

European mink (*Mustela lutreola*) still surviving in Ukrainian deltas of the Danube and Dniester

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The Ukrainian part of the Danube delta was surveyed between 26 February and 3 March 2007 to determine if the European mink (*Mustela lutreola*) (photo 1) still occurs in that area.

trap two European mink in three trapping nights (1 ♀ and 1 ♂ near 45°18' N, 29°44' E; figure 1). A hair sample was taken for genetic analysis after which the animals were released. Due to



Photo 1. The European mink (*Mustela lutreola*) has a conspicuous white coloration on its upper lip and around its nose. This is absent in the American mink (*Mustela vison*). *Photograph: Addy de Jongh.*

Live traps were built (photo 2), similar to those used by Kranz et al. (2004) in 2003 and 2004 in the Romanian part of the Danube delta. With a nightly average of 18 traps set, we were able to

bad weather conditions (e.g. high water, frost) no tracks of European mink could be found in the area. The trapping was negatively influenced by the frequent capture of brown rats (*Rattus norvegicus*) and the overturning and dragging away of traps by the abundant raccoon dog (*Nyctereutes procyonoides*). During a visit to the Dniester delta on the border of Moldova and the

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Photo 2. The second European mink in the live trap. *Photograph: Addy de Jongh.*



Photo 3. The frozen road victim from the Dniester delta. *Photograph: Tjibbe de Jong.*

In Ukraine a European mink road victim was found (photo 3), indicating that a population of mink exists in that area as well.

Recent introductions of the American mink (*Mustela vison*) in the Danube delta are believed to have caused population declines and local extinctions of European mink. Males of the American mink are able to mate early with European mink females producing resorbed hybrid offspring and could prevent successful reproduction in European mink (Ternovskij & Ternovskaya 1994). American mink is more aggressive and produces more offspring in a single season.

Studies with radio telemetry on both mink species have indicated that European mink may be chased away from its home range by invading American mink (Sidorovich 1997). The combination of these two factors has been suggested to have contributed to the decline of European mink populations (Maran 2007) (figure 2).

To assess the risk for European mink in the Ukrainian part of the Danube delta, we questioned trained foresters in the area. In the Soviet time, there was an American mink fur farm in the neighbouring city Izmail. After the collapse of the Soviet system the fur farm was dismantled.

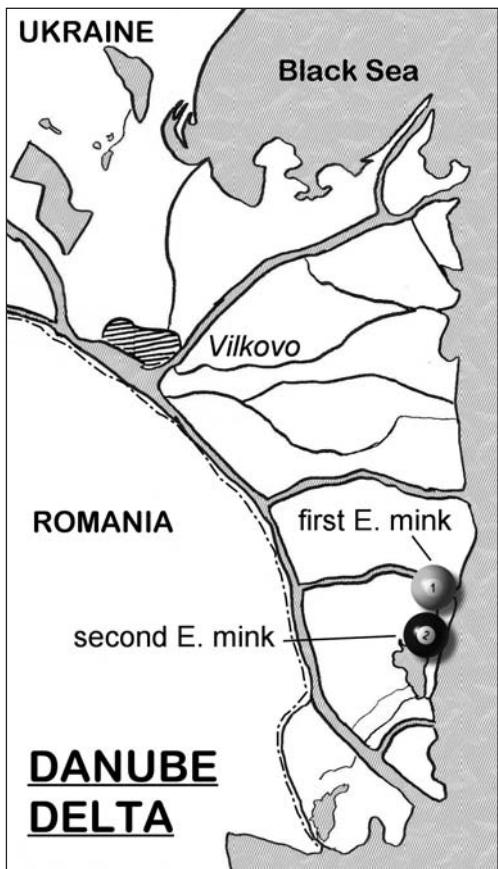


Figure 1. Locations in the Danube delta where both European mink were trapped.

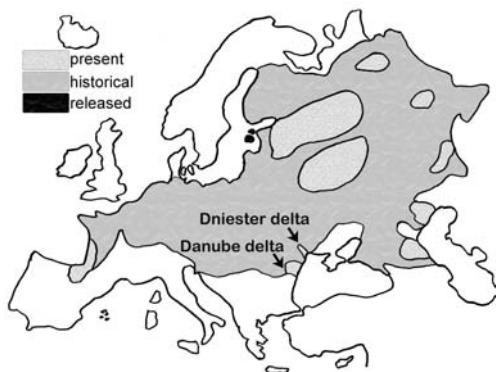


Figure 2. The historical and present geographic distribution of the European mink. Note the released populations on the large Estonian islands of Saaremaa and Hiiumaa.

The foresters suggested that it was unlikely that any of these animals survived, and could show that only European mink were seen in the area.

A biologist specialised in the Dniester ecosystem also confirmed that European mink were living in this delta, but very low numbers were thought to occur (N.V. Rozhenko, personal communication). The pelt of a European mink caught here at the end of the 20th century indicated that European mink occurred in this delta around ten years ago. There were no indications of American mink in this area. A decline in the European mink population was thought to be the result of a newly constructed dam on the river Dniester (further north in Moldova) which regulates the water level and negatively influences the mink's habitat. The dam mainly reduced fluctuations in water levels of the river, negatively affecting the food resources of the European mink (N.V. Rozhenko, personal communication).

We will continue research in both deltas, with the aim of enhancing our understanding of the occurrence and population size of European mink. Depending on our findings, a telemetry study will be set up to improve our knowledge about home ranges and daily activities of this species. A rescue plan for the survival of the European mink in this region needs to be developed urgently.

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Samenvatting

Europese nerts (*Mustela lutreola*) overleeft nog steeds in Oekraïense delta's van Donau en Dnjestr

In de periode tussen 26 februari en 3 maart 2007 slaagden de auteurs er in twee Europese nertsen te vangen in het Oekraïense deel van de Donau delta. Hiermee is aangetoond dat de Europese nerts zich hier nog weet te handhaven. De dieren zijn na de vangst gelijk weer vrijgelaten. De boswachters van het Oekraïense Donau Biosfeer Reservaat gaven aan dat zij in het reservaat alleen Europese nertsen hebben waargenomen.

De Amerikaanse nerts, die in andere delen van Europa de Europese nerts heeft verdrongen, werd niet aangetroffen. Vanwege de vroegere aanwezigheid van een pelsdierfokkerij in de nabijheid werd gevreesd dat de Amerikaanse nerts zich in het gebied kon vestigen. Dat bleek niet het geval te zijn. In de Dnjestr delta ten oosten van de Donau delta toonde een verkeerslachtoffer aan dat ook hier de Europese nerts zich wist te handhaven. Ook hier worden geen Amerikaanse nertsen aangetroffen. Door de aanleg van een dam in de rivier de Dnjestr is volgens een plaatselijke deskundige de lokale populatie sterk achteruitgegaan. De auteurs gaan in samenwerking met Tsjechische en Oostenrijkse collega's door met het onderzoek. Er zijn sterke aanwijzingen dat er verder naar het oosten langs de Zwarte Zee kust nog meer populaties van de Europese nerts voorkomen. Een internationaal onderzoeksprogramma is in voorbereiding om de Europese nerts in deze regio te behouden. Het onderzoek moet uiteindelijk uitmonden in een betere bescherming en overleving van de soort in deze regio.

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