

Reintroduction of the otter (*Lutra lutra*) in the Netherlands: did it really meet international guidelines?

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Abstract: In Lutra 47(2), Van 't Hof and Van Langevelde claim that the IUCN guidelines were met in the process of reintroducing the otter (*Lutra lutra*) in the Netherlands. In our opinion, the authors would have come to a different conclusion if they had studied the scientific literature and the IUCN guidelines more thoroughly. We argue that the IUCN guidelines were not met on several points, and conclude that the guidelines as a whole were not met.

Keywords: otter, *Lutra lutra*, reintroduction, IUCN guidelines.

General comments

In the title of their article, Van 't Hof and Van Langevelde (2004) claim that the guidelines of the World Conservation Union (formerly the International Union for the Conservation of Nature and Natural Resources or IUCN) were met in the reintroduction process of the otter in the Netherlands. However, the following quotations suggest that an adjustment of this claim is in order.

'The majority of the IUCN reintroduction criteria appear to have been followed'

(Van 't Hof & Van Langevelde 2004, p. 131)

'With the release of previously captive individuals, the project did not fully follow the suggestions of the IUCN guidelines' (van 't Hof & Van Langevelde 2004, p. 130)

Van 't Hof and Van Langevelde (2004) do not appear to be confident about their claim in the title. We argue that IUCN requirements, whether you call them 'guidelines', 'aims' or 'criteria', were violated.

Specific comments

Causes of decline

'One of the first prerequisites for any species reintroduction is that the conditions that caused the extinction in the past should no longer be present' (van 't Hof & van Langevelde 2004, p. 129).

'Identification and elimination, or reduction to a sufficient level, of previous causes of decline' (IUCN 1998).

In the following paragraphs we will introduce two causes of decline that are still present and cause serious threats to the otters. Also, it should be emphasized that a 'cause of extinction' is not the same as a 'cause of decline'. Therefore, the IUCN guidelines are stricter than Van't Hof and Van Langevelde suggest.

Water quality

'...freshwater quality, which is now deemed suitable for otter (Jansman et al. 2003)' (van 't Hof & van Langevelde 2004, p. 127).

'Water quality has improved since the otter extinction (Stichting Otterstation Nederland 1998)' (van 't Hof & van Langevelde 2004, p. 129).

The 'overall' water quality certainly improved. However, none of the reports referred to data on PCB content in the sediment, which is a crucial factor as far as the survival of the otter population is concerned: PCBs negatively affect their reproduction. Using sediment data and the ecotoxicological model OMEGA, Van der Linde (1996) estimated that the PCB content of the sediment in the Alde Feanen (province of Friesland) would not limit the growth of an otter population in that area. However, since otters have a large range of activity they may take up excessive PCBs when wandering, so a larger area should be taken into consideration. In the rest of the Netherlands, otter populations will not be sustainable in areas influenced by the river Rhine (van der Linde 1996). Traas et al. (2001) modelled congener-specific PCB accumulation in the food chain (in which the otter is top predator) and concluded that it would take another ten years for the sediment quality in the Frisian Witmeer to improve to a level that will sustain the development of otter populations. In other, more highly contaminated areas such as the Biesbosch, sixty years may be needed. Although ten years of monitoring bioaccumulation have revealed a decline in the risk for fish-eating higher organisms in the catchment area of the Rhine, they do still remain at risk (Maas 2003). Therefore, the otters should not leave the reintroduction area, since large parts of the Netherlands are not suitable for them because of poor sediment quality. This is difficult to reconcile with the aim of any reintroduction, which is the establishment of a free-ranging population (IUCN 1998).

Mortality by traffic

Special devices for otter safety have been constructed, but only in a relatively small area in respect to the actual activity range of otters. Of the 20 otters reintroduced since 2002, six had already been killed in traffic accidents by July 2005. In December 2005 two more newborn

otters lost their lives in traffic accidents. Two otters that were not introduced, but may have wandered in from Germany or may have escaped from a private collection in the Netherlands, were also killed on the road in 2005. The number of vehicle kilometres continues to increase at a rapid rate (MNP 2005). Thus, an important cause of decline and extinction is still present, and may become more important.

Otter security

'Where the security of the reintroduced population is at risk from human activities, measures should be taken to minimise these in the re-introduction area. If these measures are inadequate, the reintroduction should be abandoned or alternative release areas sought' (IUCN 1998).

The effects of water quality and traffic, both the result of human activities, can threaten or may have already damaged otter security. This would suggest that the IUCN Guidelines have been violated. However, adding insult to injury, if the security of the population is at risk from human activities, the IUCN guidelines suggest either abandoning the programme or searching for a different release area. The latter suggestion will be extremely difficult in the Netherlands. This means that, if the risk of human-induced traffic mortality or poisoning due to PCB residues can be considered a threat to the security of the population, and we think it can, the reintroduction programme should, according to IUCN Guidelines, be abandoned.

Age of the reintroduced otters

'Captured wild animals of two years or more should not be released, as they are likely to try to leave the release areas in attempt to return to their original source areas' (van 't Hof & van Langevelde 2004, p. 130).

In 2002, 15 otters were introduced, eight of them were between four and nine years old. Seven out of these eight older otters left the introduction area (Niewold et al. 2003). Two of them were killed in traffic accidents, the other five have not

been spotted since leaving the reintroduction area, and therefore cannot be considered as part of the population (Niewold et al. 2003). Still, Van 't Hof and Van Langevelde (2004) conclude that the reintroduction programme was in accordance with the IUCN Guidelines.

Social requirements

'A thorough assessment of attitudes of local people to the proposed project is necessary to ensure long-term protection of the reintroduced population, especially if the cause of species' decline was due to human factors (e.g. over-hunting, over-collection, loss or alteration of habitat). The programme should be fully understood, accepted and supported by local communities' (IUCN 1998).

'This reintroduction project partly fulfilled this aim by educating local people through special newspapers, lectures and excursions into the release area, as well as television and radio programmes to inform citizens about the project' (van 't Hof & van Langevelde 2004, p. 130).

Apparently there has only been one-way information transfer. There is no reference to actual acceptance and support, or even understanding, within the local communities. There is no sign that the local communities have fully understood, accepted, or supported the reintroduction programme. Since this is required by the IUCN guidelines, we conclude that these requirements were not only partially, but completely unfulfilled.

Supplementary

Ethical aspects should be of paramount importance in the decision-making process on reintroducing the otter (van Liere et al. 2003, van Liere 2004, van Liere & van Liere 2005, Swart, 2005). Some ethical aspects of the process were discussed before the reintroduction, but still have not been published (Addy de Jongh, personal communication). We feel that the IUCN guidelines are not sufficiently robust with respect to

animal welfare issues, which are a feature of reintroduction projects. Animal welfare issues are only incorporated in the IUCN guidelines where they would increase the chance of a successful programme, in other words, for establishing a viable population in the long term and not for the welfare of the individual animal.

Van 't Hof and Van Langevelde (2004) do not explain the implications of meeting the IUCN guidelines for the project. We are of the opinion that their paper is incomplete without such an explanation. As presented, it conveys the message that the re-introduction was in perfect order. Even if the guidelines were met, this does not necessarily mean that the reintroduction was in order from a moral point of view.

Furthermore, Van 't Hof and Van Langevelde (2004) extensively discuss how far the aims (objectives according to the IUCN guidelines) were justified in the Dutch reintroduction case. But strictly speaking, this is irrelevant. The different objectives (we prefer to use IUCN terminology) are merely suggestions, they are not obligatory in any way (IUCN 1998).

Conclusions

The conclusion of Van 't Hof and Van Langevelde (2004) that international guidelines were met when the otter was reintroduced into in the Netherlands is, in our opinion, at least questionable. Given the contents of the IUCN guidelines there are grounds for considering the immediate abandonment of the reintroduction programme.

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Samenvatting

Herintroductie van de otter (*Lutra lutra*) in Nederland: voldeed deze echt aan de internationale richtlijnen?

In een forum-bijdrage in *Lutra* 47(2) wordt gesteld dat de herintroductie van de otter (*Lutra lutra*) in Nederland voldeed aan de richtlijnen van de IUCN voor herintroductie. Als de auteurs van dit artikel beter gebruik hadden gemaakt van deze richtlijnen en de wetenschappelijke literatuur, hadden ze een andere conclusie getrokken. Aangezien aan meerdere richtlijnen, zoals het wegnemen van redenen van achteruitgang, het uitzetten van jonge adulte dieren en het waarborgen van draagvlak bij de lokale bevolking, niet werd voldaan, concluderen we dat de herintroductie van de otter niet conform het stelsel richtlijnen van de IUCN werd uitgevoerd. Daarnaast stellen we dat de IUCN-richtlijnen alleen niet voldoende zijn om een goede afweging over een herintroductie te maken. Ethische afwegingen zouden een grotere rol moeten spelen in de herintroductie van de otter.

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