

To Catch a Flounder: the Potential for Escapement of Older Southern Flounder (*Paralichthys lethostigma*) from Fishing Pressure in North Carolina

Carter Watterson*

John Alexander

North Carolina Division of Marine Fisheries

3441 Arendell Street, P.O. Box 769

Morehead City, NC 28557

*Carter.Watterson@ncmail.net

Abstract

Southern flounder (*Paralichthys lethostigma*) is the most economically important finfish species in North Carolina, USA. Landings for this species have averaged approximately 1,738 metric tons over the past eight years. The majority of the landings (93%) are comprised of one and two year-old fish. Considering the maximum age for the species is eight, this indicates either a truncated age structure for the population or escapement of the older fish from fishing pressure.

In North Carolina, southern flounder are highly susceptible to fishing pressure while inshore during the warmer months, primarily from gill nets and pound nets. As the temperature drops, the flounder move offshore into ocean waters to spawn. Once outside the inlets, very little exploitation of the stock occurs. It has been hypothesized that a portion of the population of older fish may remain offshore following spawning rather than returning inshore to the rivers and estuaries. To test this hypothesis, southern flounder have been collected on the natural and artificial reefs off of North Carolina throughout the year for aging. This presentation will focus primarily on the methodology surrounding the collection of the flounder in its natural habitat through the use of SCUBA, along with the inherent advantages and disadvantages to this collection method.