Arquipelago - Life and Marine Sciences ISSN: 0873-4704

SHORT COMMUNICATION

The polygon moray, *Gymnothorax polygonius* (Poey, 1875): A new record from Ascension Island, South Atlantic

ANDREW J. RICHARDSON & ALBERTO BRITO

Richardson, A.J. & A. Brito 2015. The polygon moray, *Gymnothorax polygonius* (Poey, 1875): A new record from Ascension Island, South Atlantic. *Arquipelago*. Life and Marine Sciences 32.

Andrew J. Richardson (email: Andy.Richardson@ascension.gov.ac) Conservation Department, Ascension Island Government, Ascension Island, South Atlantic ASCN 1ZZ; Alberto Brito, Grupo de investigación BIOECOMAC (U. D. Ciencias Marinas), Universidad de La Laguna, Tenerife, Islas Canarias.

Ascension Island (07°57′S, 14°22′W) is an isolated volcanic edifice in the South Atlantic. The closest land, St. Helena is approximately 700 miles south with the closest land mass of any size being West Africa, 1000 miles to the east. Approximately 1500 miles west of Ascension Island is the coast of Brazil. As such, the fish community of the island is a mixture of eastern and western Atlantic species, although richness is relatively low compared with other similar locations such as Cape Verde (Wirtz et al. 2014). Despite the apparent remoteness of Ascension Island there have been several key publications on the ichthyofauna for the island and surrounding marine zone. The fish community of Ascension was first summarized by Cadenat & Marchal (1963), with a comprehensive checklist of shallow-water fish species published by Lubbock (1980) recording 71 species. A report on the benthic and near-benthic fish community, from seamounts around Ascension, was compiled in Trunov (2006). The most recent review of the ichthyofauna of Ascension can be found in Wirtz et al. (2014), a study listing 173 fish species, including 12 members of the family Muraenidae. The extensive rocky marine habitat of Ascension Island is often considered a key factor behind the considerable abundance of moray eels around the island.

On 21 Feburary 2015 an unidentified moray eel was caught by a recreational angler who had been fishing in deep water from a vessel off the western coast of Ascension Island (Fig. 1). The specimen did not match any previous identification records of Muraenidae from Ascension Island.

Fig. 1. *Gymnothorax polygonius* specimen, Ascension Island (21-02-2015)

The specimen had been caught during daylight hours, using rod-and-line in approximately 150 m of water. Although there exists limited information on the benthic habitat, from other species that are regularly caught in the same location (such as *Cookeolus japonicas*) it is postulated that the site is hard-bottomed. The fisherman reported that he and others had caught similar eels in a similar location a few years previously, though occurrences were rare. The specimen was moved from the pierhead at Georgetown to the Marine and Fisheries Laboratory, Conservation Department for identification and processing.

The specimen measured 95 cm from snout to caudal tip, and weighed 1.629 kg. As part of a larger study being conducted on the island the gonads were extracted, weighing 0.00386 kg, showing the specimen to be male with reproductive stage being assessed as resting. Left and right sagittal otoliths were removed and stored for future aging analysis. No identifiable stomach contents were present. The specimen was brown in colour, with clustered pale blotches forming into a larger geometric pattern (Fig. 1), the body form being laterally compressed. Elongated jaws were not arched (Fig. 2), with molariform teeth absent and vomerine teeth in a single row. The specimen was identified as the polygon moray *G. polygonius* (Poey, 1875).

Fig. 2. Head of *G. polygonius* specimen (scale in cm).

Gymnothorax polygonius occurs in hard-bottom habitats, in both the eastern and western Atlantic (Smith 2012), typically found at depths greater than 50 m (Gasparini & Floeter 2001). This is the first confirmed record of the species at Ascension Island. Table 1 summarises several previous records of *G. polygonius* at locations in the Atlantic.

Table 1. Previous Atlantic Ocean record locations of *G. polygonius*

Location	Publication
Brazil	Floeter et al. (2003)
	Frota et al. (2004)
	Olavo et al. (2011)
Canary Islands	Brito (1991)
	Uiblein et al. (1996)
	Brito et al. (2002)
Cape Verde	Pereira et al. (2012)
	Wirtz et al. (2013)
	Hanel & John (2015)
	Menezes et al. (2015)
Madeira Island	Wirtz et al. (2008)
Trindade Island	Gasparini & Floeter (2001)
	Simon et al. (2013)
St. Helena	Böhlke et al. (1989)

Given the wide distribution of *G. polygonius* on both sides of the tropical and sub-tropical Atlantic, it is not unexpected that the species would also be found at the mid-Atlantic, Ascension Island. However, the new record does highlight the opportunity and necessity for further investigation of the marine environment and communities around Ascension Island, particularly when considering the island's unique assemblage with species sourced from across the Atlantic.

ACKNOWLEDGEMENTS

The authors are grateful to Mr Billy Richards (Ascension Island) for donation of the specimen. A. Richardson is funded by a Darwin Initiative grant to the Ascension Island Government Conservation Department (DPLUS021: Ascension Island Marine Sustainability (AIMS) – A Fisheries and Marine Biodiversity Project). The author is grateful for helpful discussions with the other AIMS team members and supervisory team.

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Received 09 July 2015. Accepted 21 July 2015. Published online 14 Sept 2015.