

The otter in the Netherlands reached minimal viable population in 2019/2020, after reintroduction in 2002

Dutch Mammal Society

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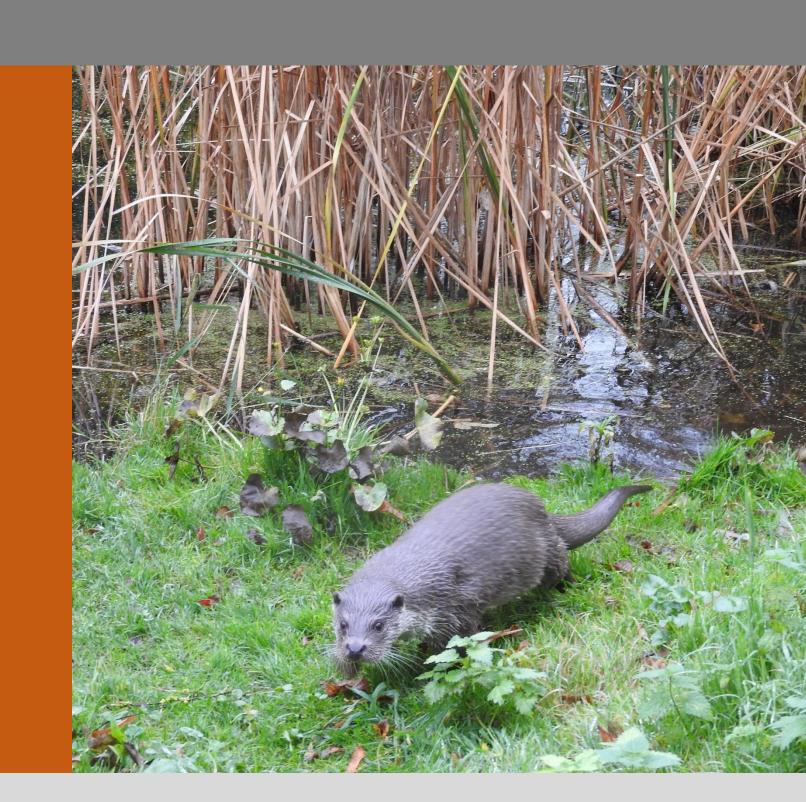
The otterpopulation in the Netherlands has grown further in 2019/2020, the population is estimated to comprise 450 individuals. For the first year, the status of minimal viable population (at least 400 individuals) has been reached. But the high traffic mortality and the low genetic variation continue to be important issues. Furthermore, the distribution is limited mostly to the Northeast of the Netherlands. In order to reach a favourable conservation status, it is necessary that the distribution increases. The Dutch Mammal Society has assigned 2021 as the Year of the Otter. The aim is to raise awareness for the issues, and to celebrate the fact that the status of minimal viable population has been reached.

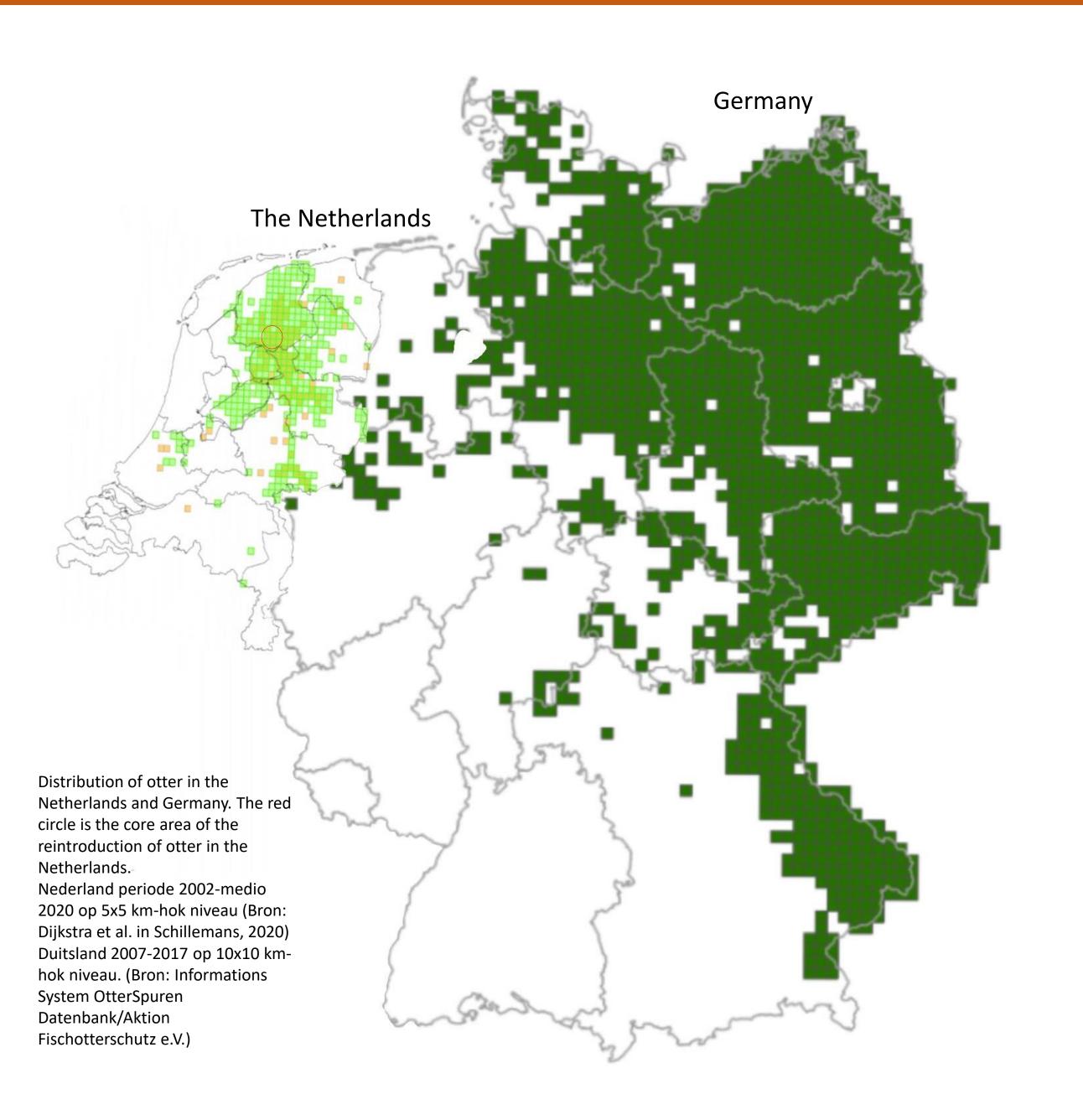
Status of minimal viable population is reached

Since the reintroduction of the otter in 2002, the amount of otters is growing. The population is estimated to be around 450 adult animals in winter 2019/2020. This means the threshold of 400 is reached, which is set for a minimal viable population (Ottburg & Van Swaay 2014). The genetic monitoring has been performed by Wageningen Environmental Research (WENR) yearly, commissioned by the Ministry of Agriculture, Nature and Food Quality and in cooperation with the volunteers of CaLutra (the Dutch Otter- and Beaver Board of the Mammal Society) and Niewold Wildlife Infocentre. This genetic monitoring keeps an eye on the development of the genetic status of the population and of mortality- and migrationrates. DNA isolated from otter spraints and dead otters found in the Netherlands is examined for this monitoring (see also paragraph Distribution).



Apart from a minimal viable population, more is needed in order to reach a favourable conservation status. This requires a larger distribution for the otter in the Netherlands. In the new areas it is required to bring in order the quality of the habitat and the future perspective. The bottlenecks to reach these are too many traffic casualties, victims in fish traps/fykes and the disconnection with the German hinterland. These three subjects are described in the next three paragraphs.





Limited distribution

Traces of otter are mostly found in the core area of otter in the northwest of Overijssel and southwest of Friesland, but more and more in Flevoland (slightly to the west), Drenthe (little to the northeast) and in parts of Gelderland (along rivers and creeks southward) (figure 1). Spectaculair is that otters settled on the westside of the country, close to Amsterdam, in areas called Nieuwkoopse Plassen and Naardermeer. The distribution of otter has increased with 13% yearly between 2013 and 2019. These are the conclusions of the distribution survey coordinated by the Dutch Mammal Society, commissioned by the Ministry, in which volunteers of CaLutra map otter spraints. Also, the servants of the waterboards report the otter traces they find in new areas. The new settlement in Nieuwkoop and Naardermeer gives hope for expansion of the distribution towards the rest of the west and south of the Netherlands. The area that also comprises the historic distribution of the otter before it got extinct in the Netherlands. In Gelderland, the distribution is not stable or growing yet. In the south of the Netherlands sometimes otter traces are found, but settlement doesn't seem realistic. South of the Netherlands in Belgium, otters coming from the Netherlands have settle in the Scheldt valley. This shows the ability of otters to colonise new areas.

To reach a favourable conservation status, the distribution needs to increase to the historic distribution of 187 10x10 square kilometer (Ottburg & Van Swaay, 2014). The current distribution is 139 10x10 square kilometer (WENR, 2020).

Traffic casualties

Traffic bottlenecks are solved on many places, but these measures couldn't prevent that many more otters are killed in traffic than the year before. The amount of killed otters is increased to 150, of which 135 are identified as traffic casualty. A minimal of three otters have drowned in a fish trap. Of nine otters the cause of death couldn't be ascertained. Despite the relative high mortality of one third of the population, the population is growing every year. For every province the main traffic bottlenecks are mapped (Kuiters et al. 2020), in order to be able to take measures to prevent traffic casualties.

Connection to German hinterland

The genetic variation of the otterpopulation in the Netherlands seems to stabilise after the reintroduction of the last years. But otters from German habitats remain of great importance to enlarge the genetic variety. German otters are found incidentally, but last year a bit more than before. There seem to be two immigrationroutes: via Overijssel and via Gelderland. The otters in the Netherlands and the Dutch-German borderarea have not yet been connected to the German hinterland. In Lower Saksony and Northrhine-Westphalia measures are needed. Northrhine-Westphalia and Gelderland the project Green-blue Rhine Alliance is running.

2021 Year of the otter

In the Netherlands and Belgium, the people are proud of the otter. Where the otter settles, this is seen as the 'crown' on the work of restoring the typical wetlands. Furthermore, the reintroduction of the otter is an international example for reintroduction of species in densily populated areas. 'The otter, a legend returns' is the title of the film with which the Year of the Otter has kicked off. 11 million people watched this documentary. 2021 is the moment to celebrate the return of the otter, and to encourage and inspire the spreading of otter success through the Netherlands and Belgium. The otter is in the heart of the people in the Netherlands. The more people know the success story of the otter, the better it is for the otter. Also in regions where the species is not present yet, it is possible and desired that the otter establishes there. A great boost is welcome. CaLutra has therefore called out 2021 as the 'Year of the Otter'. The main message: the otter has increasing numbers in the Netherlands and Belgium! But the unnatural mortality is too high and the genetic base is small. This has to improve to really stay proud on the long run. Also in Belgium and Germany 2021 is the Year of the Otter, this brings out chances for cooperation.

The Year of the otter 2021 is the celebration by many organisations, governments and individuals. The Netherlands show that it is possible let this legend return.

