



The LIFE Project for the conservation of the European mink in Catalonia. El Pont de Suert breeding centre

Illustrations: Toni Llobet. Minuartia, Environmental Studies

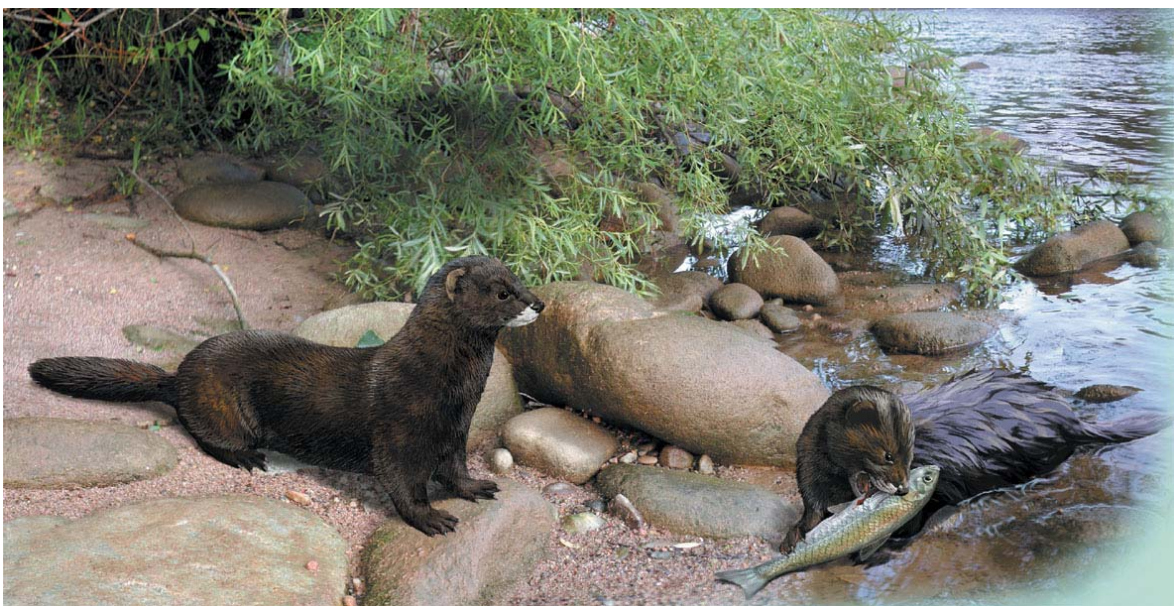
The European mink

The European mink (*Mustela lutreola*) is catalogued as a species in **danger of extinction** in the National Catalogue of Endangered Species. They belong to the mustelid family. They have long bodies and tails, adapted to land and aquatic life, and have membranes between their toes to help them to swim. Their fur is “chocolate” brown, short and glossy. They have characteristic white marks on their upper and lower lips.

The males, weighing 700-1,100 grams and with a total length of between 500 and 600 mm, are larger than the females, which weigh between 400 and 650 grams and measure between 440 and 520 mm.

Where do they live?

They live in wetlands and lakes and medium-flowing rivers, where there is good quality water and with dense and extensive riverbank vegetation. They need unpolluted rivers and well-conserved river banks.





What do they eat?

Semiaquatic carnivores, they hunt and fish for creatures in or near the water, in particular small mammals (mice, shrews, water voles, water rats), small aquatic birds, fish, amphibians, crayfish and insects. They locate their prey by moving up and down the river and they are fast to dive in and swim after what they have spotted.



How do they live?

They are solitary animals which are active at twilight and nocturnally. Their territory covers several kilometres of river, depending on the richness of dams and shelter which these offer it. After the mating season, in the spring, the females give birth to a litter of between 2 and 6 young, which they raise alone and which stay until autumn comes.

Can I see them?

The European mink make their dens hidden amongst riverbank plants and are silent animals with nocturnal and semiaquatic habits, so it is very difficult to see them in the wild. You can find their tracks: footprints that you can find on the beaches of the rivers, strong smelling excrement that they leave in prominent places, such as stones or trunks, in order to mark their territory.

The American mink, a controversial cousin

The American mink (*Mustela vison*) is a species that was introduced into Europe as a result of animals escaping from fur farms. They have colonised some rivers and are a serious threat to the conservation of the European mink. The American mink is larger, it breeds faster than the European mink and it displaces it from its habitat. In addition, it is a carrier of Aleutian disease, which could be affecting the European mink population.

Preventing the American mink from spreading is a priority for the conservation of the native mink.



How can I tell them apart?

The American mink is larger. Only its lower lip has a white mark or it has no mark at all. When it is frightened, it gives a long scream.

The European mink has white marks on both lips. When it is frightened, it gives off a series of short screeches.



American mink



European mink

An endangered species in Europe...

The European mink, together with the Iberian lynx, are the most endangered carnivores (and probably mammals) in the Palaearctic (that is, from the north of Africa up to and including the Bering Strait). Therefore, it is a species that deserves maximum attention worldwide. It is one of the most endangered species in the European continent. Until the end of the 19th century, they were plentiful all over Europe. Today, they have disappeared from more than 20 countries and occupy only 10% of what was, historically, their dispersal area.

Only three relevant populations are known in the whole world: one in the Eastern European countries, subject to a drastic drop in population; another in the area of the Danube delta, and the other two thousand kilometers away, small and isolated, in the south-west of France and the north of Spain. In Catalonia, viewings of mink are very scarce. From time to time, some are found in the Baix Ebre and Montsià regions, probably from the population settled in the upper part of the River Ebro basin.





The problems of conservation of the European mink

The extinction of the European mink throughout Europe has been attributed to various causes. The spread of the American mink, the action of diseases, pollution and the destruction of their habitat are some of the reasons involved. It is currently felt that the spread of the American mink and the action of diseases are the major problems affecting the species.

The decision to conserve the European mink

The need to act decisively to conserve the European mink has led to the Catalan, Spanish and European authorities setting up co-ordinated conservation programmes.

In 1999, the European Mink Working Group (Wild Flora and Fauna Committee) was created which is the technical forum for co-ordination between the Spanish Ministry of the Environment and the Autonomous Communities in matters of biodiversity.

In this context, the Ministries of the Environment of Castilla y León, La Rioja, the Government of Álava, and the Government of Catalonia requested a series of co-ordinated LIFE Nature projects and a LIFE Co-op project on the conservation of the European mink. All these projects are co-funded by the Spanish Ministry of the Environment and the European Commission.

The main measures of these LIFE projects are focused on the following points:

- Monitoring of the population and its habitat. Periodical study of the known populations of European mink and their habitat, and the prospecting of new stretches of river.
- Captive breeding. Captive breeding project for the European mink for the conservation of its genetic material.
- Control of the American mink. Reduction of the invasive populations of American mink.
- Regeneration of the habitat. Measures to preserve, improve and regenerate the European mink's habitats.
- Control of their state of health. Control of the state of health of the wild and the captive populations of European mink, to assess and minimise health risks.
- Monitoring of the populations. Research into the biology and ecology of the wild populations of European mink through radio tracking of specimens fitted with transmitters.



- Environmental education and publicising the problems surrounding its conservation.

The LIFE-Nature Project developed by the Government of Catalonia during the period from 2002 to 2005 meant an investment of 798,000 euros and is funded by the European Commission (50%), the Spanish Ministry of the Environment as a partner in the project (21%) and the Catalan Ministry of the Environment (29%) while Project LIFE Co-op in the period from 2004 to 2005 cost a total amount of 100,000 euros, completely funded by the European Commission and has the backing of institutions involved in the conservation of the species from Estonia, Germany, Romania, the Czech Republic, Austria, Russia and the United Kingdom.



Corporate image for all
the LIFE projects in
Spain

Captive breeding programmes for the species

The population situated in the north and centre of Russia has an old captive breeding programme. There are currently various centres that keep European mink in captivity that come from this population, most of which are included in the *European mink EEP Programme* (European breeding plans for endangered species). Of the 27 centres in 12 European countries that participate in this programme, we should highlight the installations of the Lutreola Foundation in Tallinn Zoo (Estonia) and, since 1998, those of the EuroNerz Foundation, in Osnabrück (Germany). The population in the Danube delta does not have any specimens in captivity.

The western nucleus of the species did not have any specimens in captivity either until recently, which meant a highly vulnerable situation in the face of any problem which the species could experience in its natural environment. In the same way as occurred in the rest of Europe, the dispersal area of the western nucleus has started to be taken over by wild populations of American mink, which could mean their extinction in a few years.



According to the conclusions of the International Congress for the Conservation of the European Mink, which was held in La Rioja in November 2003, and which was attended by the main world specialists in the species, and following the principle of precaution, the three populations must, until we have more information, be kept independent in conservation and captive breeding programmes.

The captive breeding programme for the species in the western nucleus

The development of the captive breeding programme of European mink from the western nucleus is described in the Conservation Strategy for the species and depends on its Work Group. The General Directives of the Programme were drawn up in the Breeding Group of the Work Group with the participation of the main European specialists in the captive breeding of the species.

The main objective of the breeding programme is the long-term conservation of the genetic diversity of the species in the western nucleus and to have animals available to recuperate the species, if necessary.

El Pont de Suert breeding centre for European mink

As part of the LIFE Project on the conservation of the species in Catalonia, there is mention of the construction and setting up of the first captive breeding centre of the species in the western nucleus in the installations of El Pont de Suert Wildlife Centre, which depends on the Directorate General for the Natural Environment of the Department of Environment and Housing of the Government of Catalonia.

The centre was designed in close, fundamental collaboration with the leading European specialists in breeding the species and after visiting the main installations that already exist intended for conserving the eastern populations, in Estonia, Germany, Finland and Russia.



Visit to El Pont de Suert Wildlife Centre by Tiit Maran (*EEP Studbook keeper* for the species, Tallinn, Estonia) and Wolfgang Festl (*EuroNerz Foundation*, Osnabrück, Germany), probably the most important specialists in captive breeding of the species, to assess the captive breeding project of the western population. September 2002.

Why in El Pont de Suert?

The choice of place was influenced by several factors:

- Centre with experience in handling and captive breeding of semiaquatic carnivores.
- Located in the same bio-geographical region.
- Being far away from the wild European mink population - which is a safety measure in view of the possible problems that the species could face in its natural environment.
- Being far away from fur farms and wild populations of American mink.

El Pont de Suert is the first of various centres felt to be necessary to safeguard the species.

Installations at El Pont de Suert Breeding Centre

The mink breeding centre, restricted to the public for reasons of health and peace and quiet, has a building divided into two areas: a staff area and area for handling specimens (hospitalisation, surgery, quarantine area) and 32 naturalised exterior



installations each with a surface area of 16 m², which can be divided and connected according to the needs of the centre. All the installations have a pond with permanently flowing water so the specimens can develop correctly.

The installations are a small-scale reproduction of the amphibious habitat of these animals, with areas of land, plant life and shelter in branches and heaps of rocks for hiding in, as well as a pond with water for dipping into. In each area there are also two dens where the mink sleep and where the females give birth.

Current status of the programme

Currently the captive breeding programme has a total of 10 founder animals which coming from La Rioja (5), Álava (2) and Burgos (2) and Navarra (1), and 18 animals already born in captivity during spring 2005. The total number of animals in the programme is 28.