Species surveys should be standardised across Member State borders to assess conservation status accurately, a new study concludes. The researchers assessed the conservation status of the Eurasian otter across the Republic of Ireland–UK border, finding that it was favourable for the whole island of Ireland. This provides a case study of surveys designed to provide data that is comparable across borders, say the researchers.

During the second half of the 20th century, the survival of the Eurasian otter (*Lutra lutra*) in Europe was threatened, primarily by polychlorinated biphenyl pesticide pollution, but also poor water quality, habitat loss, and invasive species. As a result, otters are classified by the IUCN as ‘near threatened’ and require strict protection and surveillance under the Habitats Directive. However, Member States decide separately on the methods to use for monitoring the species and, where populations cross borders, this may result in uncoordinated surveys and inconsistent data.

The island of Ireland is made up of two Member States: the Republic of Ireland and Northern Ireland, UK. In 2007-2011 the researchers surveyed 1,229 sites, 853 in the Republic of Ireland and 377 in Northern Ireland, to determine otter conservation status. The researchers used the same survey methods on both sides of the border to ensure consistency of data throughout the analysis. Factors that could influence or bias the surveys, such as the experience of the surveyors and the amount of rainfall in the previous week were taken into account when estimating the occurrence of otters.

The results showed that the otters’ range had increased by 23% between surveys in 1996-2006 and the latest surveys of 2007-2011. After correction for survey biases, otters were estimated to be present in 94% of sites across the whole island and their recorded distribution increased by 6% in Northern Ireland and by 52% in the Republic of Ireland between survey periods.

The researchers estimated there were around 9,400 breeding females throughout the island in 2010-2011, not significantly more than the estimated 8,300 individuals in 1981-1982. In the Republic of Ireland there were around 7,800 breeding females in 2010-2011 compared with around 7,100 individuals in 1981-1982, and in Northern Ireland around 1,600 individuals in 2010-2011 compared with around 1,100 in 1981-1982.

Otters were more likely to be found in wider and deeper rivers with moderately sloping banks and a good supply of trout and salmon. The researchers detected habitat degradation at 59% of the survey sites. However, the impacts of, for example, widening of canals, fishing, boating or the presence of invasive mink were not severe enough to be considered a threat to otters.

Conservation status of a species is judged by four factors under the Habitats Directive: range, population, habitat and future prospects. The results of this study revealed that the otter was more widely distributed than recorded in the past, the population had not decreased from the baseline and habitats were generally not threatened by human activities. The status was therefore ‘favourable’ for both states, as well as the island as a whole.

In this study, the researchers have demonstrated how Member States can work together to produce a standardised assessment of the conservation status of species that cross their borders.