

## **Atlantic HMS Life History Description:**

### ***Atlantic Skipjack Tuna***

**Atlantic Skipjack Tuna (*Katsuwonus pelamis*)** Skipjack tuna are circumglobal in tropical and warm-temperate waters, generally limited by the 15°C isotherm. In the western Atlantic skipjack range as far north as Newfoundland (Vinnichenko, 1996) and as far south as Brazil (Collette and Nauen, 1983). Skipjack tuna are an epipelagic and oceanic species and may dive to a depth of 260 m during the day. Skipjack tuna is also a schooling species, forming aggregations associated with hydrographic fronts (Collette and Nauen, 1983). There has been no trans-Atlantic recovery of tags; eastern and western stocks are considered separate (ICCAT, 1997).

**Predator-prey relationships:** Skipjack tuna is an opportunistic species which preys upon fishes, cephalopods and crustaceans (Dragovich, 1969, 1970b; Dragovich and Potthoff, 1972; Collette and Nauen, 1983; ICCAT, 1997). Predators include other tuna and billfishes (Collette and Nauen, 1983). Skipjack tuna are believed to feed in surface waters, however they are caught as bycatch on longlines at greater depths. Stomach contents often include *Sargassum* or *Sargassum* associated species (Morgan *et al.*, 1985).

**Life history:** Skipjack tuna spawn opportunistically in equatorial waters throughout the year and in subtropical waters from spring to early fall (Collette and Nauen, 1983). Larvae have been collected off the east coast of Florida from October to December (Far Seas Fisheries Research Lab, 1978) and in the Gulf of Mexico and Florida Straits from June to October. However, most spawning takes place during summer months in the Caribbean, off Brazil (with the peak in January through March), in the Gulf of Mexico (April to May), and in the Gulf of Guinea (throughout the year) (Richards, 1969; SCRS, 1978/79).

**Fisheries:** This fishery is almost exclusively a surface gear fishery, although some skipjack tuna are taken as longline bycatch. Most skipjack tuna are taken in the east Atlantic and off the coast of Brazil, most recently with the use of floating objects to attract them. These floating objects have been identified to possibly affect migration patterns and cause poor growth rates (ICCAT, 2008b). ICCAT assumes two management units for this species (eastern and western) due to the development of fisheries on both sides of the Atlantic and to the lack of transatlantic tag recoveries.

**U.S. Fishery Status:** Unknown.

**Growth and mortality:** Maximum size of the species is reported at 108 cm FL and a weight of 34.5 kg. Size at sexual maturity is 45 cm (18 inches) for males and 42 cm for females. This size is believed to correspond to about 1 to 1.5 years of age, although significant variability in interannual growth rates makes size-to-age relationships difficult to estimate (Collette and Nauen, 1983; ICCAT, 1997). Growth rate is variable and seasonal, with individuals from the tropical zone having a higher growth rate than those from the equatorial zone (SCRS, 1997). Life span is estimated to be eight to 12 years (Collette and Nauen, 1983).

**Habitat associations:** Aggregations of skipjack tuna are associated with convergences and other hydrographic discontinuities. Also, skipjack tuna associate with birds, drifting objects, whales, sharks and other tuna species (Colette and Nauen, 1983). The optimum temperature for the species is 27°C, with a range from 20° to 31°C (ICCAT, 1995).

### **Atlantic HMS EFH Text Description:**

#### *Essential Fish Habitat for Skipjack Tuna:*

- **Spawning, eggs, and larvae:** In offshore waters in the Gulf of Mexico to the EEZ and portions of the Florida Straits as shown in Figure 5.8.
- **Juveniles/subadults (<45 cm FL):** Localized areas in the central Gulf of Mexico from Louisiana through the Florida Panhandle. Localized areas in the Atlantic off of Georgia, South Carolina, and North Carolina to Maryland, and from Delaware to Cape Cod and the southern east coast of Florida through the Florida Keys. Please refer to Figure 5.9 for detailed EFH map.
- **Adults (≥45 cm FL):** In the central Gulf of Mexico, off of Texas through Florida. Localized areas in the Atlantic off of South Carolina and the northern east coast of Florida, and from Cape Hatteras to Cape Cod and the southern east coast of Florida through the Florida Keys. Please refer to Figure 5.10 for detailed EFH map.

## Atlantic HMS EFH MAP:

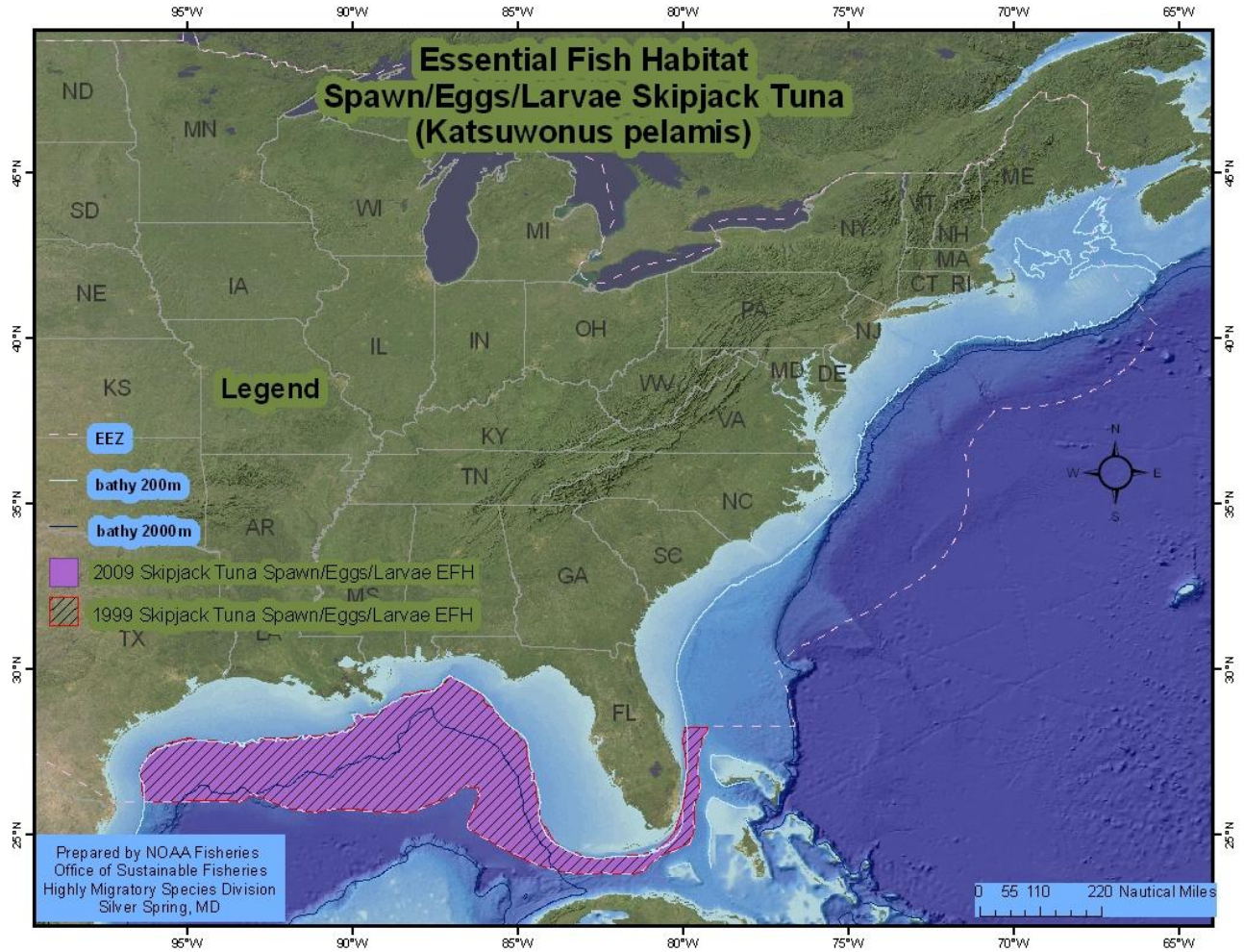


Figure 1. Atlantic Skipjack Tuna: Spawning, Eggs, and Larvae.

Maps are also available on the following webpages:

- Atlantic HMS EFH Amendment Homepage: <http://www.nmfs.noaa.gov/sfa/hms/documents/fmp/am1/index.html>
- Habitat Mapper: <http://www.habitat.noaa.gov/protection/efh/efhmapper/index.html>