97-104.

Summary: Cet article présente la situation actuelle et les impacts des populations introduites de mammifères dans les îles subantarctiques françaises. Les moyens de contrôle en place ou planifiés sont également présentés.

Chapuis, J.L. & Boussès, P. 1987. Relations animal-végétation : conséquences des introductions de mammifères phytophages dans l'archipel de Kerguelen. Actes du colloque sur la Recherche française dans les Terres Australes. 269-278

Summary: L'histoire des introductions de 4 mammifères herbivores, l'évolution de leurs populations, et leurs impacts sur les communautés végétales et animales sont présentés et discutés. Des moyens de contrôle sont envisagés pour permettre la restauration de ces milieux.

De Garine-Wichatitsky, M., Spaggiari, J., Menard, C. 2004. Ecologie et impact des ongulés introduits sur la forêt sèche de Nouvelle Calédonie. IAC/CIRAD, Programme Elevage et Faune, Païta, Nouvelle-Calédonie, 50p et 128 p d annexes.

[Frenot, Y., Chown, S.L., Whinam, J., Selkirk, P., Convey, P., Skotnicki, M., & Bergstrom, D. 2005. Biological invasions in the Antarctic: extent, impacts and implications. *Bio. Rev.* 80, 45-72.](#)

Summary: Article de synthèse sur les invasions biologiques (plantes, invertébrés et vertébrés) en antarctique.

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Summary: Cette article propose une liste des plantes exotiques pour 3 des îles subantarctiques françaises. Le rôle passé et présent des activités humaines dans les phénomènes d'invasions est discuté.

[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.

[ITIS \(Integrated Taxonomic Information System\), 2004. Online Database *Bos taurus*](#)

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=183838 [Accessed December 31 2004]

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

Summary: Personal communication with Jean Yves Meyer, from the Délégation de la Recherche of French Polynesia

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

Triolo, J. 2005. Guide pour la restauration écologique de la végétation indigène-Ile de La Réunion, ONF-Direction Générale de la Réunion, 88 p

Summary: Guide pratique sur la restauration écologique de la Réunion. De nombreuses informations sur la végétation et les menaces.