



Family Baetidae

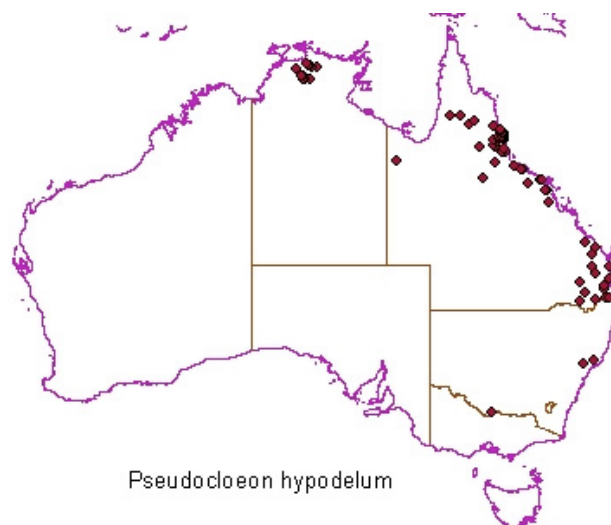
Habitat Profile for *Pseudocloeon hypodelum* Lugo-Ortiz and McCafferty

Pseudocloeon hypodelum Lugo-Ortiz and McCafferty was widespread on the northern and north eastern drainages of the Northern Territory, Queensland and extended in the eastern drainage in New South Wales. One record was of considerable interest from the Murray River which is consistent with rare findings of this species in the Murray River catchment streams in Victoria only during drought years. *P. hypodelum* was recorded from 95 samples during this study. (Lugo-Ortiz *et al.* 1999) described *P. hypodelum* and this species is consistent with Genus 3 sp 4 (Suter 1997). This distribution is consistent with that recorded by Suter (1997) and Suter *et al.* (2002) although there were many more locations in this study, and there was considerable extension of the southern range.

Pseudocloeon hypodelum was generally recorded in edge and kick habitat samples from lowland streams generally below 200 m altitude (Chart a), < 80 km from the source (Chart b), with predominantly cobbles and sand substrate with >10% detritus cover (Chart c). The streams were between 1-100 m wide (Chart d) and less than 0.7m deep (Chart e), with low to moderate alkalinity between 4.3-475 mg/L (Chart f) and low to high conductivity generally below 300µS/cm but as high as 1450µS/cm (Chart g).

The following generalities can be made about the other parameters listed in the Table: recorded water temperature between 14-35.7 °C, pH circum-neutral, mostly in range of 5.6-9.2, and low turbidity 0.5-55 NTU.

Mean, median and range for selected physical and chemical parameters and habitat categories are given in the Table.



Pseudocloeon hypodelum

Distribution of *Pseudocloeon hypodelum* in Australia.

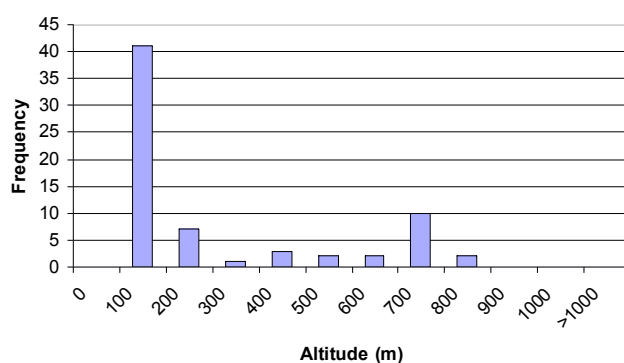


Pseudocloeon hypodelum, nymph and typical habitat

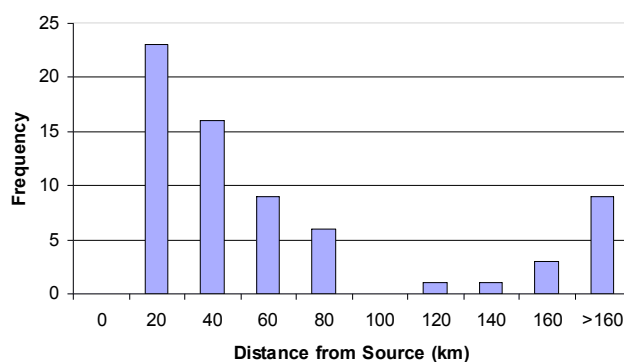


Charts for *Pseudocloeon hypodelum*

a) Altitude

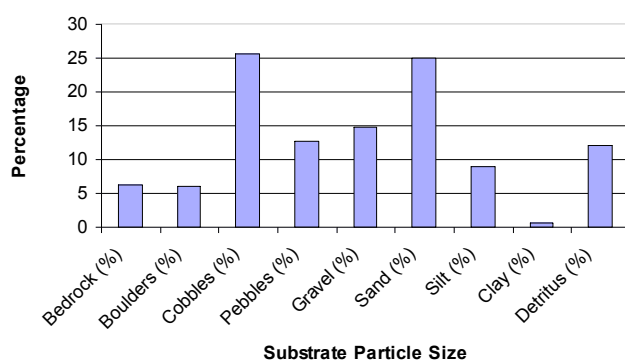


b) Distance from source

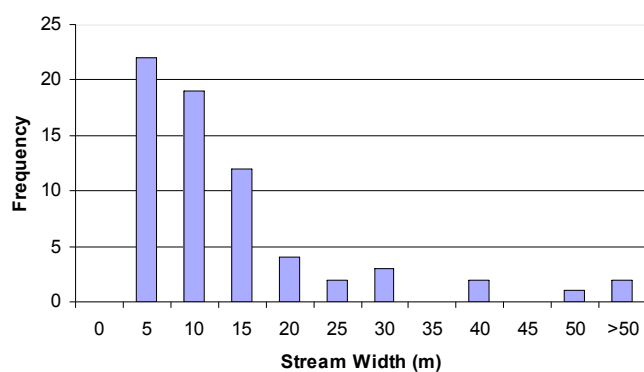




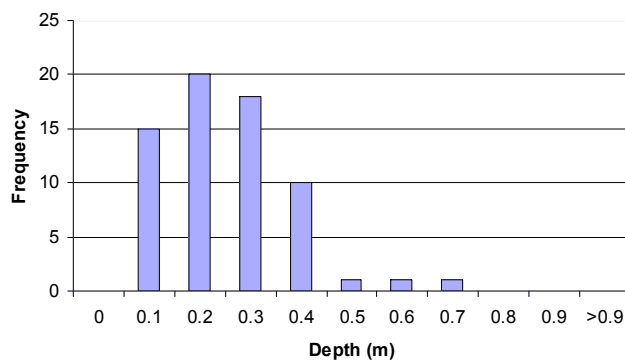
c) Substrate Particle Size



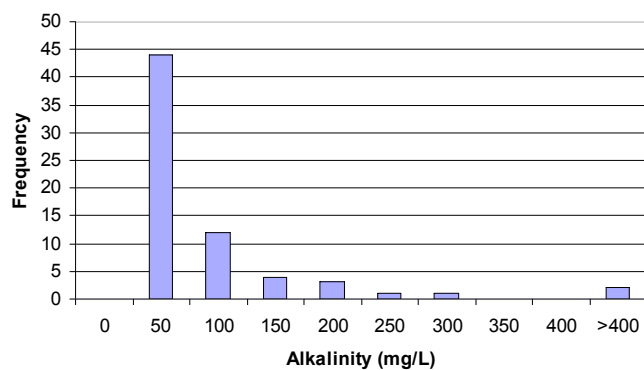
d) Stream Width



e) Depth



f) Alkalinity





g) Conductivity

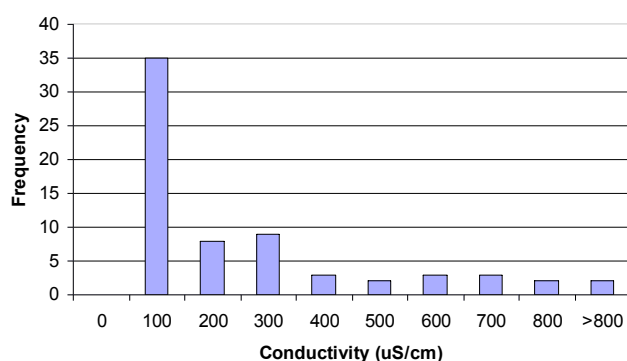


Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *P. hypodelum* (N= number of records).

	Mean	Median	Range	N
Altitude (m)	202	75	2-780	68
Distance from source (km)	79	30	2.4-565	68
Stream width (m)	13.4	8	1-100	67
Stream Depth (m)	0.24	0.20	0.03-0.70	66
Water temperature (°C)	24.2	23.8	14-35.7	677
Conductivity (µS/cm)	224	93	28-1450	67
pH	7.4	7.3	5.6-9.2	67
Turbidity (NTU)	6.3	2.1	0.5-55	67
NO ₃ -N (mg/L)				
Total N (mg/L)	0.461	0.310	0.001-3.60	67
Total P (mg/L)	0.046	0.017	0.003-1.600	67
Alkalinity (mg/L)	64.5	24.0	4.3-475	67

References

Lugo-Ortiz CR, McCafferty WP, Waltz RD (1999) Definition and Reorganization of the Genus *Pseudocloeon* (Ephemeroptera: Baetidae) with New Species Descriptions and Combinations. *Transactions of the American Entomological Society* **125**, 1-37.

Suter PJ (1997) 'Preliminary Guide to the identification of nymphs of Australian Baetid Mayflies (Insecta : Ephemeroptera) found in flowing waters. Identification Guide No. 14.' (Co-operative Research Centre for Freshwater Ecology: Albury)

Suter PJ, Conrick D, Cockayne B, Choy S (2002) 'Habitat profiles of Queensland mayflies, families Baetidae, Caenidae and Prosopistomatidae.' (Cooperative Research Centre for Freshwater Ecology: Albury)