**Myocastor coypus**

**Common name**
ragondin (French), Sumpfbiber (German), Biberratte (German), coypu (English), nutria (English), ratão-do-banhado (Portuguese, Brazil), coipú (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.

**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.

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

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 (*Libellula angelina* in IUCN Red List of Threatened Species) and a fish the vulnerable deep-bodied bitterling (*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 Kenya (Harper et al. 1990).

Pathway
Fur farms, introduced for fur exploitation.


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

Acheilognathus longipinnis VU
Desmana moschata VU
Narcissus triandrus LC

BIBLIOGRAPHY
24 references found for Myocastor coypus

Management information

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.


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

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

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

Summary: Results of the eradication campaign in England.

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

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

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

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

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, Shiro. Department of Regional Science, Hokkaido University, Japan.

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

General information

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


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


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


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 informaci?n sobre especies invasoras de m?xico cuenta actualmente con informaci?n acerca de nombre cient?fico, familia, grupo y nombre com?n, as? como h?bitat, estado de la invasi?n en m?xico, rutas de introduccio?n y liga a otros sitios especializados. Algumas de las especies de mayor riesgo ya tienen una liga directa a la p?gina de alertas. Es importante resaltar que estas listas se encuentran en constante proceso de actualizaci?n, por favor consulte la portada (http://www.conabio.gob.mx/invasoras/index.php.Portada), en la secci?n novedades, para conocer los cambios.

Espacios invasores - Mam?feros is available from:

http://www.conabio.gob.mx/invasoras/index.php/Especies_invasoras_-_Mam%C3%ADferos [Accessed 30 July 2008]

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:


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


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


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


**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.