



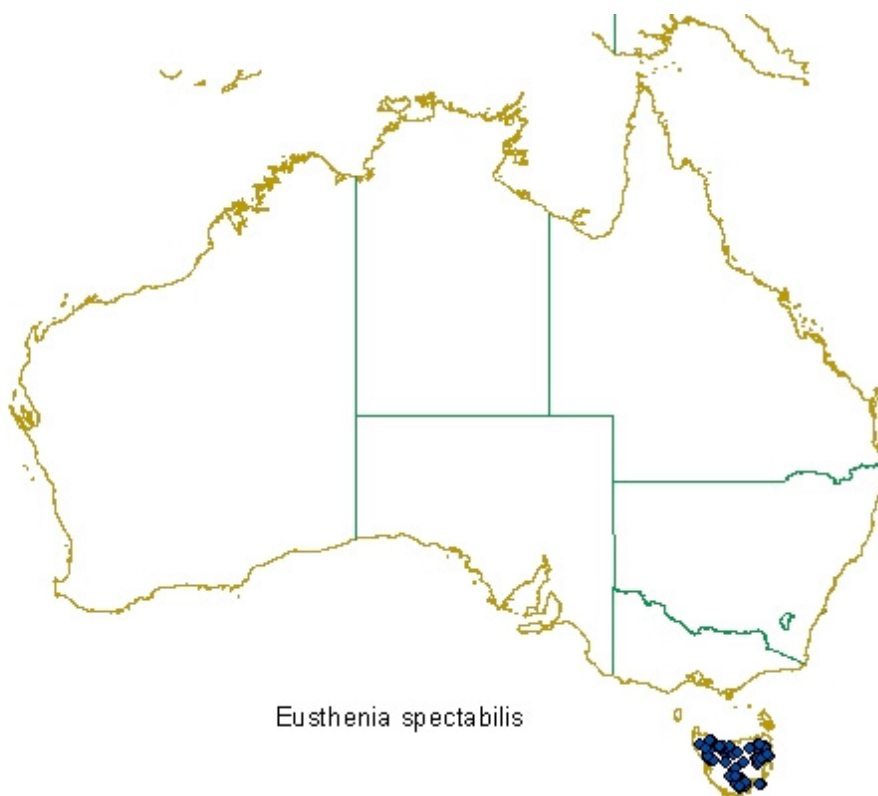
Family Eustheniidae

Habitat Profile for *Eusthenia spectabilis* Gray

Eusthenia spectabilis Gray is an endemic stonefly from Tasmania. Hynes (1989) noted that this species was “widespread in swift streams and rivers at all altitudes, and on the stony shores of lakes...”. In this study *E. spectabilis* was recorded from 60 samples throughout Tasmania.

E. spectabilis was recorded from streams principally at altitudes between 100 and 400m above sea level (Chart a) and generally close to the stream source (usually <20km) (Chart b) and the substrate was dominated by cobbles, pebbles and gravel with 20% sand and no detrital cover (Chart c). Streams were generally between 5-30m wide (Chart d) with low conductivity <200 μ S/cm (Chart e).

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



Distribution of *Eusthenia spectabilis* in Australia.

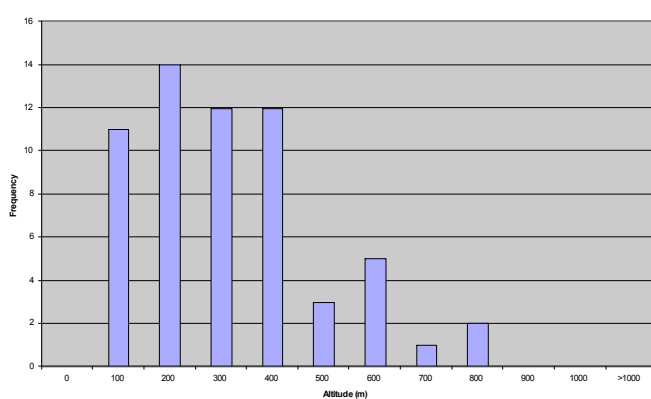


Eusthenia spectabilis, nymph and typical habitat

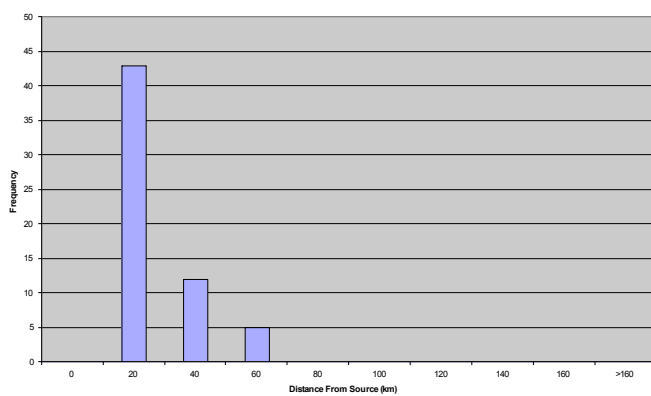


Charts for *Eusthenia spectabilis*

a) Altitude

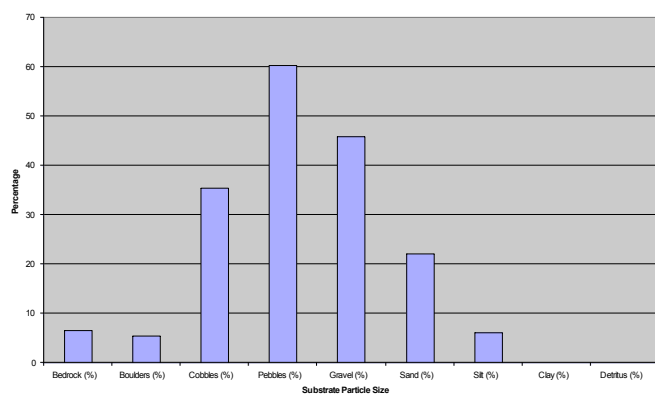


b) Distance from source

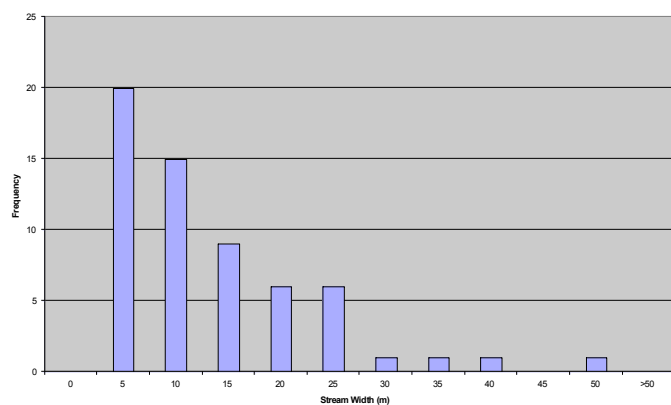




c) Substrate Particle Size



d) Stream Width



e) Conductivity

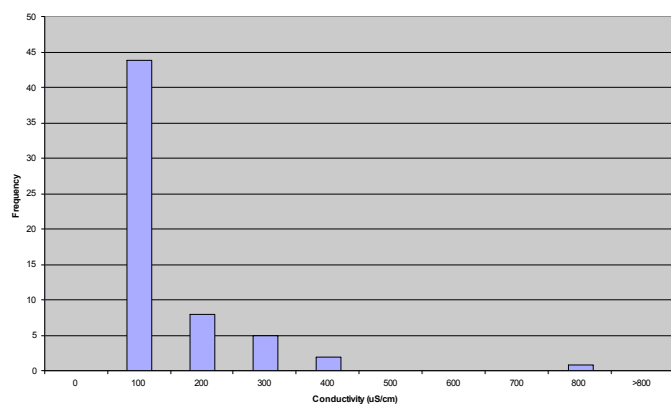




Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *Eusthenia spectabilis* (N= number of records).

	Mean	Median	Range	N
Altitude (m)	267.3	230	10-750	60
Distance from source (km)	15.8	10.3	1-54	60
Width (m)	11.6	9.0	1.2-48.3	60
Depth (m)				
Water Temperature (°C)				
Conductivity (µS/cm)	107	68.2	17.5-766	60
pH				
Turbidity (NTU)				
NO3-N (mg/L)				
Total N (mg/L)				
Total P (mg/L)				
Alkalinity (mg/L)				

References

Hynes HBN (1989) 'Tasmanian Plecoptera.' (Australian Society for Limnology)