



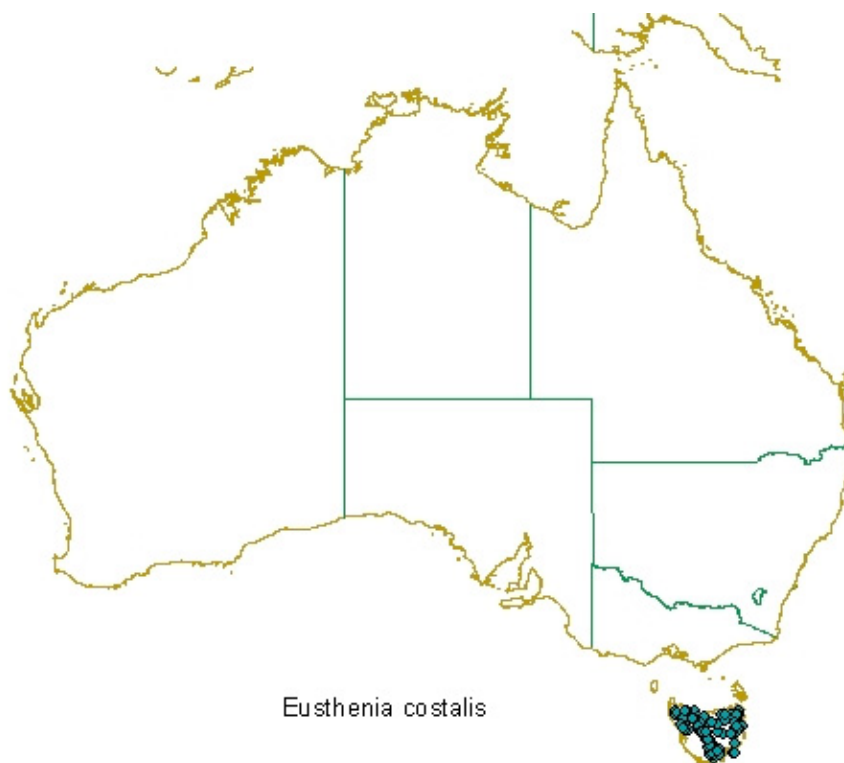
Family Eustheniidae

Habitat Profile for *Eusthenia costalis* Banks

Eusthenia costalis Banks is an endemic stonefly from Tasmania. Hynes (1989) noted that *E. costalis* was “widespread in swift streams and rivers at all altitudes”. It was recorded from 106 samples throughout Tasmania in this study.

E. costalis 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 no detrital cover (Chart c). Streams were generally <30m wide (Chart d), and conductivity was low between 17 μ S/cm and 77 μ S/cm (Chart e).

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



Eusthenia costalis

Distribution of *Eusthenis costalis* in Australia.

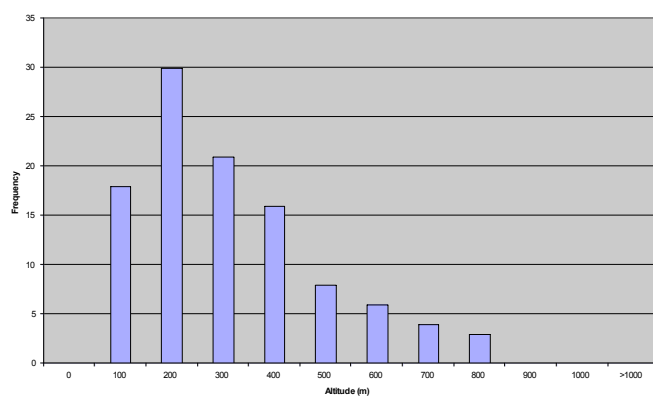


Eusthenia costalis, nymph and typical habitat

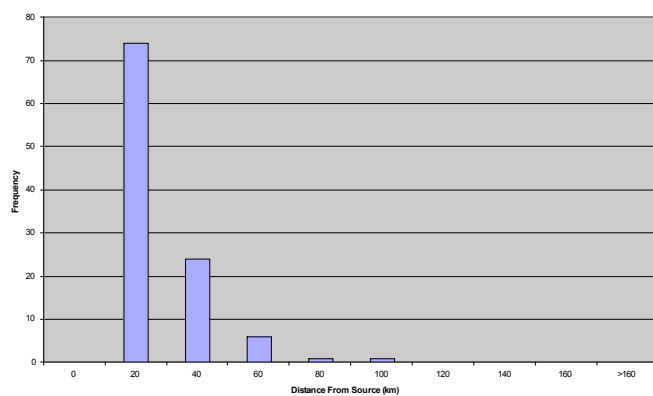


Charts for *Eusthenia costalis*

a) Altitude

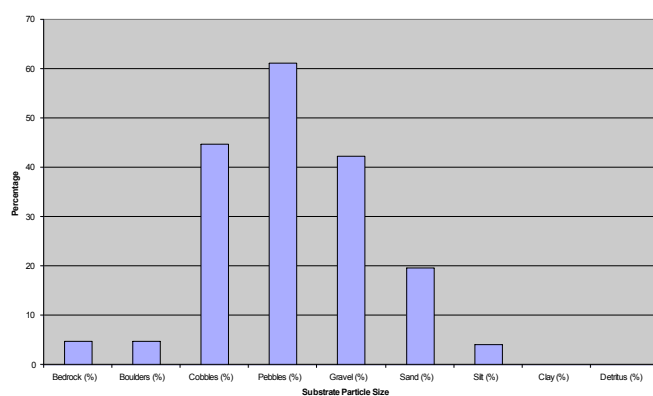


b) Distance from source

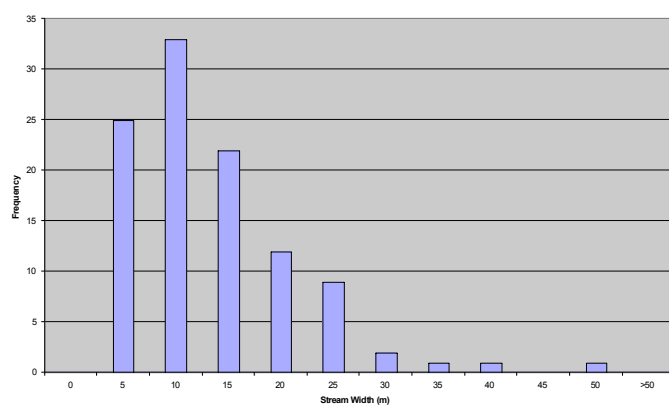




c) Substrate Particle Size



d) Stream Width



e) Conductivity

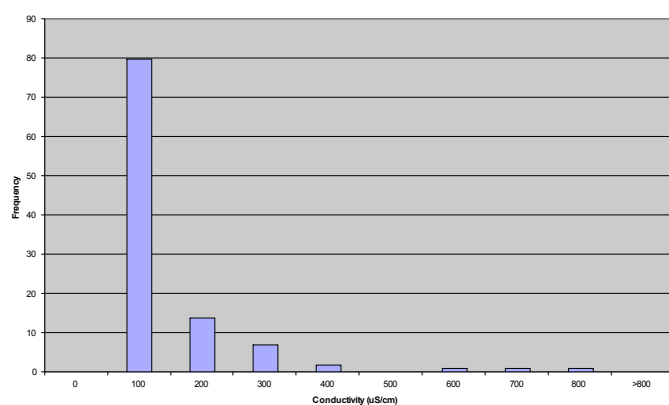




Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *Eusthenia costalis* (N= number of records).

	Mean	Median	Range	N
Altitude (m)	263	223	10-750	106
Distance from source (km)	17.2	12	3.2-89	106
Width (m)	11.5	9.7	1.3-48.3	106
Depth (m)				
Water Temperature (°C)				
Conductivity (µS/cm)	99.3	63.7	17.5-766	106
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)