

# SARA REVIEW - SEA OTTER

## *Successful Recovery Leading to Downgrading of Status*

### Introduction

The case of the Sea Otter is an example of recovery measures achieving improvement in the population status of a species. It also provides an example of the complexity of recovery work, where the needs of one species conflict with the needs of other species at risk.

#### ***Sea Otter (Enhydra lutris)***

The Sea Otter, the smallest marine mammal, was historically abundant in coastal waters in the North Pacific from northern Japan to central Baja California. Following an intensive harvest for furs beginning in the 1700s, Sea Otters were extirpated from much of their range, including from Canada's Pacific coast, mainly due to overhunting.

#### ***SARA Status***

The Sea Otter was listed as Threatened on *Species at Risk Act* (SARA) Schedule 1, based on a Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessment in 2000. COSEWIC reassessed the Sea Otter as Special Concern in 2007, and in March 2009, the species was listed as Special Concern on SARA Schedule 1. A Recovery Strategy for Sea Otter in Canada was completed in 2007.

### Effective Recovery

Recovery efforts for the Sea Otter began long before proclamation of SARA and continued with the listing of the Sea Otter on SARA. A total of 89 Sea Otters from Alaska were reintroduced to a site on the west coast of Vancouver Island between 1969 and 1972. Since reintroduction over 35 years ago, the population has grown to over 3,000 individuals occupying some 25-33% of the historical B.C. distribution. The rate of population increase was 18-19% per year during the first two decades, then slowed to 8% per year thereafter. Distribution of the Sea Otter has expanded from the original site of reintroduction to include much of the west coast of Vancouver Island. Sea Otters have also established themselves at a site on the B.C. Central Coast, some distance from the Vancouver Island sites.

The improvement in the status of this species is evident in successive COSEWIC assessments: the species was assessed as Endangered in 1978 and 1986, as Threatened in

1996 and 2000, and as Special Concern in 2007. Special Concern status is based on the fact that the population is not yet demonstrably secure, despite the increase since the early 1970s, and remains susceptible to oil spills.

Sea Otter is a good example of how the potential for population recovery can be realized when recovery measures contribute to the creation of favourable conditions for the species. Although Sea Otters are preyed on by other animals (killer whales, bald eagles) and are susceptible to oil contamination and entanglement in fishing gear, the principal historical threat was hunting. In the absence of this threat, and with the availability of suitable habitat, pursuant to protection and recovery measures, the Sea Otter population reintroduced to Canada has shown the ability to increase significantly from a very low level.

### ***Species Interactions: Restoring Balance***

Recovery of the Sea Otter on the B.C. coast could potentially have substantial ecosystem impacts, including predation on invertebrate populations, such as the threatened Northern Abalone. Sea Otters prey on sea urchins, molluscs, crabs and other coastal invertebrates, consuming some 20% of their body weight per day to maintain their high metabolic rate. These invertebrates likely increased in population during the period when the Sea Otter was extirpated, contributing to the success of their fisheries.

The impact of Sea Otter predation on the Northern Abalone is of particular interest with respect to species at risk protection and recovery. Predation may be contributing to low abalone population levels in areas where Sea Otters occur, although it would be expected that, at some point, equilibrium would be re-established between populations of the two species. Given that the populations of both species are still vulnerable, there is little scope for addressing Sea Otter predation on abalone at this time. It is felt that with continued monitoring, the impact of predation on the population and the complex relationship between the species will be better understood.

## **Conclusions**

The increase in Sea Otter population since its reintroduction in the early 1970s shows that recovery is possible when conditions are favourable. Although the rate of population increase has tapered off in recent years, the population and distribution of Sea Otters on the B.C. coast has continued to increase. Fostering recovery will mainly be a matter of ensuring that potential threats, especially oil spills, are minimized.

Since predation may act to keep abalone populations at reduced levels in areas where Sea Otters occur, recovery targets for the abalone may need to take into consideration the consequences of the simultaneous recovery of the Sea Otter. Such situations, where more than one species at risk occur in the same habitat and interact, could lend themselves to the use of multi-species, ecosystem or watershed recovery planning approaches. However, the development of recovery strategies based on such approaches can be

complex and it might be advisable to wait until the stage when recovery action plans are being developed and more is known about the species and their interactions.

## Reference

Sea Otter Recovery Team. 2007. Recovery Strategy for the Sea Otter (*Enhydra lutris*) in Canada. *Species at Risk Act* Recovery Strategy Series. Fisheries and Oceans Canada, Vancouver. vii + 56 pp.