

Myocastor coypus  

System: Freshwater_terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Rodentia	Myocastoridae

Common name ragondin (French), Sumpfbiber (German), Biberratte (German), coypu (English), nutria (English), ratão-do-banhado (Portuguese, Brazil), coipù (Spanish)

Synonym

Similar species *Ondatra zibethicus*

Summary *Myocastor coypus* (coypu) is a large semi-aquatic rodent which originated from South America. However, due to escapes and releases from fur farms there are now large feral populations in North America, Europe and Asia. Their burrows penetrate and damage river banks, dykes and irrigation facilities. *Myocastor coypus*' feeding methods lead to the destruction of large areas of reed swamp. Habitat loss caused by coypus impacts plant, insect, bird and fish species.



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

Species Description

Myocastor coypus (coypu) is a large rodent (5-9kg; 40-60cm body; 30-45cm tail), superficially rat-like, pelage brown and yellow-brown in colour with a cylindrical tail. It has webbed hindfeet, with a footprint up to 15cm long, imprints of the web is often visible; incisors are prominent and bright orange-yellow (unlike rats which are yellow-brown), with white marks on muzzle (Woods *et al.* 1992, Carter and Leonard 2002). Faeces cylindrical, up to 70mm long, with fine longitudinal striations (LeBlanc, 1994).

Notes

Myocastor coypus (coypu) prefer habitats near the water, animals are rarely observed over 100m away from river. Severe winter could reduce reproductive success and adult survival.

Lifecycle Stages

Myocastor coypus (coypu) breed throughout the year; post-partum oestrus. Sexual maturity 3-10 months. Gestation 127-138 days. Mean litter sizes 5-6 (2-9), prenatal embryo losses are common during cold winter and in females in poor health condition. Woods *et al.* 1992)

Uses

Myocastor coypus (coypu) are valued as a source of fur (Carter and Leonard 2002) and have been used as a meat source. Coypu provides prey for alligators and other native predators in some areas

Habitat Description

Myocastor coypus (coypu) are generally found near permanent water, particularly reed beds and swamp/marsh. Also found in rivers, streams, lakes, ponds and brackish marsh in coastal areas.



GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: *Myocastor coypus*

Reproduction

Placental. Sexual. Significant relationship between winter severity and female reproduction in the following spring. Prenatal embryo losses are high until 13-14 weeks of gestation. Sexual maturity 3-10 months. Gestation 127-138 days. Litter size 2-9; prenatal embryo losses are common during cold winter and in females in poor health condition. (Woods *et al.* 1992, Genesis Laboratories, Inc. 2002)

Nutrition

Herbivorous, *Myocastor coypus* (coypu) eat wetland plants and crops. Selective feeding causes massive reduction in reed swamp. Occasional feeding on freshwater mussels are reported. It practices coprophagy. (Woods *et al.* 1992, Carter and Leonard 2002, Genesis Laboratories, Inc. 2002)

General Impacts

Myocastor coypus (coypu) burrows undermine the banks of rivers and dykes causing instability (Carter and Leonard, 2002). Feeding on rhizomes and young shoots of marsh plants leads to plant community breakdown and can lead to erosion in coastal habitats (LeBlanc, 1994). Coypu feeding on sea oat rhizomes in Mississippi barrier islands have led to sand dune erosion in these important habitats (GSMFC 2005).

At high densities coypu are able to convert marshland to open water by feeding on plants. Habitat destruction caused by coypu threatens rare marshland species of bird, fish and invertebrates. In Italy coypu have caused breeding whiskered tern (*Chlidonias hybrida*) to decline by largely destroying the cover of water-lilies *Nymphaea* in [Valli di Argenta a designated IBA \(Important Bird Area\)](#). The habitats of two national treasure species in Japan - a critically endangered dragon fly (see [Libellula angelina in IUCN Red List of Threatened Species](#)) and a fish the vulnerable deep-bodied bitterling (see [Acheilognathus longipinnis in IUCN Red List of Threatened Species](#)) (Shirow Tatsuzawa, pers. Comm.) are threatened by coypu.

Coypu also feed on agricultural crops (Carter and Leonard 2002) including sugarcane, alfalfa and root crops (Woods *et al.* 1992)

Management Info

Feral populations of coypu are managed by shooting and trapping. Eradication is preferable for small to medium size populations but some level of control is essential in most cases if eradication is not feasible. High fur prices can help encourage sufficient hunting to control populations (Carter and Leonard 2002). In times of high fur prices little damage was observed to wetlands in Louisiana, USA (Marx *et al.* 2003). In 2002 a bounty system existed in Louisiana. That year a \$12.5 million investment resulted in 342 trappers returning 300,000 tails over a 4 month season. Animals were shot or trapped and carcasses were either retained and sold as pelts or disposed of in the wetlands (Marx *et al.* 2003). Coypu have been eradicated from a number of states in the USA and are classed as pests in countries throughout the world (Carter and Leonard, 2002). A population of around 6000 coypu (Genovesi, 2005) was eradicated from East Anglia, UK in a campaign using cage traps. 24 trappers were employed for 8 years at a cost of £2.5 million (Gosling, 1989). An eradication was proposed for a small lake in Sicily but opposition by the World Wildlife Fund (WWF) prevented the eradication taking place (Genovesi, 2005). An unsuccessful attempt was made to use pythons (*Python rebae*) as a biocontrol for coypu in Lake Navaisha in Keya (Harper *et al.* 1990)

Pathway

Fur farms, introduced for fur exploitation.

Principal source: Woods, C.A., Contreras, L., Willner-Chapman, G. and Whidden, H.P. 1992. *Myocastor coypus*. Mammalian Species 398: 1-8.,

Carter, J. and Leonard, B. 2002. A review of the literature on the worldwide distribution, spread of and efforts to eradicate the coypu (*Myocastor coypus*). Wildlife Society Bulletin 30: 162-175.

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GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: *Myocastor coypus*

Review:

Publication date: 2008-04-13

ALIEN RANGE

[1] ARMENIA	[1] AUSTRIA
[1] AZERBAIJAN	[1] BELGIUM
[1] BOTSWANA	[1] BULGARIA
[4] CANADA	[1] CHINA
[1] CROATIA	[1] CZECH REPUBLIC
[1] DENMARK	[1] EX-YUGOSLAVIA
[1] FINLAND	[1] FRANCE
[1] GEORGIA	[1] GERMANY
[1] GREECE	[1] HUNGARY
[1] ISRAEL	[1] ITALY
[5] JAPAN	[1] JORDAN
[1] KAZAKHSTAN	[1] KENYA
[1] KOREA, REPUBLIC OF	[1] MEXICO
[1] NETHERLANDS	[1] NORWAY
[1] POLAND	[1] ROMANIA
[1] RUSSIAN FEDERATION	[1] SLOVENIA
[7] SPAIN	[1] SWEDEN
[1] SWITZERLAND	[1] TAJIKISTAN
[1] TANZANIA, UNITED REPUBLIC OF	[1] THAILAND
[1] TURKEY	[1] TURKMENISTAN
[1] UNITED KINGDOM	[31] UNITED STATES
[1] ZAMBIA	[1] ZIMBABWE

Red List assessed species 6: CR = 1; VU = 3; LC = 2;

[Acheilognathus longipinnis](#) VU

[Desmana moschata](#) VU

[Narcissus triandrus](#) LC

[Arvicola sapidus](#) VU

[Libellula angelina](#) CR

[Porphyrio porphyrio](#) LC

BIBLIOGRAPHY

24 references found for *Myocastor coypus*

Management information

[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]

[Carter, Jacoby., 2007. Worldwide Distribution, Spread of, and Efforts to Eradicate the Nutria \(*Myocastor coypus*\) USGS National Wetlands Research Center](#)

Summary: Website contains information about the introduced range of the coypu broken up by continent.

Available from: <http://www.nwrc.usgs.gov/special/nutria/index.htm> [Accessed 29 January 2008]

Carter, J. and Leonard, B. P. 2002. A review of the literature on the worldwide distribution., spread of, and efforts to eradicate the coypu (*Myocastor coypus*) Source. Wildlife Society Bulletin. 30(1): 162-175.

[Fasham, M; Trumper, Kate., 2001. Review of non-native species legislation and guidance Department for Environment, Food & Rural Affairs](#)

Summary: Available from: <http://www.defra.gov.uk/wildlife-pets/wildlife/management/non-native/documents/review-report.pdf> [Accessed 12 March 2010]

Genesis Laboratories, Inc. 2002. Report prepared for the Louisiana Department of Wildlife and Fisheries. 155pp.

Summary: Thorough review of biology and natural history, control and socioeconomic and cultural effects of coypu in Louisiana

Genovesi, P. 2005. Eradications of invasive alien species in Europe: a review. *Biological Invasions*. 7 (1): 127-133.

Summary: This paper gives details about the eradications of invasive species from Europe.

Gosling, L. M. 1989. Extinction to order. *New Scientist*, 4 march 1989: 44-49.

Summary: Results of the eradication campaign in England.

Gosling, L. M. and Baker, S. J. 1987. Planning and monitoring an attempt to eradicate coypus from Britain. *Symposia of The Zoological Society of London* 58: 99-113.

Summary: Populations simulations were used to help plan a campaign to eradicate feral coypus.

Gosling, L. M., Baker, S. J. and Clarke, C. N. 1988. An attempt to remove coypus (*Myocastor coypus*) from a wetland habitat in East Anglia. *Journal of Applied Ecology* 25: 49-62.

Summary: A trial was carried out to test whether it was possible to eradicate coypu using cage trapping.

Harper, D.M., Mavuti, K.M. and Muchiri, S.M., 1990. Ecology and management of Lake Naivasha, Kenya, in relation to climatic change, alien species introduction, and agricultural development. *Environmental Conservation* 17: 328-336.

Summary: Information about failed attempt to eradicate coypu using pythons (*Python rebae*)

[LeBlanc, Dwight J., 1994. Nutria Prevention and control of wildlife damage. \(Eds\) Scott E. Hygnstrom Robert M. Timm & Gary E. Larson](#)

Summary: Concise review of coypu damage and control methods, focussing on Louisiana

Available from: <http://www.ces.ncsu.edu/nreos/wild/pdf/wildlife/NUTRIA.PDF> [Accessed 21 January 2008]

Marx, J., Mouton, E., Linscombe, G. 2003. Nutria harvest distribution 2002-2003 And A survey of nutria herbivory damage in coastal Louisiana in 2003. Unpublished report by Fur and Refuge Division, Louisiana Department of Wildlife and Fisheries.

Summary: History of nutria colonisation of Louisiana. Also contains a survey of damage to wetlands caused by nutria and information about the 2003 nutria harvest including a breakdown of different hunting methods in different habitats

Tatsuzawa, Shirow. Department of Regional Science, Hokkaido University, Japan.

Summary: Interview at ISSG HQ. Auckland, 19 March 2004.

General information

Abbas, A. 1991. Feeding strategy of coypu (*Myocastor coypus*) in central western France. *Journal of Zoology*, London, 224: 385-401.

Summary: Feeding strategy of coypu and ability to colonize new habitats

Borgnia, M., Galante, M. L. and Cassini, M. H. 2000. Diet of the coypu (Nutria, *Myocastor coypus*) in agro-systems of Argentina Pampas. *Journal of Wildlife Management* 64(2): 354-361.

Summary: Diet composition and food selection of coypu in three riparian habitats.

[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]

Gulf States Marine Fisheries Commission (GSMFC), 2005. *Myocastor coypus* (Kerr, 1792)

[ITIS \(Integrated Taxonomic Information System\), 2005. Online Database *Myocastor coypus*](#)

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.cbif.gc.ca/pls/itisca/taxastep?king=every&p_action=containing&taxa=Myocastor+coypus&p_format=&p_ifx=plgt&p_lang= [Accessed March 2005]

Mendelssohn H & Yom-Tov, 1987. Eds. Vol 7: Mammals. Plants and Animals of the Land of Israel. Ministry of Defence/The Publishing House, Society for the Protection of Nature in Israel.

Reggiani, G., Boitani, L. and De Stefano, R. 1995. Population dynamics and regulation in the coypu *Myocastor coypus* in central Italy. *Ecography* 18: 138-146.

Summary: Demographic parameters of a coypu population in Mediterranean climate.

Reggiani, G., Boitani, L., D Antoni, S. and De Stefano, R. 1993. Biology and control of the coypu in the mediterranean area. *Suppl. Ric. Biol. Selvaggina* XXI: 67-100.

Summary: Biology and regulation factors of coypu population in mediterranean habitats.

[Salsamendi, E., Latierro, L. and J. O'Brien \(2009\). Current distribution of the Coypu \(*Myocastor coypus*\) in the Basque Autonomous Community, northern iberian peninsula. *Hystrix It. J. Mamm.* 20\(2\): 155-160](#)

Willner, G. R., Chapman, J. A. and Pursley, D. 1979. Reproduction, physiological responses, food habits, and abundance of nutria on Maryland marshes. *Wildlife Monograph* 65: 43.

Summary: Study on feeding strategies, population dynamics and adaptation of coypus.

Woods, C.A., Contreras, L., Willner-Chapman, G. & Whidden, H.P. 1992. *Myocastor coypus*. *Mammalian Species* 398: 1-8.

Summary: Detailed taxonomic information about the species. Map of original native range. Information about breeding, feeding and general impacts. Mainly focussed on native range, some mention of impacts and management in introduced range.