Tardigrades of the Australian Antarctic: *Hypsibius heardensis* (Eutardigrada: Hypsibiidae: *dujardini* group) a new species from sub-Antarctic Heard Island

WILLIAM R. MILLER¹, SANDRA J. MCINNES², & DANA M. BERGSTROM³

¹ Dept. of Biology, Baker University, Baldwin City, Kansas 66006 U.S.A., email: William.Miller@BakerU.edu
² British Antarctic Survey, Natural Environment Research Council, Madingley Road, Cambridge CB3 0ET, United Kingdom, email: sjmc@bas.ac.uk
³ Australian Antarctic Division, 203 Channel Highway, Kingston Tasmania 7050, Australia, email: Dana.Bergstrom@aad.gov.au

Abstract

A new species, *Hypsibius heardensis* sp. nov. (Tardigrada: Eutardigrada: Hypsibiidae) is described from samples collected during the Australian National Antarctic Research Expeditions (ANARE) 1986-87 expedition to Heard Island, in the southern Indian Ocean. The new species belongs to the *dujardini* group and differs from similar species of *Hypsibius* by the absence of eyes, large apophyses, near equal macroplacoids, lack of a microplacoid, the presence of a small septulum, and cuticular bars near the base of all claws.

Key words: Tardigrada, *Hypsibius heardensis* sp. nov., Heard Island, Antarctica

Introduction

Heard Island (53° 06' S, 73° 30' E) (Figs 1A, B), is located in the southern Indian Ocean to the south of the Polar Frontal Zone, only 1650 km north of Antarctica, and about midway between Australia (4350 km to the east), and South Africa (4850 km to the west) (Clark et al. 1983). The island is mainly volcanic, built on pelagic limestone of Miocene age (Barling 1990; Clarke et al. 1983), and approximately 40 km long by 20 km wide (an area of 367 km²), with one main peak, Big Ben, rising to 2745 m (Allison & Keage 1986). Though extensively ice covered, between 1985 and 2000/01 there has been a substantial reduction in ice extent, which has reduced from over 80% to approximately 69% of total surface area (Ruddell, per. comm.).

Accepted by C. Beasley: 28 May 2005; published: 25 Jul. 2005