

# PELAGIC HABITAT USE IN ATLANTIC BLUEFIN TUNA (*THUNNUS THYNNUS*)

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## POSTER

### *Abstract:*

To examine pelagic habitat use in Atlantic bluefin tuna, we used data records (1 or 2 min resolution) from 15 archival tags and one pop-up archival tag. Daily vertical profiles were manually classified into three dive types: 1) U-shaped profiles associated with foraging; 2) non U-shaped profiles with frequent V-shaped dives that are associated with transiting or searching for prey; and 3) profiles restricted to surface waters by either bathymetry or thermal constraints (cold waters). These profiles are associated with coastal habitats or higher latitudes. Fixed kernel home range utilization distributions were calculated for each of the dive-type classes. Key foraging habitats were identified in the northwestern Atlantic (the Gulf of Maine, Grand Banks and Flemish Cap), the northeastern Atlantic and off Florida and the Bahamas. Further analysis examined the relationship between diving behavior (*e.g.* mean daytime depth, temperature, surface returns) and the physical oceanography (*e.g.* water temperatures, oxygen concentrations, mixed layer depth) of each region.

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