## Aquatic Species at Risk

# The Spotted Wolffish... a Species at Risk in the North

as designated under the federal Species at Risk Act

COSEWIC Status – THREATENED May 2001 SARA Status – THREATENED June 2003



This species has been identified as Threatened by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). It is listed under the federal *Species at Risk Act* (SARA) and was afforded

protection under the SARA as of June 2004. Additional protection is afforded through the federal *Fisheries Act*. Under the SARA, a recovery strategy must be developed for this species.

#### **General Description**

Spotted Wolffish (*Anarhichas minor*) are large marine fishes from the Anarhichadidae family. Other common names include the Leopardfish and the Spotted Catfish. They have the following characteristics:

- Prominent canine-like teeth in the front of both jaws
- Heavy head with a blunt, rounded snout and small eyes
- Long, stout body with no pelvic fins
- Dorsal fin long and extending to base of caudal, with flexible spiny rays
- Caudal fin small and slightly rounded, pectoral fins rounded
- Firm musculature
- Colour is variable from pale olive to deep brown with upper parts sprinkled with irregularly shaped blackish-brown spots
- Maximum length to over 1.8 m and weight 23 kg



### **Distribution**

Spotted Wolffish occur in the Arctic Ocean and on both sides of the North Atlantic Ocean from Labrador to the Barents Sea. Its northern limit in Canada is Baffin Bay, although its presence is rare. In the western North Atlantic, it is found off east and west Greenland, on the Labrador Shelf and Grand Banks and less commonly on the Scotian Shelf.

#### **Habitat and Life History**

This species is found offshore in cold, deep water, usually below 5°C and between 50 and 800 m in depth but as shallow as 25 m (Canadian arctic populations). They prefer a coarse sand and sand/ shell hash bottom with rocky areas nearby for shelter and nest building. Spawning occurs in summer to late fall/early winter. As many as 54,600 large eggs (up to 6 mm in diameter) are laid in deep water in clusters on the sea floor and are guarded primarily by males. Growth rate is slower for this species than for the Atlantic and Northern Wolffish (Barents Sea). Fish become mature at seven years of age or older and can live to 21 years. The species does not form large schools and migrations are local and limited.

#### Diet

The diet of this fish consists primarily of hardshelled invertebrates found on the bottom, such as crustaceans and molluscs. Echinoderms, tube worms, seaweeds and fish have also been reported in the gut contents of the Spotted Wolffish.

#### **Threats**

There are no direct studies of factors responsible for the declines observed in wolffish abundance but it is believed that overfishing and habitat alteration have played a role. In Canada, this fish species is not targeted by the fishing industry, however, by-catch mortality by offshore trawlers and long-liners is considered a threat. In addition, activities that disturb the ocean bottom, such as trawling, may damage spawning habitat.

#### **Similar Species**

The Spotted Wolffish can be distinguished from the Northern Wolffish (*A. denticulatus*) and the Atlantic Wolffish (*A. lupus*) by its dark spots.

Text Sources: Scott and Scott 1988; Stock Status Report 2004/031 2003.

For more information, visit the SARA Registry Website at www.SARAregistry.gc.ca and the Fisheries and Oceans Canada (DFO) Website noted below.





Permission provided by B.W. Coad (CMN) and J.D. Reist (DFO); prepared by N. Alfonso (CMN).

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### www.aquaticspeciesatrisk.gc.ca

Section 32 (1) of the Species at Risk Act (SARA) states that "no person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species."