

## *Elops saurus* (Ladyfish)

Family: Elopidae (Ladyfish)

Order: Elopiformes (Tarpons and Ladyfish)

Class: Actinopterygii (Ray-finned Fish)



**Fig. 1.** Ladyfish, *Elops saurus*.

[<http://www.filmflorida.com/daily-species/ladyfish/>, downloaded 2 March 2016]

**TRAITS.** The medium-sized fish *Elops saurus* (ladyfish or ten-pounder) belongs to the small family, Elopidae. It can be recognized as being flanked by small silver scales with a slight wash of green (Fig. 1), and the scales are thin and come off easily (Fish Identification, 2010). Marine Fishes of Georgia (2016) describes the ladyfish as having a slender, sub-cylindrical body with a straight lateral line and a pointed head with terminal mouth. The caudal (tail) fin is deeply forked and usually brown or grey, the slightly transparent dorsal fin is pale olive in colour, and both the pelvic and pectoral fins are white with tints of yellow (Holbrook, 2011). The length of the ladyfish is up to 1m, and the average weight is 1.3kg (Wikipedia, 2016).

**DISTRIBUTION.** *Elops saurus* is native to the western Atlantic Ocean and surrounding waters. Their distribution ranges from New England, USA, to Brazil and includes the Gulf of Mexico and the Caribbean (Fig. 2). It is therefore native to Trinidad and Tobago. According to Bester (2016) the ladyfish has been spotted in both the Indian and Pacific Oceans, however, Adams et al. (2012) state that *E. saurus* in other parts of world were incorrectly reported.

**HABITAT AND ACTIVITY.** Young *E. saurus* prefer estuaries, with a mixture of salt and fresh water resulting in low salinity, whereas the adult is tolerant of a wider range of salinity and can be found in oceans, coastal streams, lagoons, and on a few rare occasions has been spotted in freshwater (Bester, 2016). Besides the salinity of the water another factor that affects the activities of ladyfish is temperature. They are thermophiles which mean they function efficiently at high temperatures, and are only tolerant of lower temperatures for short periods. Many times the cold temperature of Florida waters has led to their death (Bester, 2016). It lives in up to 50m depth of water, below which there can be oxygen deprivation. Besides obtaining food near the coast, from June to October ladyfish are found near the shoreline but after that they disappear, this is linked to their spawning season.

**FOOD AND FEEDING.** Larval *Elops saurus* feed mainly on zooplankton, and as they become juveniles they eat crustaceans and tiny fish. By the time they have matured they consume other bony fish (Bester, 2016). Many large pieces of fish are often found in their stomachs, as this fish swallows its prey whole. In a study of the stomach contents of 295 *E. saurus* to determine the main food source of these fish, 229 contained food. The major component was fish (94%) and the remaining (6%) comprised crustaceans such as shrimps, crabs and lobsters (Sekavec, 1974).

**POPULATION ECOLOGY.** The average life span of the ladyfish is approximately 6 years (Bester, 2016), males and females reach sexual maturity at different ages, males in 3 years and females in 4 years. These offshore feeders are often found in schools (collective name for a group of fish); feeding in groups is a defence mechanism against potential predators.

**REPRODUCTION.** The preferred conditions for juvenile ladyfish is in low salinity waters. The larval stage of the ladyfish is 27-48 days (Adams et al., 2012) after which the fish enters an estuary and stays until it becomes fully mature. After the length increases to approximately 35mm the fish is recognized as being juvenile.

**BEHAVIOUR.** The ladyfish certainly does not live up to the name of being a ‘lady’, the fish is known to be a fighter. Many times when hooked by a fishing rod they are seen making leaps out of the water (Fig. 3). Their agility and the tremendous amount of energy they possess make them highly demanded by anglers (Bester, 2016). The recreational sport of angling uses small ladyfish as live bait since they can travel great distances quickly without becoming tired. The fish is also called a ‘ten-pounder’ simply because although its average weight is three pounds, they fight viciously as if they weighed ten pounds.

**APPLIED ECOLOGY.** IUCN lists *Elops saurus* as LC – Least Concern, and the population as being stable (Adams et al., 2012). In regions where the ladyfish is native, it is known for its commercial use, i.e. human consumption as well as use as bait by fishermen, but there are laws that prohibit the capture of this species for commercial use in Florida. They are consumed by humans although their flesh is bony. One threat faced by this species is alterations in the quality of freshwaters since the preferred habitat of juvenile ladyfish is estuaries.

## REFERENCES

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**Fig. 2.** Map showing the world distribution of *Elops saurus* in the western Atlantic Ocean.

[<http://flylifemagazine.com/wednesday-fish-facts-elops-saurus-ladyfish-on-6-weight/>, downloaded 15 February 2016]



**Fig. 3.** Ladyfish (*Elops saurus*) leaping out of the water.

[<http://www.texassaltwaterfishingmagazine.com/fishing/wild/subpage312.html>, downloaded 20 February 2016]