

# SARA REVIEW - SPOTTED, NORTHERN AND ATLANTIC WOLFFISH

## *Promoting Compliance and Recovery through Stakeholder Engagement*

### Introduction

This case study highlights the importance of stakeholder engagement, communication and education activities to help raise awareness of, and promote compliance with, protection and recovery of species at risk. It provides a brief overview of the use of these methods in Newfoundland and Labrador to promote the protection and recovery of Spotted, Northern and Atlantic Wolffish under the *Species at Risk Act* (SARA).

### ***Wolffish (Genus: Anarhichas)***

The wolffishes are a group of species which are widely distributed in commercial fishing areas on Canada's Atlantic continental shelf. Although generally not targeted by fish harvesters, they are frequently taken as incidental catch in fisheries targeting other bottom-living fish. Two species are currently listed as Threatened on Schedule 1 of SARA: Spotted Wolffish (*Anarhichas minor*), Northern Wolffish (*Anarhichas denticulatus*). A third species, the Atlantic Wolffish (*Anarhichas lupus*) is listed as a species of Special Concern).

A combined Recovery Strategy for the two threatened species and Management Plan for the special concern species was finalized early in 2008. This document was developed by a team that included representatives from the fishing industry (inshore and offshore fisheries), universities, and federal and provincial governments.

### Recovery Actions

#### ***Engaging Fish Harvesters***

Fishing and environmental fluctuations can contribute to declines in exploited populations, but the deep and detailed knowledge of fish harvesters can also contribute to sustainable use of fish populations, including population rebuilding where necessary. Tapping their knowledge and engaging their support is an essential part of protection and recovery of marine species at risk.

Although there is no direct fishery for wolffish in Canadian waters, they are caught in fishing operations targeting other species. Wolffish caught as bycatch were traditionally

discarded in poor condition after commercially valuable species were dealt with on deck, likely leading to a low probability of survival. Live release in good condition was identified in the recovery strategy as an important means of potentially reducing incidental mortality of these species and thus contributing to their recovery. Knowledge of fishers was useful in leading the recovery team to this conclusion.

One of the five primary objectives in the Recovery Strategy for Spotted and Northern Wolffish, and Management Plan for Atlantic Wolffish is to develop communications and education programs to promote the conservation and recovery of wolffish populations. Specific actions identified include increasing resource user knowledge and public awareness of wolffish species, and promoting stewardship initiatives.

Since wolffishes were listed on Schedule 1 when SARA entered into force in 2003, communication and education activities to meet this objective have been undertaken in Newfoundland and Labrador (NL). Plasticized species identification sheets in English and Inuktitut, printed materials on safe release practices for different kinds of fishing gear, and a video on best practices for live release of wolffishes were developed for distribution to fishermen and for presentation at workshops and meetings. Presentations on identification, ecology, conservation, and safe handling and release practices have been given since 2003 to fishermen's union meetings, on-board observers on commercial vessels, and fishing communities, both in targeted meetings and during meetings for other purposes such as discussions of fishery management plans. Fishery officers and representatives of a company contracted to conduct education programs made wharfside visits to educate fishermen about wolffishes and about live release practices.

In addition, under the Habitat Stewardship Program, the Groundfish Enterprise Allocation Council (GEAC), an association of commercial fishermen, conducted research on distribution of wolffishes in relation to distribution of commercially valuable species, on modifications to fishing gear to reduce incidental catch, and on survival after live release. The project results showed a high rate of survival after live release of wolffish. The project also included development of protocols for live release and training videos for crew.

### ***Engaging the Public***

In parallel with outreach activities on wolffishes, Department of Fisheries and Oceans (DFO) regional staff in NL developed a project aimed at promoting a sense of stewardship in a youth audience, at building relationships between the community and DFO, and at engaging and informing the public on DFO programs and species at risk issues. This included provision of art supplies and organization of presentations to students by DFO scientists, Fishery Officers, and Search and Rescue technicians.

Between November 2005 and May 2006, 200 students of the Queen Elizabeth High School in Foxtrap, NL, produced over 150 pieces of art depicting species at risk, Coast Guard vessels and fishing gear, which were exhibited at an art show attended by 600 people including the Minister of Fisheries and Oceans. Students were also engaged in writing essays and developing stories about species at risk which were read to children at

a nearby primary school. The project and the art show were extensively covered by local media. Exhibits remain on display at DFO's St. John's office and are frequently visited by school groups.

## Conclusions

Including representatives from the fishing industry helped the recovery teams gain practical knowledge about the implication of fishing operations for wolffish. Engaging fishers in the recovery of wolffish helped to promote awareness of, and compliance with, the need to minimize bycatch and to release wolffish rapidly and in good condition. The education and communication programs have helped to significantly raise awareness of the conservation problems of the three wolffish species. In addition, communities in Newfoundland and Labrador have become more aware of the general issues associated with species at risk protection and recovery.

## Reference

Kulka, D., C. Hood and J. Huntington. 2007. Recovery Strategy for Northern Wolffish (*Anarhichas denticulatus*) and Spotted Wolffish (*Anarhichas minor*), and Management Plan for Atlantic Wolffish (*Anarhichas lupus*) in Canada. Fisheries and Oceans Canada: Newfoundland and Labrador Region. St. John's, NL. x + 103 pp.