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A DRAGONFLY AND A DAMSELFLY ON ROBBEN ISLAND: PRELIMINARY RESULTS FROM ODONATAMAP

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A DRAGONFLY AND A DAMSELFLY ON ROBBEN ISLAND: PRELIMINARY RESULTS FROM ODONATAMAP

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As pointed out by Loftie-Eaton et al. (2016), the seabirds of Robben Island have been well studied, while other taxa have been neglected. The bibliography of publications relating to the biodiversity of Robben Island (Underhill & Barham 2016) listed a single paper focused on the invertebrates (Mukherjee et al. 2010). What we know of the butterflies and moths of Robben Island has been reviewed by Loftie-Eaton et al. (2016). This paper provides information on the dragonflies and damselflies (Odonata).

Robben Island, 5.07 km² in size, is an island in Table Bay, about 7 km west from the nearest coastline, at Bloubergstrand, Cape Town, South Africa (Crawford & Dyer 2001). There is no running water on the island, except for temporary streams during winter rainfall events. There are several quarries, which fill in winter, and are essentially stagnant, often with algal blooms in the warm summer months.

OdonataMAP aims to map the distributions of the dragonflies and damselflies of Africa (Underhill et al. 2016). Besides the records submitted directly to the OdonataMAP Virtual Museum, the project hosts the Odonata Database of Africa (Clausnitzer et al. 2012). Of the 144,033 records in the combined database, only two records, both from OdonataMAP, are from Robben Island. They are of two species, Tropical Bluetail *Ischnura senegalensis*, a damselfly, and Blue Emperor *Anax imperator*, a dragonfly.

Tropical Bluetail *Ischnura senegalensis*

The Tropical Bluetail was photographed by Eukene Rueda on Robben Island on 29 January 2013 (Figure 1). This species occurs from the Western Cape, northwards across most of Africa, through the Middle East and southern Asia as far east as Japan, and it is associated with still-water, such as in ponds and dams (Tarboton & Tarboton 2015, Samways & Simaika 2016). Tarboton & Tarboton describe it as “more tolerant of polluted, acidic, alkaline or saline water than any other damselfly” in South Africa. The quarries of Robben Island probably provide suitable breeding habitat for this species. It is about 3 cm in length (Tarboton & Tarboton 2015).

Figure 1. The damselfly Tropical Bluetail Ischnura senegalensis. *Male on Robben Island, January 2013. © Eukene Rueda. http://vmus.adu.org.za/?vm=OdonataMAP-3432*

Blue Emperor *Anax imperator*

The Blue Emperor was photographed, also by Eukene Rueda, on Robben Island on 29 November 2012 (Figure 2). This is a widespread species of dragonfly which occurs throughout Africa, and northwards over most of southern Europe and western Asia. This large dragonfly (7–8 cm) is a strong flyer, and is often encountered far from water. It is a mobile species that rapidly locates and colonises new wetlands formed after rainfall events (Tarboton & Tarboton 2015). It is more sensitive to water quality than the Tropical Bluetail (Samways & Simaika 2016), and it is unlikely that any of the waterbodies on Robben Island provide suitable breeding habitat. Whether the specimen seen on Robben Island had, in fact, bred on the island, or was a visitor from the mainland, is unknown. The Blue Emperor recorded on Robben Island was a female (Figure 2). For reference purposes, a photograph of a male is included (Figure 3).

Figure 2. The dragonfly Blue Emperor Anax imperator*. This is a female on Robben Island, November 2012. © Eukene Rueda.*
http://vmus.adu.org.za/?vm=OdonataMAP-2216

Figure 3. Male Blue Emperor Anax imperator. *This record was made at Midmar Dam in KwaZulu-Natal. © Alan Manson.*
http://vmus.adu.org.za/?vm=OdonataMAP-1098

Visitors to Robben Island, and especially the fieldworkers on research projects, are encouraged to be alert to opportunities to take photographs of damselflies and dragonflies. At this stage, knowledge of the Odonata of the island is sparse. It is likely that more species will be recorded.

Acknowledgments

Eukene Rueda made both records of Odonata on Robben Island while she was monitoring the breeding of oystercatchers on the island in the summer of 2012/13. She was sponsored by the Basque University and the Basque Government. Warwick Tarboton made the OdonataMAP identifications. We are grateful to Robben Island Museum for logistical support.

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