The Eurasian Otter Lutra lutra Monitoring and status in Denmark 2004-2017



Søgaard B. (bjs@bios.au.dk), Madsen A.B., Andersen L.W, Bladt J.S., Therkildsen O.R. & Elmeros M. Department of Bioscience, Aarhus University, Denmark

A systematic monitoring programme for species listed on the EU Habitat Directive, including the Eurasian Otter *Lutra lutra*, was initiated in 2004 in order to provide an assessment of their conservation status.

The otter suffered serious declines in Denmark during the 1960s and 1970s. A series of conservation actions (stop grids in fish traps and wildlife passages at road bridges) were initiated to protect the remnant population, including a management plan for the otter in Denmark in 1996.

The recovery of the otter in Denmark was described by six national field surveys since mid-1980'ies (Fig. 1). The surveys document a substantial increase in range and the otter now occupies the whole of mainland Jutland – reflecting an increase in population size as well. DNA analysis of spraints found in 2011 and 2017 documents that otters are recolonizing the island of Funen in the middle of Denmark.

On the island of Zealand in eastern Denmark, an intensive survey in 2006 conducted by NGO confirmed the presence of otters in two river systems. In 2017, the used standard method for the first time was able to prove the presence of otter here. This may indicate an increase in the local populations of otter, as it is well known, that the standard method is not suitable to detect small and fragmented populations (Madsen & Gaardmand 2000).

The 2011-2012 and 2017-survey shows that status of the otter population in Denmark has improved significantly since the 1990'ies and all suitable habitats in mainland Jutland, areas in Funen and Zealand are now occupied by the species (Fig. 2). Furthermore, the otter has expanded in northern Germany and the population in Denmark is no longer isolated (Honnen et al. 2011).

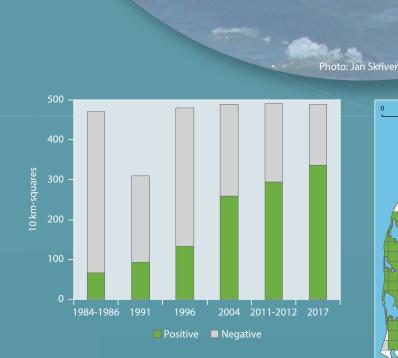
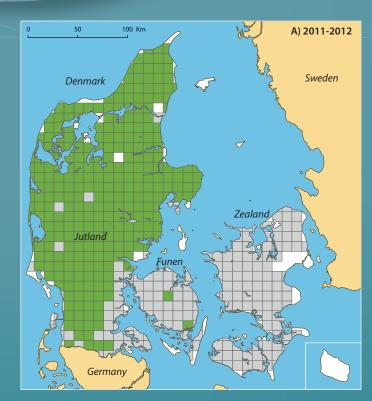


Figure 1. Number of positive and negative 10×10 km-squares in the national otter surveys in 1984-1986, 1991, 1996, 2004, 2011-2012 and 2017 in Denmark.



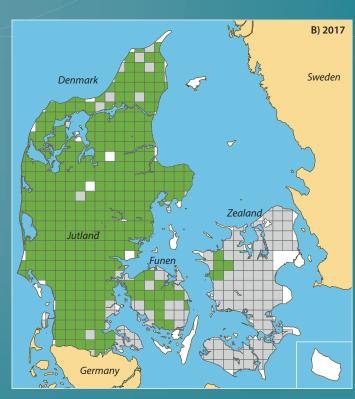


Figure 2. The otter distribution in Denmark by 10×10 km-squares in the national surveys in A) 2011-2012 and B) 2017. Green squares indicate positive squares where otter tracks were recorded, and grey squares indicate negative squares where no tracks were found. White areas/squares indicate that the otter was not monitored here.