Seal rehabilitation in the Netherlands: past, present and future.

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Introduction

How important is the rehabilitation and release of harbor seals? This is the central question in a growing controversy in the Netherlands. The harbor seal population in the Dutch Wadden Sea area has been under pressure for some time but seems to be recovering, even despite the PDV epizootic not too long ago. With this in mind, some researchers are now questioning the need and desirability of large scale seal rehabilitation centers in the Netherlands. Needless to say, this has triggered quite a discussion. This discussion is far from over, but it may be a good idea to have a closer look at the issues.

The harbor seal population in the Dutch Wadden Sea: a short history

The Wadden Sea area is a large area that stretches from the northern part of the Netherlands East and North all the way to Denmark. It is a large tidal flat area, which is part of the North Sea, between a chain of barrier islands and the European mainland. This area is rich in wildlife and the tidal flats are ideal haulout sites for harbor seals. The subpopulation in the Dutch part of the Wadden Sea has been the subject of intensive research (Reijnders, 1982). Developing a model for this population has been one of my Master's projects (van der Toorn, 1984).

Before 1950, there were about 3,000 harbor seals in the Dutch Wadden Sea. In that period, hunting effort increased enormously and whole year classes were wiped out. Consequently, in 1962, when hunting was banned, less than 1,000 animals were left. The population increased in size slightly, until in the late 60s another drop occurred. In 1975, there were less than 500 harbor seals left. This drop was caused by reduced reproduction, in turn caused by pollution (in particular PCBs). The relative number of pups born was 9-12%, whereas in the German part of the Wadden Sea, this was around 30%. Also pup mortality was quite high, about 60%. Since 1975, the population has been increasing again. Probable reasons for this increase include a high activity of the seal rehabilitation centers and immigration of seals from the German part of the Wadden Sea. In 1988, there were an estimated 1,000 harbor seals in the Dutch Wadden Sea.

In 1988, the population was hit very hard by the morbillivirus (PDV) epizootic (van der Toorn, 1990)., which killed an estimated 60% of all the seals in the whole Wadden Sea area. In 1989, there were about 500 seals left in the Dutch Wadden Sea. This population has recovered remarkably well. Already in 1993, the population had increased to 1,074 animals (Reijnders, 1993). The percentage of pups born is up to 18-20% and the pup mortality is down to 40%. In 1995, the estimated growth rate of the population was about 18% per year. According to Peter Reijnders (in Abrahamse and Revier, 1996) this is a positive after-effect of the PDV epizootic. Before the epizootic, there were some reproducing females, who lost a lot of their contaminant load during lactation (passing it on to their offspring) and non-reproducing females, who had a high contaminant load, which compromised their health and reproduction. It is especially the latter group that has been killed in the epizootic, while the healthier, reproducing females survived. So the proportion of reproducing females in the population has increased. This can explain the increase in pup production. Also, since these females have a much lower contaminant load, they do not poison their pups any longer and this gives rise to a lower pup mortality. The average contaminant load of the animals now is about 50% of that found in the 70s.

Seal rehabilitation centers

Seal rehabilitation in the Netherlands started 45 years ago. In 1951, when there was still a bounty hunt going on, Gerrit de Haan and his wife tried to rehabilitate some seals on the island of Texel. The seals were not released, because of the risk of the animals being killed by hunters. This was the start of the seal rehabilitation center at the Texel museum, now called Ecomare. This facility still has a resident seal population, which has become a breeding group. Up until now, there have been 151 seal pups born at the facility, most of which have been released into the Wadden Sea. This breeding group is isolated from the seals in rehabilitation. Occasionally, animals that are unfit for release are added to the breeding group, in this way creating an influx of new genetic material into the group.

In 1961, Rene Wentzel started another seal rehabilitation center, in Uithuizen. He returned rehabilitated seals to the Wadden Sea, because that's where the seals belonged in his philosophy. He could also more or less safely do so, because in 1962, seal hunting was prohibited. This center eventualy developed into the well known Seal Rehabilitation Center in Pieterburen, now run by Lenie 't Hart (since 1971).

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Some viewpoints

The following is an excerpt of Abrahamse and Revier (1996) and of an episode of the Dutch public television program Nova.

Peter Reijnders, of the Institute for Forestry and Nature Research (IBN) says that the target of managing the seal population should be a population, that is as fit as possible and optimally adapted to the situation of its habitat. Because of the history of the population, a completely natural situation is not possible. Seal rehabilitation at a low level, mainly for education purposes, will have no impact on the population and its educational value can have a positive effect on the quality of the seals' environment. According to Reijnders, seal rehabilitation for the purpose of saving the population is unnecessary and may even be undesirable. Death and dying are part of nature. Releasing weaker, but rehabilitated animals back into the population may not be in the interest of the population.

The Saelarium, a public display and rehabilitation facility in Esbjerg, Denmark, stopped accepting young pups (often called "howlers") in 1982, when it became clear that rehabilitation of those young pups had no effect whatsoever on the Danish seal population. Svend Tougaard, the biologist and manager of the Saelarium, says that his facility only accepts pups for research purposes. He thinks that the risk of introducing diseases when releasing rehabilitated pups is greater than a potential benefit. people should look at the needs of the population. Releasing rehabilitated pups does not fit into that picture. He is well aware of the human and emotional aspect of rehabilitation. But, he says, people are often doing that, because it makes them feel good. In many cases you just prolong suffering. He thinks that sick pups are usually better off when they are euthanized right away, instead of going through a lengthy and intense rehabilitation process with an uncertain outcome.

Jan Kuiper, of the seal rehabilitation center Ecomare, does not agree with Tougaard. He is not so sure that releasing animals does not have an effect on the population growth. And even if it doesn't, the rehabilitation is an excellent hook for education. "It is not only the seal, but the whole ecosystem, that counts". People get to see the animals close up and can be told about the threats to their environment. He also does not subscribe to the theory, that releasing rehabilitated animals will undermine the overall strength of the population. According to him, the most common reason that pups are found is that they are disturbed in the nursing period and therefore have not built up enough stamina.

Lenie 't Hart of the seal rehabilitation center in Pieterburen thinks that Svend Tougaard's opinion is dangerous. According to her, this leads to people trying to treat the seals themselves, without expert help, because they want to save it from euthanasia. This may cause a lot of additional suffering. She thinks releasing rehabilitated seals should only be stopped if there is unequivocal proof that the release does weaken the population. Apart from the rehabilitation itself, education is an important function of the center.

Conclusion

This discussion about the pros and cons of seal rehabilitation has raised some interesting questions, which may apply to other areas as well. The core question is of course: do we really know why we are doing what we are doing?

In the case of seal rehabilitation in the Netherlands, the issue revolves around the following questions:

- Does the seal population benefit from the rehabilitation or is it possibly even negatively affected by it?
- Do the individuals benefit from it or are they subjected to prolonged suffering?
- Does it have an effect on public opinion? And does that in turn have an effect on the population and its environment?

As has been shown above, there is not one straightforward answer to any of these questions. The end of this discussion is not in sight yet and probably won't be for a while. You will be updated on new developments, when they occur. In the meantime, it may be a good idea to reflect on our own motivations for what we are doing. You may be involved in similar discussions in the future and it can't hurt to be prepared.

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