



## ***Paroster baylyi* sp. n., *P. ursulae* sp. n. (Col. Dytiscidae, Hydroporinae) and the water beetle diversity of pan-gnammas on isolated granite outcrops in the Mallee of south-western Australia**

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### **Abstract**

*Paroster baylyi* sp. n. and *P. ursulae* sp. n. are described from south-western Australia, and compared with the similar *P. michaelseni* Régimbart, 1908. Their median lobes, parameres, gonocoxae, gonocoxosterna and habitus are illustrated, and details about their unique habitats and water beetle coenoses are given. The two new species are the first dytiscids to be known breeding solely in temporarily water filled rock-holes—so-called “pan-gnammas”—in the Mallee zone of south-western Australia. The total number of described species in the genus *Paroster* Sharp, 1882 is now 11. Eight aquatic Coleoptera of the families Dytiscidae and Hydrophilidae are recorded from 13 pan-gnammas on four granite outcrops in south-western Australia.

**Key words:** Coleoptera, Dytiscidae, *Paroster*, new species, inselbergs, gnammas, Mallee, south-western Australia

### **Introduction**

The Australian diving beetle genus *Paroster* Sharp, 1882 so far comprised nine species (Nilsson 2001, Fery 2004) which inhabit lentic, shallow and ephemeral water bodies in south-western and south-eastern Australia (Watts 1978, 1985, 2002). A comprehensive systematic revision of the whole genus is in preparation and three more species collected in recent years in Western Australia are awaiting description (Watts & Leys, in preparation).

In January 2000 and September 2002 adults and larvae of predaceous water beetles were collected by the senior author during two surveys of the south-western part of Western Australia. Additional specimens collected during various other Australian biological surveys, and the type material of all so far known members of *Paroster*—mainly deposited in the South Australian Museum (Adelaide) and the Natural History Museum in London—were studied, too. The aims of the present paper are to describe two new species of *Paroster*, to compare these with the rarely collected *Paroster michaelseni* Régimbart, 1908, and to report on the water beetle fauna of 13 pan-gnammas (for definition see below) distributed among four granite outcrops in the Mallee of south-western Australia.

### **Material and methods**

The following codens are used for collections from which we have studied specimens: