

Tropocyclops sp. INFORMATION SHEET

Classification

Subphylum:	Crustacea
Class:	Maxillopoda
Subclass:	Copepoda
Order:	Cyclopoida
Family:	Cyclopidae
Genus:	<i>Tropocyclops</i>
Specific name:	unknown species
Common name:	cyclopoid copepod

Distinguishing Features

Copepods belonging to the order Cyclopoida have antennae that do not extend beyond the metasome (anterior body section), the (posterior) urosome is narrower than the metasome (Fig. 1), and egg sacs are paired.

The Campbell Island cyclopoid is considered to be a species of *Tropocyclops* based on the following features:

- The 5th leg comprises a single segment roughly as long as wide with three apical setae, one of which is slightly longer and thicker than the others (Fig. 2).
- The outer edges of the furcal (caudal) rami are not serrated as in *Eucyclops*, are about twice as long as wide, and lack transverse rows of small spines, dorsally as in *Paracyclops* (Fig. 3).
- The antennae of the Campbell Island species appear to have 11 or 12 segments; the distal 6 segments are distinct but the more proximal ones are difficult to make out. As *Tropocyclops* species can have 6–12 segments this is probably not a critical factor.
- Body length of 0.8–1.0 mm.

Comments

No copepods have previously been reported from Campbell Island. *Tropocyclops prasinus* occurs in New Zealand and is typically a benthic species (Chapman *et al.* 2011).

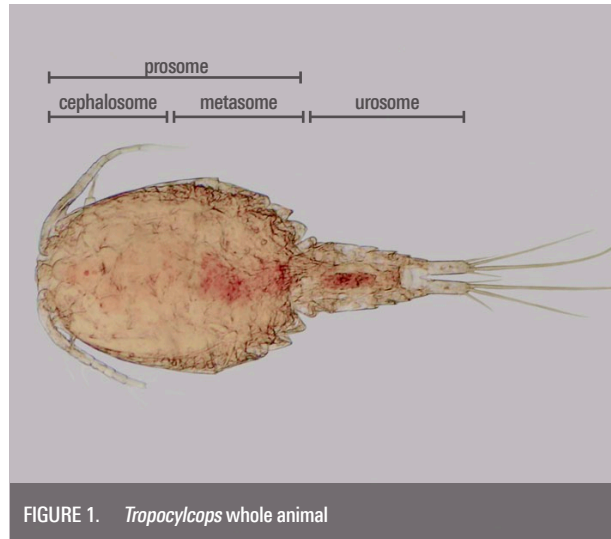


FIGURE 1. *Tropocyclops* whole animal

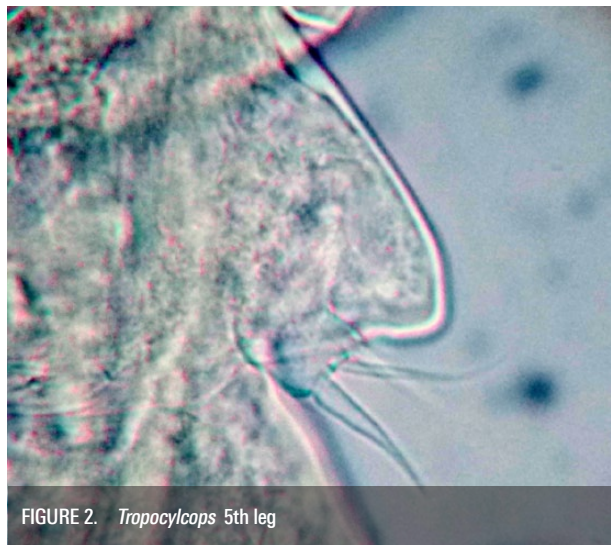


FIGURE 2. *Tropocyclops* 5th leg

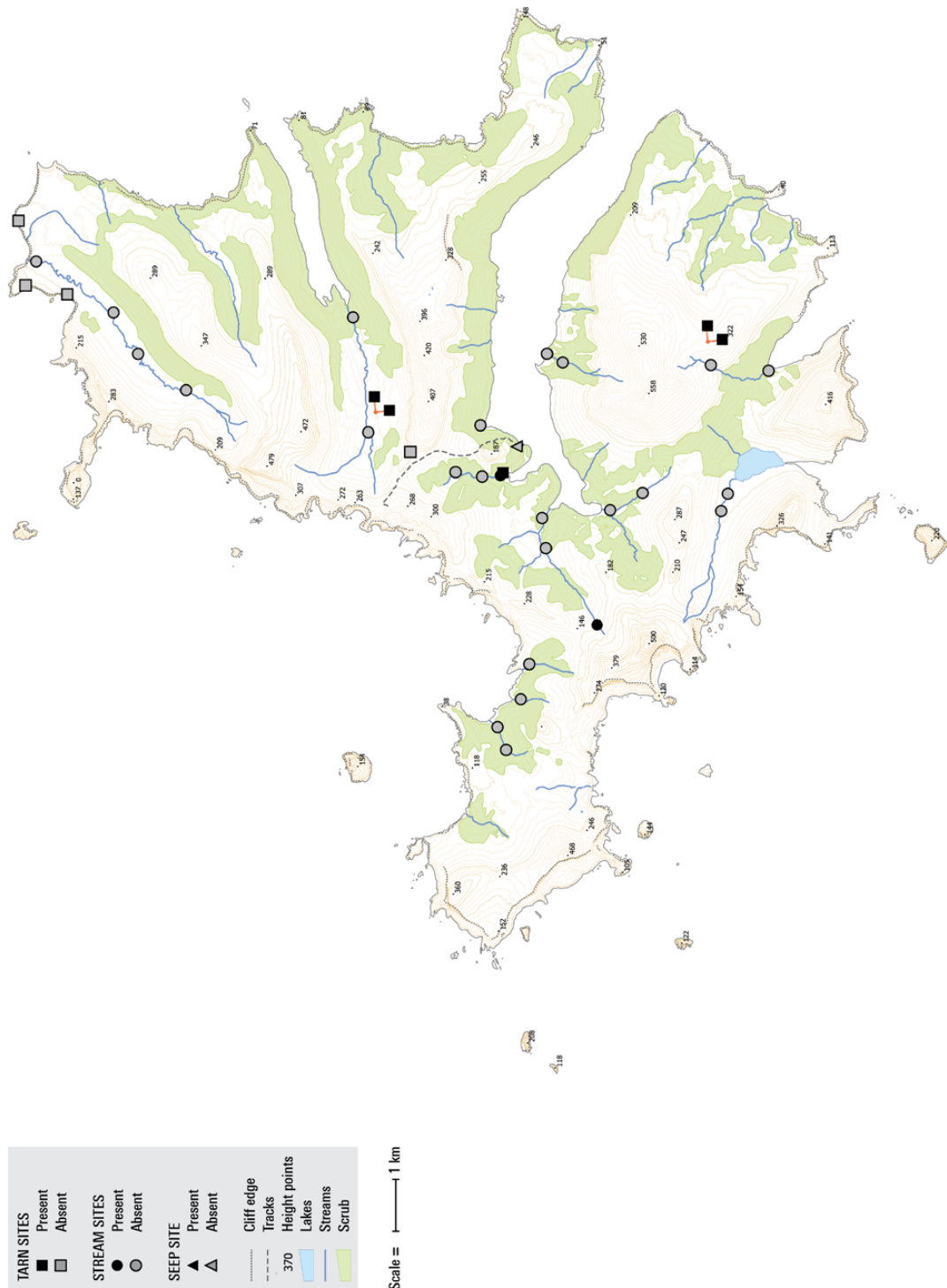


FIGURE 3. *Tropocyclops* rami

Biogeographic Information

Presence/absence on streams, tarns, and a seepage sampled on Campbell Island.

Distribution map based on surveys undertaken by EOS Ecology during the 2010–11 Campbell Island Bicentennial Expedition (www.campbellisland.org.nz). Distribution data © EOS Ecology, 2013.



New Zealand Transverse Mercator
 New Zealand Geodetic 2000
 Created on: 3 December 2013
 Created by: Kirsty Brennan

Tropocyclops sp. Distribution
CAMPBELL ISLAND
 December 2010–February 2011

Produced by: EOS Ecology
 Project name: Campbell Island Bicentennial Expedition
 Project no.: 06033-EOS01
 Project lead: Shelley McMurtrie
www.eosecology.co.nz



Original Description

N/A

References & Further Reading

- Chapman, M.A., Lewis, M.H. & Winterbourn, M.J. 2011. *Guide to the freshwater Crustacea of New Zealand*. New Zealand Freshwater Sciences Society, Christchurch. 188pp
- Morton, D. W. 1990. Revision of the Australian Cyclopidae (Copepoda: Cyclopoida). II. *Eucyclops* Claus and Ectocyclops Brady. *Australian Journal of Marine and Freshwater Research* 41: 657–675.
- Thorp, J. H. & Covich, A. P. (eds) 2001. Ecology and classification of North American freshwater invertebrates. Academic Press, San Diego.

How to Cite this Information Sheet

- McMurtrie, S.A., Sinton, A.M.R., & Winterbourn, M.J. 2014. Lucid Identification Key to Campbell Island Freshwater Invertebrates: *Tropocyclops* sp. information sheet. EOS Ecology, Christchurch, New Zealand.

ACKNOWLEDGEMENTS – The creation of the Lucid Key and information sheets were supported by the TFBIS (Terrestrial and Freshwater Biodiversity Information System) Fund administered by the Department of Conservation (TFBIS Contract No. 278), and by EOS Ecology. Invertebrate specimens were collected by EOS Ecology during the 2010–11 Campbell Island Bicentennial Expedition (CIBE), made possible by the 50° South Trust. Thanks to Maureen Lewis for her assistance and contribution to this information sheet.

