



Family Gripopterygidae

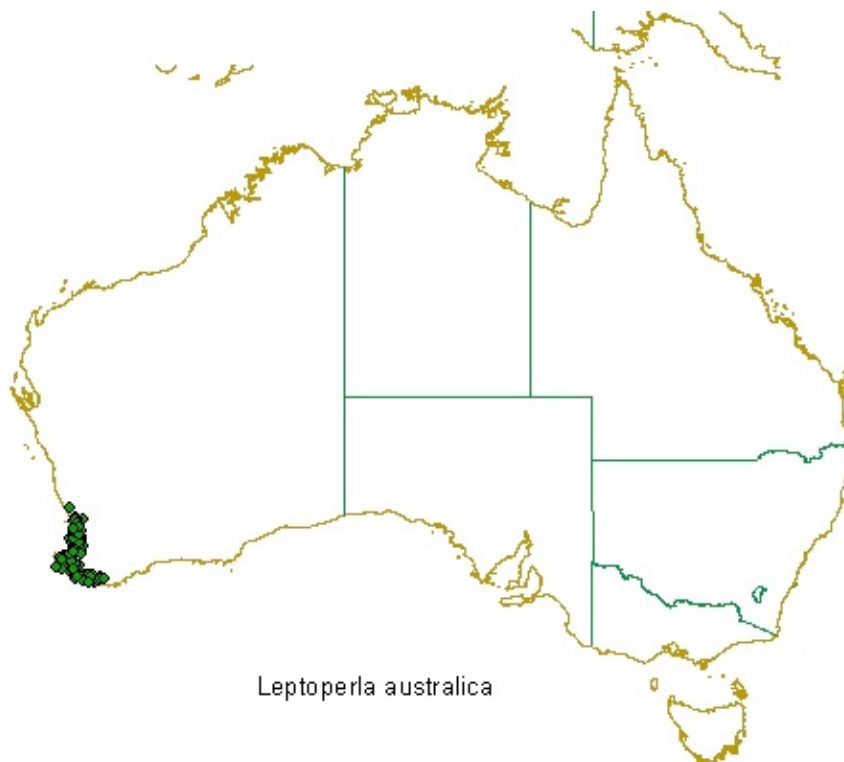
Habitat Profile for *Leptoperla australica* (Enderlein)

Leptoperla australica is an endemic stonefly species from Western Australia and was recorded from 163 samples in the south-west of Western Australia. Hynes and Bunn (1984) recorded this species in small streams in the Darling Range, WA.

L. australica was recorded from low altitude streams below 300m (Chart a) and usually within 20km of the stream source (Chart b) and with substrate dominated by sand and over 20% detrital cover (Chart c). The streams were generally less than 10m wide (Chart d) and pH varied from acidic to alkaline, alkalinity was low (<100mg/L) (Chart e) and conductivity was highly variable, but the majority of records were between 200-400 μ S/cm (Chart f).

The following generalities can be made about the other parameters listed in Table 1: relatively low temperature (7.1-18.3 °C), pH was in range of 4.3-9.2 and low turbidity (<40 NTU).

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

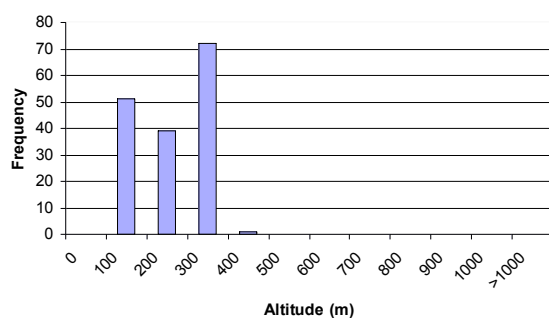


Distribution of *Leptoperla australica* in Australia.

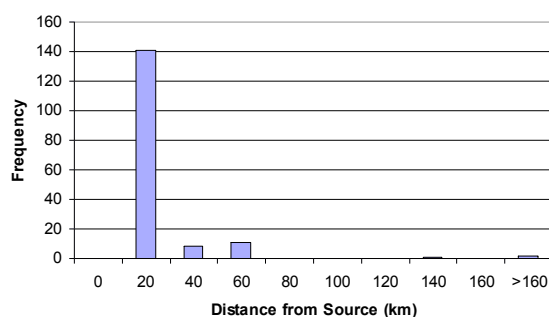


Charts for *Leptoperla australica*

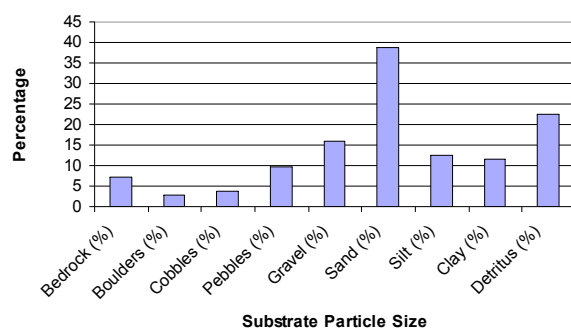
a) Altitude



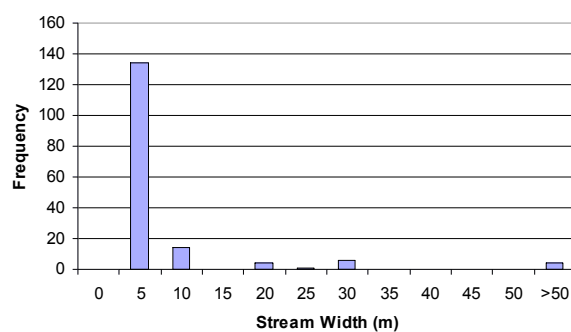
b) Distance from source



c) Substrate Particle Size

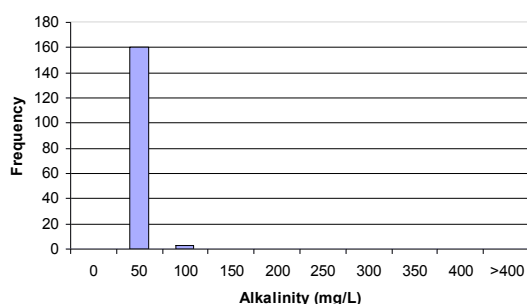


d) Stream Width





e) Alkalinity



f) Conductivity

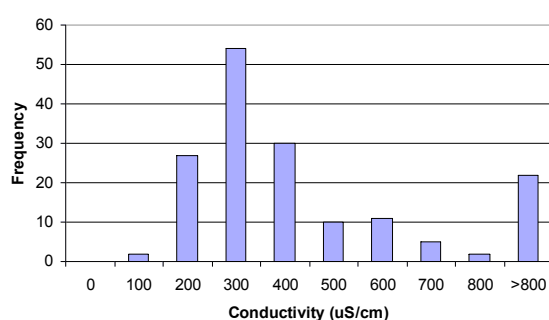


Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *Leptoperla australica* (N= number of records).

	Mean	Median	Range	N
Altitude (m)	163	145	6-320	163
Distance from source (km)	14.8	7	2-204	163
Width (m)	6.6	2.7	1-200	162
Depth (m)				
Water Temperature (°C)	12.2	12.3	7.1-18.3	162
Conductivity (uS/cm)	592	298	100-7200	162
pH	6.5	6.6	4.3-9.2	162
Turbidity (NTU)	2.3	1.3	0.1-40	162
NO ₃ -N (mg/L)	0.089	0.03	0.01-1.0	162
Total N (mg/L)	0.437	0.27	0.07-2.8	162
Total P (mg/L)	0.02	0.005	0.005-0.077	162
Alkalinity (mg/L)	14.9	11	1-70	162

References

Hynes HBN, Bunn SE (1984) The stoneflies (Plecoptera) of Western Australia. *Australian Journal of Zoology* **32**, 97-107.