NOTES ON FLAT NEEDLEFISH, *ABLENNES HIANS* IN NORTH CAROLINA

FRANK J. SCHWARTZ and JOSEPH PURIFOY

Institute of Marine Science, University of North Carolina, Morehead City, NC 28557-3209

Abstract: Maximum lengths of three flat needlefish, *Ablennes hians* collected in North Carolina between 1990 and 2012 increased to 564 mm TL for inshore captures and 1,300 mm TL for offshore captures.

INTRODUCTION

The first *Ablennes hians* (Valenciennes, 1846) Family Belontiidae (14 in, 346 cm TL) captured in North Carolina occurred at Beaufort, NC in 1885 (Jenkins 1885). Several others were caught in pound nets in 1903 and 1905 (Smith 1907). Coles in Gudger 1913 caught a nine inch, 228 mm TL *A. hians* in 1910. Flat needlefish *Ablennes hians* is compressed flat laterally, lacks keels, has elongated jaws with many pointed teeth, 12–14 bar sides and inhabits worldwide tropical, island and sub-tropical waters (Robins and Ray 1886; McEachran and Fechhelm 1998; Carpenter 2002). A pelagic species, it ranges from Massachusetts, Gulf of Mexico, Bahamas, Caribbean seas south to Rio De Janeiro, Brazil and attains lengths of 1,100 mm TL (McEachran and Fechhelm 1989).

Schwartz (2006) reported 11 additional *Ablennes hians* captured in North Carolina between 1974 and 1985. Wigley et al. 2003 noted flat needlefish 23–53 cm TL collected north of Cape Hatteras between 1992–1999. Nineteen other known captures offshore between 2001 and 2003 ranged : 292–497 mm TL (Hogue, pers. comm. 2012). Since then two *A. hians* were captured offshore by hook and line at 33°98'N, 76°67'W, 20 June 1990 (1,208 mm TL; NCSM 27570) and 34°53'N, 76°21'W, 17 August 1991 (1,300 mm TL; NCSM 27581).

Recently, a 564 mm TL *A. hians* (NCSM 72856) was trawled 5 September 2012 in the 4 m deep Newport river (near junction with Core creek), Carteret County, North Carolina. Previously, the only inshore *A. hians* captures were in the Newport river and at the Institute of Marine Sciences; sizes were 290–429 mm TL (Schwartz 2006).

Overall *A. hians* is an enigmatic species in North Carolina waters. The recent captures increase maximum sizes of inshore specimens to 564 mm TL and offshore specimens to 1,300 mm TL. It is strange so few *A. hians* have been captured in the light of much fishing, trawling and sampling.

Acknowledgements: Gabriele Hogue (NCSM) supplied the NCSM catalogue numbers.

LITERATURE CITED

- CARPENTER, K. E. 2002. The living resources of the western Central Atlantic. Vol. 2. Bony fishes Pt.1. Acipenseridae to Grammatidae). FAO species identification guide for fishery purposes and American Society of Ichthyologists and Herpetologists. Spec. Publ. FAO, Rome 5:601–1374.
- GUDGER, E. W. 1913. Natural History notes on some Beaufort, North Carolina Fishes, 1910–11. No. III. Fishes new or little known on the coast of North Carolina collected by Mr. Russel J. Coles. J. Mitchell Soc. 157–172.
- JENKINS, O. P. 1885. Notes on the fishes of Beaufort Harbor, North Carolina. Johns Hopkins Univ. Circ. October 1885. 11 p.
- MCEachran, J. D., AND J. D. FECHHELM. 1998. Fishes of the Gulf of Mexico, Vol. 1. Myxiniiformes to Gasterosteiformes. Univ. Texas Press, Austin, TX. 1112 p.
- ROBINS, C. R., AND G. C. RAY. 1886. A field guide to the Atlantic Coast fishes of North America. Houghton Mifflin, Boston, MA. 324 p.
- SCHWARTZ, F. J. 2006. Beloniform fishes in North Carolina: families Belontiidae, Scomberesocidae, Exocoetidae and Hemiramphidae. J. No. Car. Acad. Sci. 122(2):63–69.
- SMITH, H. M. 1907. The Fishes of North Carolina. NC Geol. Econ. Surv. Vol. II. Raleigh, NC. 453 p.
- WIGLEY, S. E., H. M. McBRIDE, AND N. J. McHUGH. 2003. Length-weight relationships for 74 fish species collected during NSF-SC research vessel bottom trawl surveys 1992–99. NOAA Tech. Memo. NMFS-NE 171, 26 p.