



Family Telephlebiidae

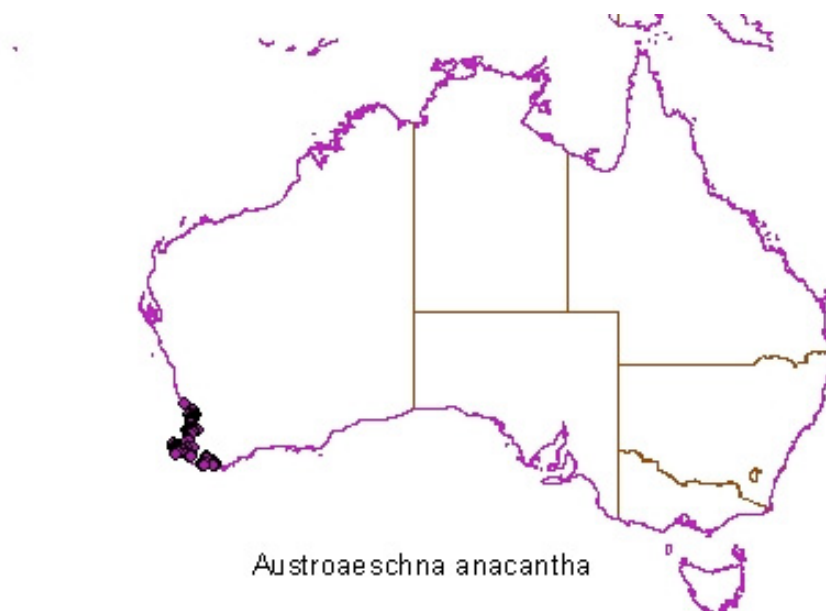
Habitat Profile for *Austroaeschna anacantha* Tillyard

Austroaeschna anacantha Tillyard is an endemic species from the south west coastal region of Western Australia (Sutcliffe 2003; Theischinger 2002; Trayler *et al.* 1996). This species was common in samples being recorded from 140 locations from Perth to Albany in areas with >800mm of rainfall (Sutcliffe 2003).

A. anacantha was found in channels, macrophytes and riffles. The rivers were at low altitude (<300m) (Chart a) and generally close to the stream source (Chart b), although some larvae were collected over 50km from the source. The substrate was dominated by sand with >20% detrital cover (Chart c). Stream width was variable from less than 1 m to over 80m (Chart d). The alkalinity was moderate (Chart e) and the conductivity was very high ranging from 146 to 7560 $\mu\text{S}/\text{cm}$ (Chart f).

The following generalities can be made about the other parameters listed in the Table: relatively low temperature (7.9-25 °C), pH was in range of 4.9-8.1 and moderate turbidity (<66 NTU).

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



Distribution of *Austroaeschna anacantha* in Australia

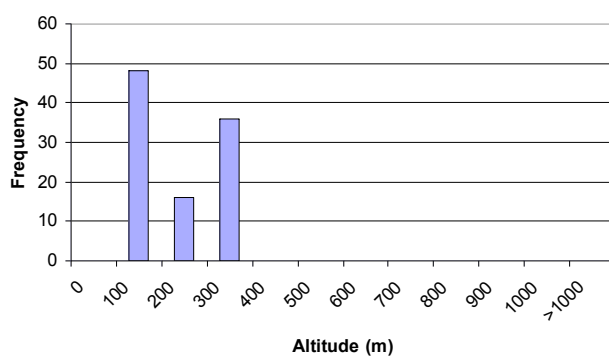


Austroaeschna anacantha, nymph

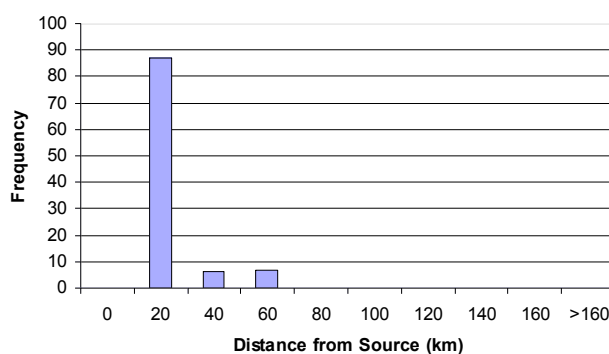


Charts for *Austroaeschna anacantha*

a) Altitude

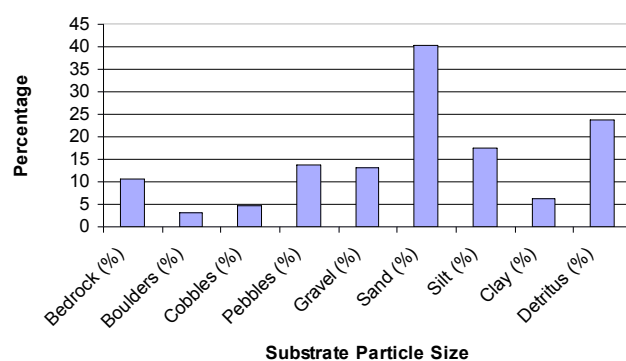


b) Distance from source

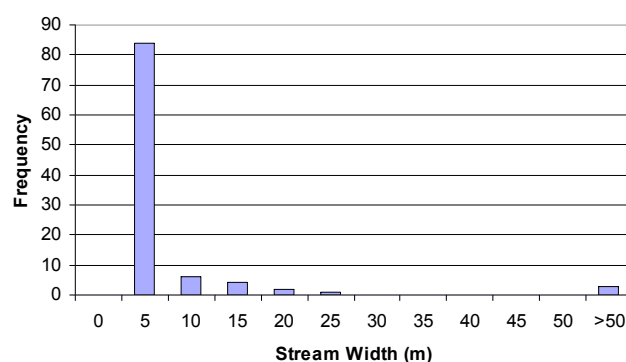




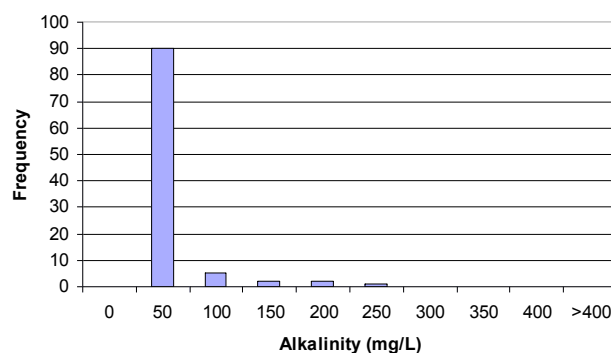
c) Substrate Particle Size



d) Stream Width



e) Alkalinity



f) Conductivity

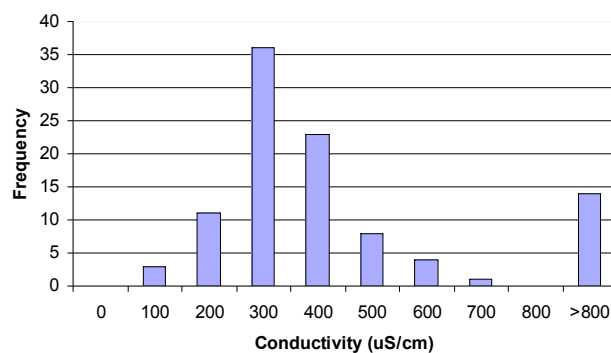




Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *Austroaeschna anacantha* (N= number of records).

	Mean	Median	Range	N
Altitude (m)	133	132	7-300	100
Distance from source (km)	11.5	6.0	0.25-59	100
Width (m)	6.2	2.5	0.77-86	100
Depth (m)				
Water Temperature	15.3	14.6	7.9-25	97
Conductivity (µS/cm)	696	295	146-7560	100
pH	6.8	6.8	4.9-8.1	97
Turbidity (NTU)	4.3	2.0	0.2-66	99
Oxidised Nitrogen (mg/L)	0.114	0.030	0-0.01-0.85	98
Total N (mg/L)	0.398	0.410	0.02-1.300	97
Total P (mg/L)	0.017	0.010	0.05-0.260	100
Alkalinity (mg/L)	26.5	15	3-240	100

References

Sutcliffe K (2003) The conservation status of aquatic insects in south-western Australia. Doctor of Philosophy thesis, Murdoch University.

Theischinger G (2002) 'Preliminary keys for the identification of larvae of the Australian Petaluridae, Archipetaliidae, Austropetaliidae, Telephlebiidae and Aeschnidae (Odonata).' (Cooperative Research Centre for Freshwater Ecology: Albury)

Trayler KM, Davis JA, Horwitz P, D. M (1996) Aquatic fauna of the Warren bioregion, south-west Western Australia: Does reservation guarantee preservation? *Journal of the Royal Society of Western Australia* **79**, 281-291.