



First Record of Wide-Eyed Flounder (*Bothus podas* Delaroche, 1809) in Saroz Bay (Northern Aegean Sea, Turkey)

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ABSTRACT

A single specimen of the wide-eyed flounder (*Bothus podas* Delaroche, 1809) was caught using the trammel nets by fishermen on 15 May 2017 in İbrice Bight (Saroz Bay). This paper represents the first record of *B. podas* for Saroz Bay.

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Pisi Balığının (*Bothus podas* Delaroche, 1809) Saroz Körfezindeki (Kuzey Ege Denizi, Türkiye) İlk Kaydı

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ÖZ

Bir adet pisi balığı (*Bothus podas* Delaroche, 1809), 15 Mayıs 2017 tarihinde İbrice Koyu'nda (Saroz Körfezi), balıkçılar tarafından fanyalı ağlar ile yakalanmıştır. Bu çalışma Saroz Körfezi için *B. podas*'un ilk kaydını sunmaktadır.

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Introduction

The wide-eyed flounder (*Bothus podas* Delaroche, 1809) is a small bothiid species usually living on shallow soft and mixed sediments on the continental shelf to a depth of about 400 m (Torchio, 1962; Nash et al., 1991). This species is distributed in the Mediterranean and in the Eastern Atlantic, from the Gulf of Cadiz to Angola, including Madeira, Cape Verde and the Canary Islands (Göthel, 1992).

Bothus podas has no commercial value but appears to be of ecological importance in these relatively rare shallow-water, sandy-bottom areas (Morato et al., 2007). It is a diurnal predator, usually burrowing partially or almost entirely in sand or mud (Darnaude et al., 2001). The studies on the feeding habits of this species report that it feeds mainly on benthic invertebrates like molluscs, polychaetes, crustaceans and sea urchins (Nash et al., 1991), but also on small benthic fishes (Azevedo, 1995; Darnaude et al., 2001).

The social structure of the wide-eyed flounder is harem. Both sexes are territorial throughout the year.

Adult males defend large territories, which include several smaller female territories. During the reproductive season, which lasts from May to August in the Mediterranean Sea, territorial males court and mate only with females in their territories (Carvalho et al., 2003; Esposito et al., 2009). The present study is the first record of the wide-eyed flounder (*Bothus podas* Delaroche, 1809) in the Saros Bay (Northern Aegean Sea, Turkey).

Material and Methods

A single specimen of *Bothus podas* (Figure 1) was caught using the trammel nets by fishermen on 15 May 2017 in İbrice Bight (Saroz Bay) (Figure 2) at a depth of about 15 m. The specimen was identified based on Mater et al. (2009), photographed and some meristic characters were measured. And then, it was fixed and preserved in 6% formalin solution.



Figure 1 *Bothus podas* captured in İbrice Bight, Saroz Bay

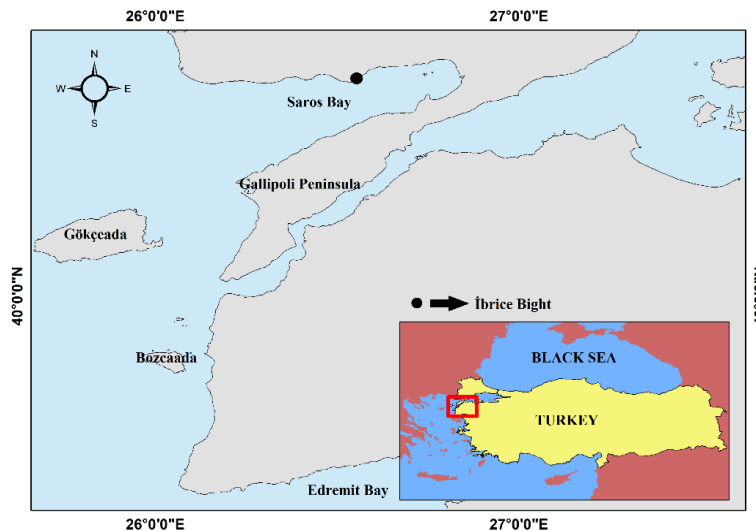


Figure 2 İbrice Bight where *Bothus podas* was captured (indicated by a full dot)

Results and Discussion

Saroz Bay, which is situated in the Northeastern Aegean Sea, is connected to the North Aegean with a depth of approximately 600 m to the west. The shelf extends at a water depth of 90–120 m. The length of the bay is about 61 km and the width at the opening to the Aegean Sea is about 36 km (Eronat and Sayın, 2014). As Saroz Bay had been closed to bottom trawl fishing since 2000 (Cengiz et al., 2011) and no industrial activity was prevalent in the area (Sarı and Çağatay, 2001), the bay can be considered as a pristine environment (Cengiz et al., 2013). The total length of captured specimen of *Bothus podas* was 17.0 cm and total weight was 53.0 g. The specimen presented following meristic characters; dorsal fin rays 85, pectoral fin rays 9, anal fin rays 70, pelvic fin rays 6 and line lateral numbers of scale 81. The body is flat and its shape is elongated oval. With a open tail fin, it looks like a shell. The eyes are very wide and the mouth is vertical. In addition, the entire fish is asymmetric.

As to Turkish waters, the wide-eyed flounder has been reported by Özyayın et al. (2007) in İzmir Bay and by Bilge et al. (2014) in Southern Aegean. Although several studies on fish communities have been done in the Saroz Bay (Koç et al., 2004; İşmen et al., 2007; Özekinci et al., 2009; Altuğ et al., 2011; Cengiz et al., 2011; Keskin et al., 2011a; 2011b), *B. podas* has never been caught or mentioned for this area. But, in the table that Çoker and Akyol (2018) submitted on the fish diversity of Saroz Bay, although they has shown the existence of species as if it existed in the Saroz Bay, the involved species has been reported by Keskin and Ünsal (1998), Karakulak et al. (2006), Keskin et al. (2013), Gönülal and Güreşen (2014), Altın et al. (2015) in Gökçeada Island, an area which is completely independent of the Saroz Bay.

In this connection, the faunal changes observed are related to climate change and water warming (Dulčić et al., 1999; Dulčić and Grbec, 2000). The climate change controls the rate of change in the geographical distribution of marine species or populations in the sea (Papaconstantinou, 2014). These changes may affect the status of the Turkish marine fauna and give rise to rare occurrences in Northern Aegean Sea (Cengiz, 2014; Cengiz and Tunçer, 2015).

Conclusion

There are no specific conservation measures in place for this species (IUCN, 2019). The captured single specimen of *B. podas* does not clearly indicate that there is an established population in Saroz Bay. At this juncture, this occurrence may be the base for future monitoring of possible spreading of the species.

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