

Paraclinus nigripinnis (Blackfin Blenny)

Family: Labrisomidae (Blennies)

Order Perciformes (Perch and Allied Fish)

Class Actinopterygii (Ray-finned Fish)



Fig. 1. Blackfin blenny, *Paraclinus nigripinnis*.

[<http://www.fishbase.org/photos/ThumbnailsSummary.php?id=3749>, downloaded 9 March 2016]

TRAITS. This big-eyed fish is quite small, reaching a maximum length of around 6.5cm. Males and females are not easily distinguishable, however it is suggested that males are slightly larger than females (Michael, 2015). The blackfin blenny has black anal and dorsal fins and yellow translucent tail fin, with a body colour predominantly black with white spots (Fig. 1). There is an ocellus (eyespot, blue with an outer yellow ring) at the rear of the dorsal fin (Figs 1 and 2). This species was formerly known as *Clinus nigripinnis* (IUCN, 2014).

DISTRIBUTION. *Paraclinus nigripinnis* can be found in the western Atlantic, that is south and east Florida, the Bahamas, throughout the Caribbean to Tobago and northern Trinidad, as well as parts of the Gulf of Mexico and Central America (Fig. 3). It has been reported that the species also resides in Brazil, but this record is now assigned to a different species, *Paraclinus rubicundus* (IUCN, 2014).

HABITAT AND ACTIVITY. *Paraclinus nigripinnis* is a marine fish found in rocky tide pools and in sandy domains with algae-coated rocks, in addition to basins, eroded limestone slopes and seagrass beds. It inhabits waters at depths ranging from the shoreline to 10 m deep, and can also be located on and around coral reefs (Cervigon, 1994).

FOOD AND FEEDING. *P. nigripinnis* are omnivorous blennies whose diet mainly consists of filamentous microalgae, detritus, and foraminiferans. They have also been known to consume small crustaceans and snails, as well as sponges and fish eggs, which are thought to be mistakenly ingested as the fish feeds on algae (Michael, 2015).

POPULATION ECOLOGY. *Paraclinus nigripinnis* is the most common species of the genus *Paraclinus* in the Bahamas. The species was found at an average population density of 0.68 fish per square metre (0.68/m²) on the shorelines of Buck Island Reef National Monument in the US Virgin Islands (Bohlke and Chaplin, 1993). The species was found in Belize at 67% of research stations amongst algae and rubble, at 30% of stations in tide pools, and at 25-33% of stations with deep and shallow seagrass, respectively. A current population trend is unknown, but the population in Bermuda has been eliminated (Dulvey et al., 2003).

REPRODUCTION. Male *Paraclinus nigripinnis* protect a small territory such as the crevice of a rock or an empty shell. As the female enters into the male's territory, eggs are laid which stick to the walls of the territory as the male fertilizes them, after which the female leaves. The female leaves the male to guard the eggs until they hatch. The male sits just outside the territory while feeding, otherwise he remains inside the shell of rock crevice looking over his young. Newly hatched *Paraclinus nigripinnis* larvae (Fig. 4) swim upward to the water surface to feed on plankton (microscopic sized plants and animals) that drift in the water, before they return to the bottom (Michael, 2015).

BEHAVIOUR. This blenny is solitary, meaning that it spends the majority of its time living without others of its species. *P. nigripinnis* is quite tolerant of low oxygen levels which is an adaptation to cope with the changing oxygen concentrations in the habitats they occupy (especially at night) such as deep within reefs and tide pools (Michael, 2015). It is typical of blennies to 'sit' on coral or rocks, using their pelvic fins to lift their heads off the bottom.

APPLIED ECOLOGY. No serious threats against the blackfin blenny are known and therefore is not listed as a threatened in the Global Assessment (IUCN, 2014). They are generally harmless to humans but used commercially in aquariums for algal control. *Paraclinus nigripinnis* is not particularly dependent on coral reefs as a habitat. The fish is presumably unlikely to be susceptible to its prime predator, the lionfish, since *P. nigripinnis* is only a small portion of its diet. Conservation actions for the blackfin blenny have not been put into place, however its distribution overlaps with that of reef protection programmes and marine protected areas (IUCN, 2014).

REFERENCES

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Posted online: 2016

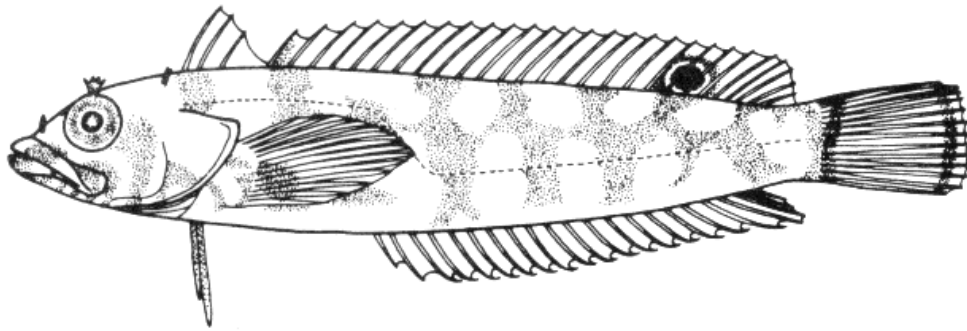


Fig. 2. Illustration of the morphological features of *Paraclinus nigripinnis*
[<http://www.fishbase.org/photos/ThumbnailsSummary.php?id=3749>, downloaded 10 March 2016]

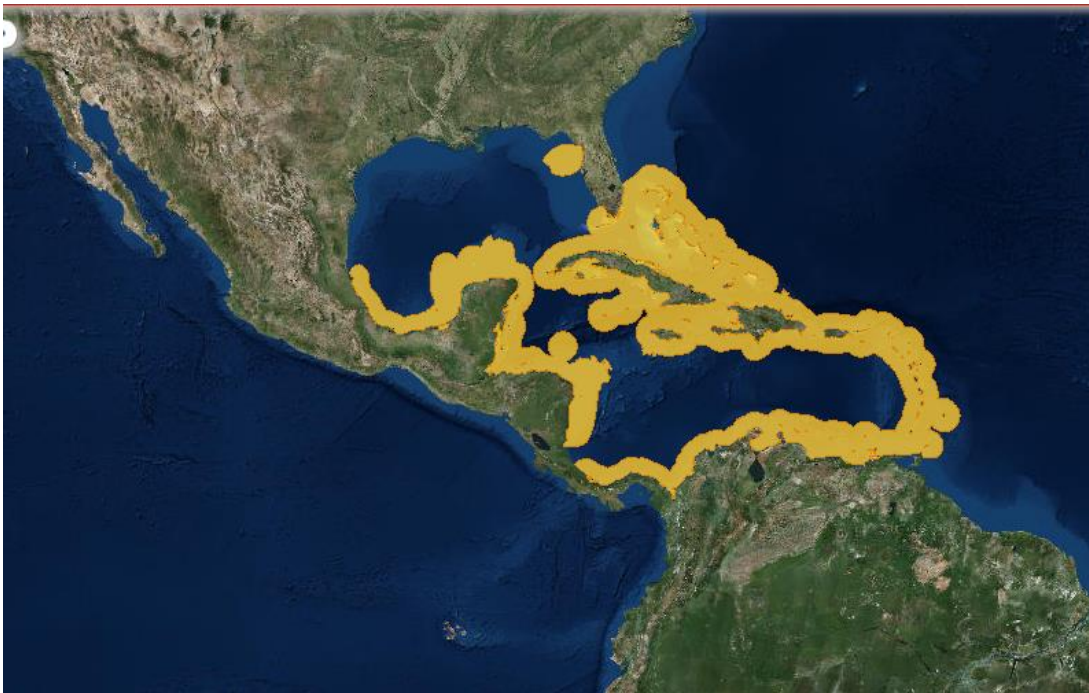


Fig. 3. Map showing distribution of *Paraclinus nigripinnis* (blackfin blenny).
[<http://maps.iucnredlist.org/map.html?id=46104789>, downloaded 10 March 2016]



Fig. 4. A preserved larva of the blackfin blenny (body length 7.9mm).


(natural size)

[<http://www.coralreeffish.com/labrisomidae.html>, downloaded 10 March 2016]

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