



FAMILY PROSOPISTOMATIDAE

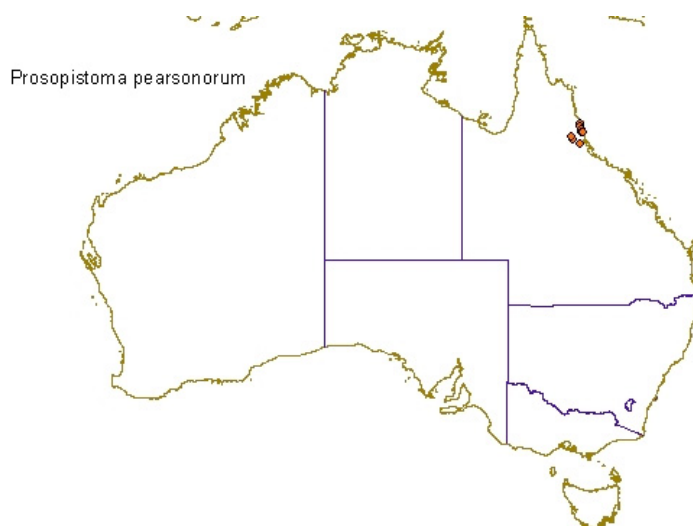
Habitat Profile for *Prosopistoma pearsonorum* Campbell & Hubbard

Prosopistoma pearsonorum was recorded from 11 localities. Previous studies (Campbell and Hubbard 1998) and (Peters and Campbell 1991) recorded this species from large rivers or small streams with rubble or boulder substrate.

In this study, *P. pearsonorum* was recorded from fifth order streams at low altitude (<600m) (Chart a) and ranging from 18-240km from the source (Chart b) and with a cobble-gravel substrate with approximately 15% detrital cover (Chart c). The streams were generally less than 40m wide (Chart d) and *P. pearsonorum* was found in riffles in water less than 0.3m deep (Chart e) with flows usually below 1m/sec. The streams were generally near neutral, with very low turbidity, alkalinity (Chart f) and conductivity (Chart g). The streams flow through natural land with minimal development and the riparian zone was mainly shrubs with no canopy cover. The upstream catchment was moderately developed (25-49%) but with only minor extractions and regulation.

The following generalities can be made about the other parameters listed in the Table: recorded water temperature between 23.4-29.4 °C, pH mostly in range of 7-8 and low turbidity of <4 NTU.

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



Distribution of *Prosopistoma pearsonorum* in Australia.

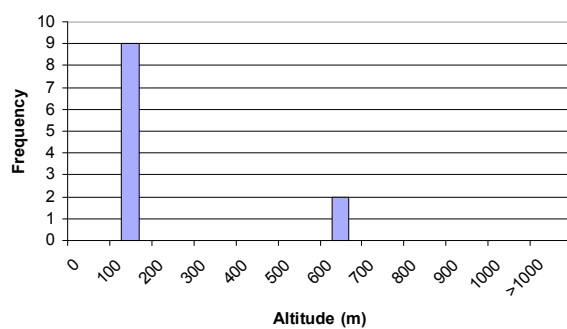


Prosopistoma pearsonorum, nymph and typical habitat

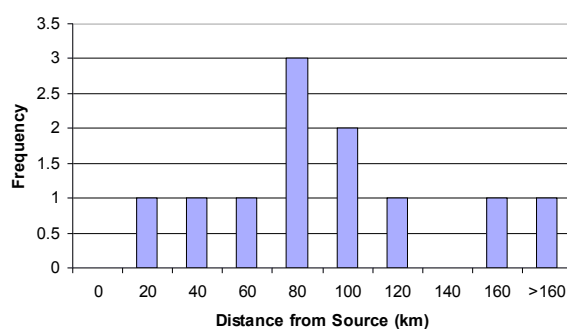


Charts for *Prosopistoma pearsonorum*

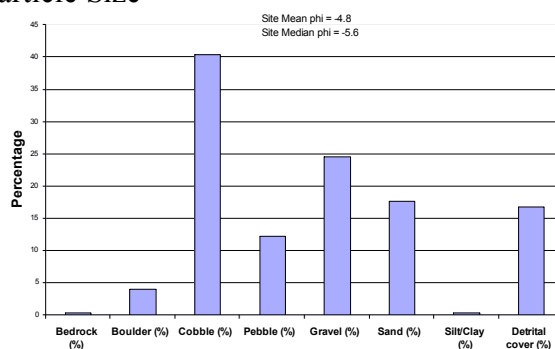
a) Altitude



b) Distance from source

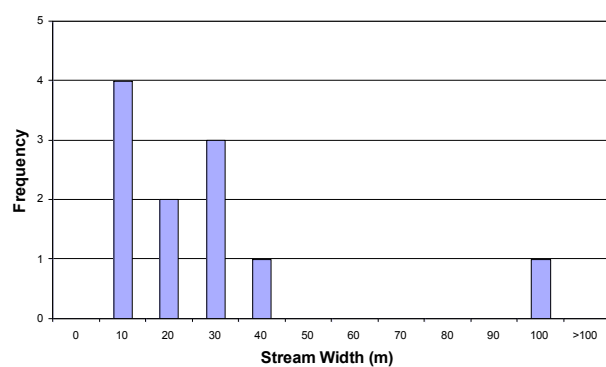


c) Substrate Particle Size

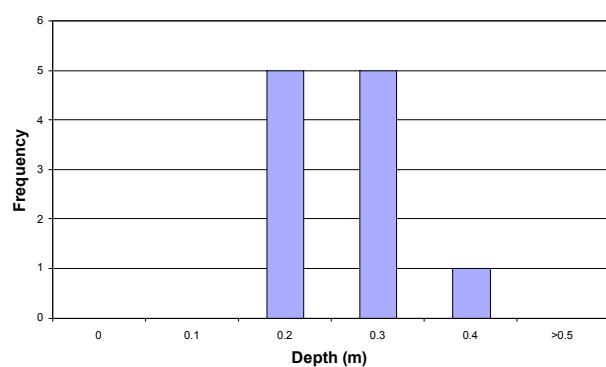




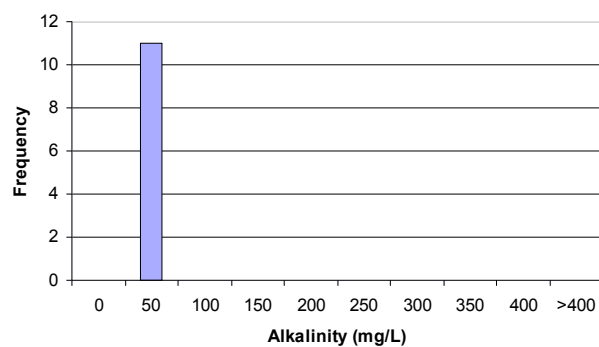
d) Stream Width



e) Depth



f) Alkalinity



g) Conductivity

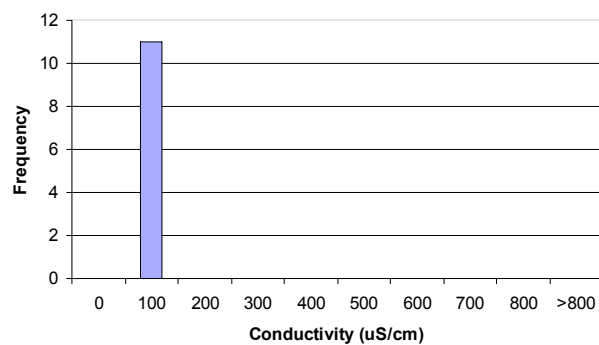




Table. Mean and median physical and chemical parameters and habitat categories for *Prosopistoma pearsonorum*.

	Mean	Median	Range	n
Altitude (m)	125	35	5-580	11
Distance from source (km)	89.5	72.2	18.4-238	11
Stream Width (m)	26.3	20	7-95	11
Stream Depth (m)	0.23	0.25	0.15-0.4	11
Water Temperature (°C)	25.6	24.8	23.4-29.4	11
Conductivity (µS/cm)	58.9	61	37-80	11
pH	7.4	7.3	7-8	11
Turbidity (NTU)	0.95	0.5	0.5-4	11
Nitrate NO ₃ -N (mg/L)				
Total N (mg/L)	0.280	0.210	0.16-0.51	11
Total P (mg/L)	0.015	0.013	0.006-0.028	11
Alkalinity (mg/L)	19.9	19.5	7.7-26.5	11

References

Campbell IC, Hubbard MD (1998) A New Species of *Prosopistoma* (Ephemeroptera, Prosopistomatidae) from Australia. *Aquatic Insects* **20**, 141-148.

Peters WL, Campbell IC (1991) Ephemeroptera. In 'The Insects of Australia'. (Ed. CSIRO) pp. 279-293. (Melbourne University Press: Carlton)