

Discovery of New Populations of Hemiphlebia mirabilis (Ancient Greenling)

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Introduction

This article contains information about recent new sightings of *Hemiphlebia mirabilis* (Selys, 1869 Odonata: Hemiphlebiidae) in south-west Victoria and south-east South Australia during the summers of 2008/09 and 2009/10. This includes being recorded in South Australia for the first time.

It is listed as Endangered (IUCN 2008 Red List).



Female *Hemiphlebia mirabilis*, Long Swamp November 2009

Initial Discovery

On an orchid survey of Long Swamp (in Discovery Bay Coastal Park) during December 2008, organised by the Department of Sustainability and Environment (DSE) with volunteers from Australasian Native Orchid Society (ANOS) – Victoria, a distinctive damselfly was observed. When I first saw it I immediately recognized it despite being the first time that I had seen this species.

The swamp is quite distinctive consisting mainly of large swathes of twig-rush (*Baumea* sp) flooded seasonally but dry by late summer. There were numerous of these damselflies seen on the following day, when the weather was warmer. I had previously searched for this species unsuccessfully at Yea and Wilsons Promontory and realized by the number I had seen here that they prefer this habitat.

Further Searches

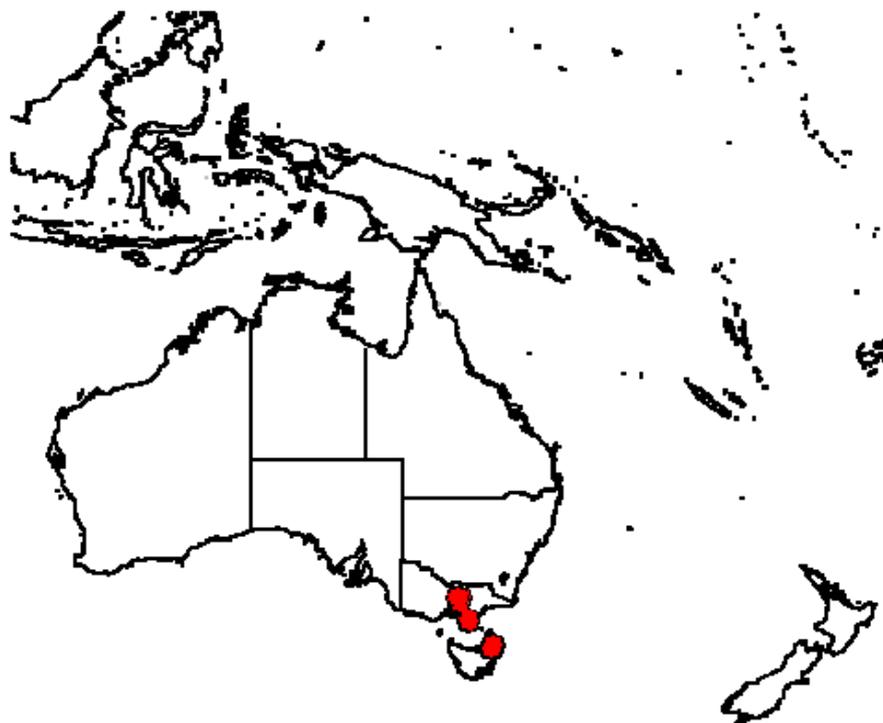
Using satellite images I searched for similar features nearby, the most obvious being Piccaninnie Ponds Conservation Park, just across the border in South Australia. Returning in November and December 2009 I observed large numbers of *H. mirabilis* here, as well as in Long Swamp.

During this time David Pitts (DSE Portland) had discovered numerous other sites containing smaller populations as well as Grassy Flats Swamp (Cobboboonee National Park), which may contain large populations. I was only able to explore a small part of this swamp late in the season when the water levels were low and only saw a handful but earlier in the season I suspect there could be more. Brian Haywood and myself each found an additional small colony in South Australia.

Previous Records

The following map was obtained from the CSIRO Australian National Insect Collection Database and shows previously known locations.

http://anic.ento.csiro.au/database/biota_details.aspx?BiotaID=24229



It is my understanding that the sites in Tasmania have not been surveyed recently. In the previous summer a “handful” of *H. mirabilis* were observed at one of the two locations at Wilsons Promontory and few if any were sighted at Yea. This makes the new areas around the SA/Vic border by far their strongest colonies and makes me believe they are only just hanging on at other locations. By comparison I saw many hundreds at Long Swamp in November 2009 and over a hundred at Piccaninnie Ponds in December.

http://photos.rnr.id.au/reports/Hemiphysalis_mirabilis_2010.pdf