

## *Halichoeres poeyi* (Blackear Wrasse)

Family: Labridae (Wrasses)

Order: Perciformes (Perch and Allied Fish)

Class: Actinopterygii (Ray-finned Fish)



**Fig. 1.** Blackear wrasse, *Halichoeres poeyi*.

[<http://biogeodb.stri.si.edu/caribbean/en/gallery/specie/3900>, downloaded 31 October 2016]

**TRAITS.** The blackear wrasse *Halichoeres poeyi* shows the conspicuous characteristics of all wrasses, having a pointed snout and protruding canine teeth to the front of the mouth; generally, wrasses are small fish, below 20 cm in length (Encyclopedia of Life, 2016). The blackear wrasse displays wide pink bands with a thin blue stripe on the head and tail. A dark spot behind the eye gives the species its common name. The head and body are olive coloured, and the scales are lined with pink-red. The dorsal fin has blue and orange margins, and the tail fin a dull yellow, with pink-orange lines (Fig. 1). The patterns of males and females are similar, but females are considerably smaller than males (Fig. 2) (Roede, 1972). *Halichores poeyi* was previously identified as *PlatyGLOSSUS poeyi* (IUCN, 2010).

**DISTRIBUTION.** *Halichoeres poeyi* inhabits the Atlantic waters of the Caribbean (Roede, 1972) and can be found throughout the archipelago of islands from the northernmost Bahamas to Trinidad and Tobago with the exception of southern Florida, the United States, Belize and Brazil (Fig. 3) (IUCN, 2010).

**HABITAT AND ECOLOGY.** The habitat of wrasses are quite diverse, ranging from coral reefs, to tidal pools and sand bottoms. *Halichoeres poeyi* is a marine fish and prefers the specific environments of coral and rocky reefs as well as seagrass (particularly turtle grass), at a depth of 30m (IUCN, 2010). However, *Halichoeres poeyi* also frequently inhabits areas rich in algae. The blackear wrasse is strictly diurnal in nature showing characteristic lethargic activity in the wee hours of the morning and in the late evening. Its diet consists predominantly of decapods, gastropods, sea stars and sea urchins, the latter of which were assumed to be made available for feeding via a larger predatory fish, and this species shows less intense movements than other wrasses (Roede, 1972).

**REPRODUCTION.** *Halichoeres poeyi* is a sequential protogynous hermaphrodite, some individuals changing sex from female to male as they grow, with an average body length of 8.3cm at sex change (IUCN, 2010). Many males gather and put on showy displays to attract females and so this wrasse is one of the few species that does not form a harem but rather a lek (Animal Diversity Web, 2016). Larvae of *Halichoeres poeyi* have long thin bodies with a small mouth and small pelvic fins. They are the only species of larval *Halichoeres* to develop internal, specialized, chromatophores (Fig. 4) (CoralReefFish, 2016).

**APPLIED BIOLOGY.** Due to its small size, *Halichoeres poeyi* is not a desirable catch for fisheries however, they are quite popular in the aquarium trade industry because of their size and colours. It is placed in the IUCN's Least Concern category and so is not endangered (IUCN, 2016).

#### REFERENCES

- Animal Diversity Web.(2016). Labridae.  
<http://animaldiversity.org/accounts/Labridae/#a44300646d8a2e9252039705c86490b2>, accessed 31 October 2016.
- CoralReefFish (2016). Family Labridae. A Photographic Guide To The Larvae Of Coral Reef Fishes.  
<http://www.coralreeffish.com/labridae.html>, accessed 31 October 2016.
- Encyclopedia Of Life. (2016). Labridae. [http://eol.org/pages/5305/hierarchy\\_entries/56598439/details](http://eol.org/pages/5305/hierarchy_entries/56598439/details), accessed 14 November 2016.
- IUCN. (2010). *Halichoeres poeyi*. The IUCN Red List of Threatened Species.  
<http://www.iucnredlist.org/details/187584/0>, accessed 31 October, 2016.
- Roede, M. (1972). Color as related to Size, Sex, and Behavior in seven Caribbean Labrid Fish Species, genera *Thalassoma*, *Halichoeres* and *Hemipteron*. **138**: 7-9, 21, 70, 108-119

Author: Raéann Parris

Posted online: 2016



**Fig. 2.** Difference in size of female (above) and male blackear wrasse.

[<http://www.fishwisepro.com/pics/JPG/TN/TN058770F000024W000002.jpg>, downloaded 14 November 2016]



**Fig. 3.** Map showing species distribution range.

[[http://www.fishbase.org/images/aquamaps/native/pic\\_Fis-24661.jpg](http://www.fishbase.org/images/aquamaps/native/pic_Fis-24661.jpg), downloaded 14 November 2016]



**Fig. 4.** *Halichoeres poeyi* larva, length 12.6mm.

[<http://www.coralreeffish.com/larvae/labridae/zhalichoerespoeyi126.jpg>, downloaded 14 November 2016]