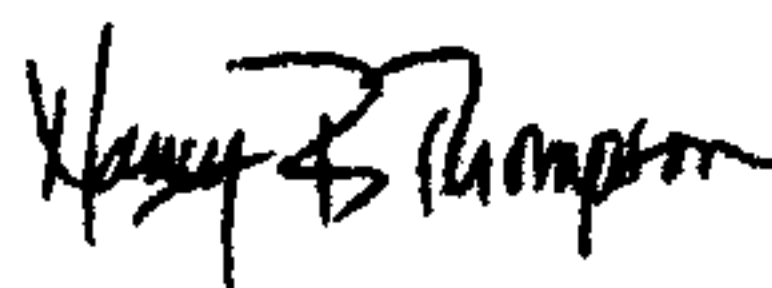




UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northeast Fisheries Science Center
166 Water Street
Woods Hole, MA 02543-1026

July 7, 2009

MEMORANDUM FOR: Patricia A. Kurkul
Regional Administrator, NER

FROM: Nancy B. Thompson, Ph.D. 
Science and Research Director

SUBJECT: Review of Status Review Report of the Atlantic Wolffish
(*Anarhichas lupus*)

In response to your memo of June 19, 2009, Center staff reviewed the Subject report and we offer the following comments:

Overall the Biological Review Team has done an excellent job of summarizing the available information on Atlantic wolffish. The analyses of depth and temperature preferences are well done and informative. Most of our comments are editorial in nature, but there are a couple of contradictions regarding the Distinct Population Segment. In view of the critical importance of this determination, the problems identified below should be addressed.

MAJOR COMMENTS

Page 12, statement: *“Although it is possible that U.S. samples are genetically distinct from western Atlantic Canadian samples, more genetic samples need to be collected from U.S. waters and analyzed in order to make that determination. If the regions are different, it would be due to genetic drift related to small population size, rather than to historically significant isolation of this region from the rest of the range.”* Strike “more” in the first sentence, as there do not appear to be any US genetic samples analyzed. Also, while it may be logical to conclude that there was no historical isolation, it is not justified adequately in this summary. In short, this is a key finding that US stocks and Canadian are part of one DPS and the authors need to say more about why. Provide some citations if possible.

Page 14, statement: *“The BRT recognizes that additional population structuring could exist between the Western Atlantic Canada/ U.S. DPS, but samples are limited for the U.S. portion of the range. Future genetic research involving U.S. Atlantic wolffish samples may require the reassessment of this DPS.”* Statement on page 12 could be considered to counter any need to have future research and reassessment of the DPS (e.g., differences are due to genetic drift, and not historical legacy.) These two statements need to be reconciled. Given there are no samples analyzed, suggest striking: *“, but samples are limited for the U.S. portion of the range.”*



Comments on page 11 that differential management measures between the US and Canada influence population segments based on different management are not well supported.

Evidence of genetic differences within wolffish is based primarily on an unpublished study of fish largely within Canadian waters (p. 14). We are somewhat concerned that no samples were taken in western Gulf of Maine or Georges Bank, thus making it difficult to define the western and southern extent of the DPS. We are also concerned that the key scientific document supporting the DPS designation is (1) an unpublished study, (2) is not provided in the Literature Cited (neither McCusker et al unpublished nor McCusker et al. 2008 are included), and (3) it is unclear whether an unpublished document meets IQA standards.

The status review authors also need to check their Literature Cited, because not only are the McCusker reports excluded, but others are also missing (e.g., Knutsen et al. unpublished, Shaw et al. 1999).

The role of differential temperature preferences among life stages as a factor affecting mixing among population groups might be explored further.

Page 132, Section 10: The conclusion here is somewhat terse and needs some cross-referencing to the concepts documented in the threats analysis. This should be about 1-2 pages in length to adequately document findings in summary form. A paragraph is not enough. The information is in the threats analysis section, and just needs to be summarized. This section would then need to be condensed (3/4 page) and moved forward into the non-existent Executive Summary. Section 11 on research need is missing as well, this needed to be added or removed from Table of Contents.

MINOR COMMENTS

Section 3.2 p. 3: The topic sentence of the four paragraphs in the species description refers to the teeth of wolffish. Some of this material would be more appropriate in later sections such as diet (3.6). Also, anthropomorphic terms like “ferocious disposition” can be inappropriate and often create unintended perceptions.

Section 3.4 p. 5: The statement that the size range in the spring and fall bottom trawl surveys range “from .003 – 1.37 m in spring and .004 – 1.2 m in fall” does not appear correct. Recheck for 0.03 and 0.04 m or 3 and 4 cm.

Throughout Document: Citation - Collette and Klein-MacPhee, 2002 is inaccurate for wolffish biology. The chapter should be cited: Rountree 2002 in Collette and Klein-MacPhee eds.

Figure 6.3.1 (Overall distribution of Atlantic wolffish in U.S. waters based on fishery independent and fishery dependent data sources): This is a very informative depiction of the range of wolffish, particularly the broad range of encounters in observed trips and party charter boats. Given the importance of this figure, it may be worth expanding each panel to a full page. If the party charter boat observations are occluding the observer observations, then it would be

useful to show the data separately. The differences between the spring and fall data points are almost impossible to see due to occlusion. In other words, this figure could be split into 4 separate plots.

Section 7.1.2: Non-fishing Activities – Can this be comprehensive without mentioning wind development and associated bottom activities on page 101?

Page 118: Figures XX and YY need to be identified.

Page 132: Table reference is omitted.

cc: F. Serchuk
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