



Family Gomphidae

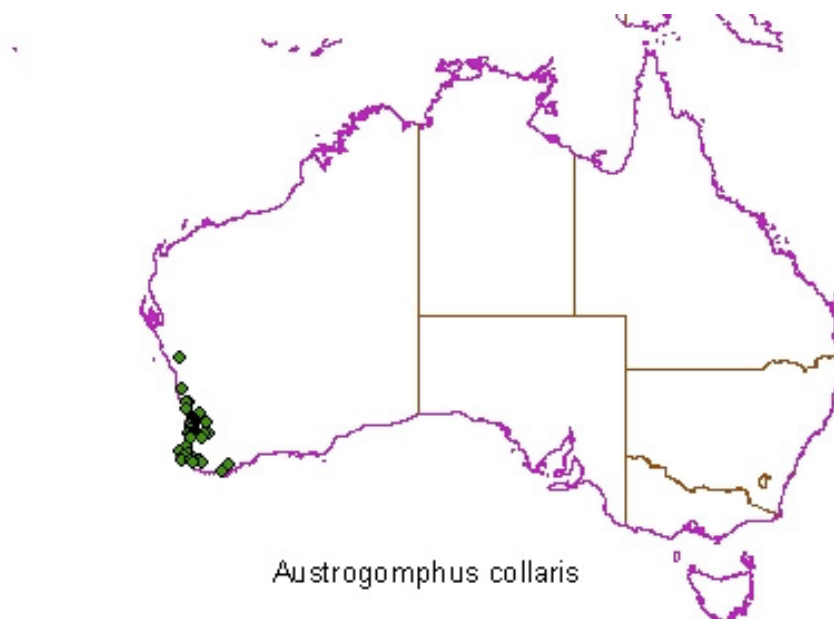
Habitat Profile for *Austrogomphus collaris* Hagen

Armogomphus collaris Hagen is an endemic species of dragonfly from Western Australia (Houston and Watson 1988; Sutcliffe 2003; Theischinger 2000). They were recorded from 56 samples from south-western Western Australia in this study.

Armogomphus collaris was generally found channel and macrophyte samples in lowland streams at altitudes of <300m (Chart a), but <120km from the stream source (Chart b) with substrate dominated by sand and silt with >25% detrital cover (Chart c). The streams were generally <20m wide (Chart d) with low to medium alkalinity generally <200mg/L (Chart e) with high conductivity generally >800 $\mu\text{S}/\text{cm}$ (Chart f).

The following generalities can be made about the other parameters listed in the Table: water temperature between 10.1-26.3 °C, pH was in range of 5.6-8.7 and low to moderate turbidity (0.5-89 NTU).

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

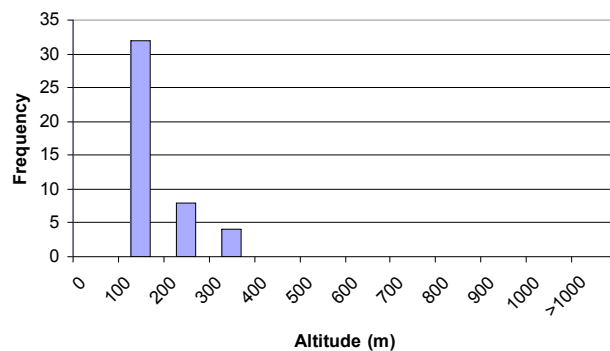


Distribution of *Austrogomphus collaris* in Australia.

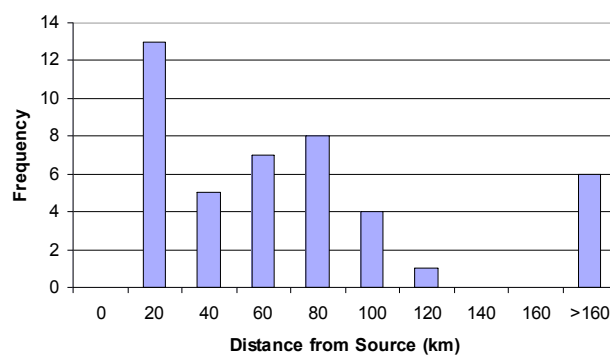


Charts for *Austrogomphus collaris*

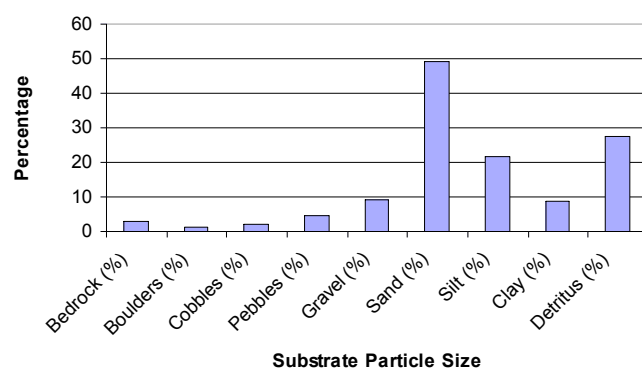
a) Altitude



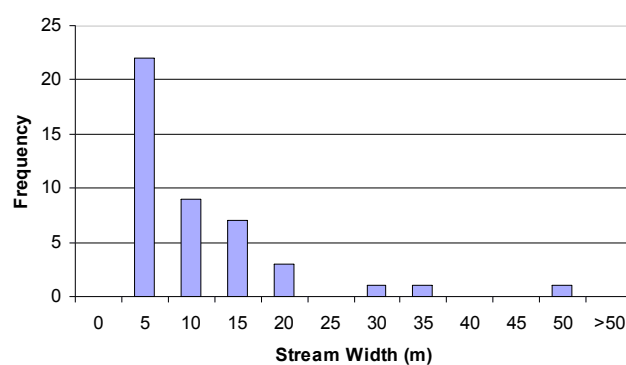
b) Distance from source



c) Substrate Particle Size

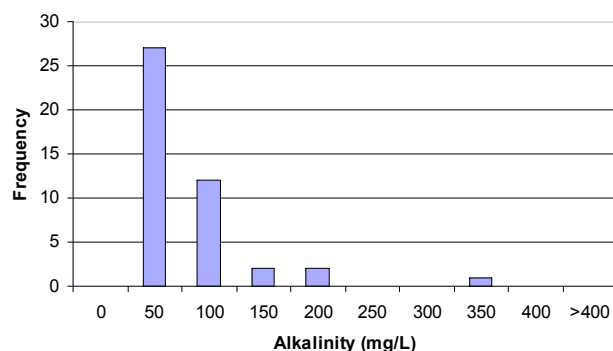


d) Stream Width





e) Alkalinity



f) Conductivity

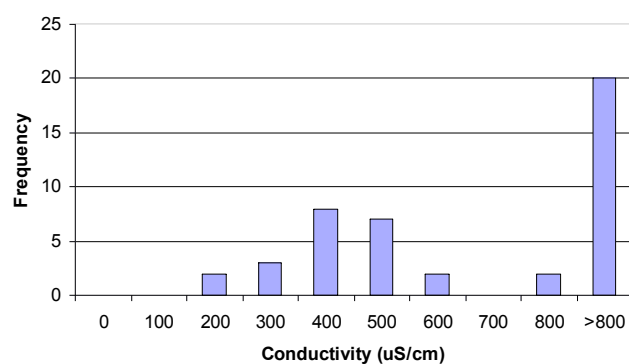


Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *Austrogomphus collaris* (N= number of records).

	Mean	Median	Range	N
Altitude (m)	72.3	50	7-238	44
Distance from source (km)	69.3	50	9-261	44
Width (m)	8.9	5.0	1-50	44
Depth (m)				
Water temperature (°C)	17.3	16.1	10.1-26.3	44
Conductivity (µS/cm)	2656	654	164-18350	44
pH	7.1	7.2	5.6-8.7	44
Turbidity (NTU)	7.1	4.0	0.5-89	44
Oxidised Nitrogen (mg/L)	0.162	0.035	0.010-1.210	44
Total N (mg/L)	0.747	0.660	0.050-2.40	44
Total P (mg/L)	0.037	0.015	0.005-0.230	44
Alkalinity (mg/L)	55.3	38.0	5-310	44



References

Houston WWK, Watson JAL (1988) Odonata. In 'Zoological Catalogue of Australia'. (Eds DW Walton and WWK Houston) pp. 33-132. (Australian Government Publishing Service: Canberra)

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

Theischinger G (2000) 'Preliminary key for the identification of larvae of the Australian Gomphidae.' (Cooperative Research Centre for Freshwater Ecology: Albury)