



## Family Leptophlebiidae

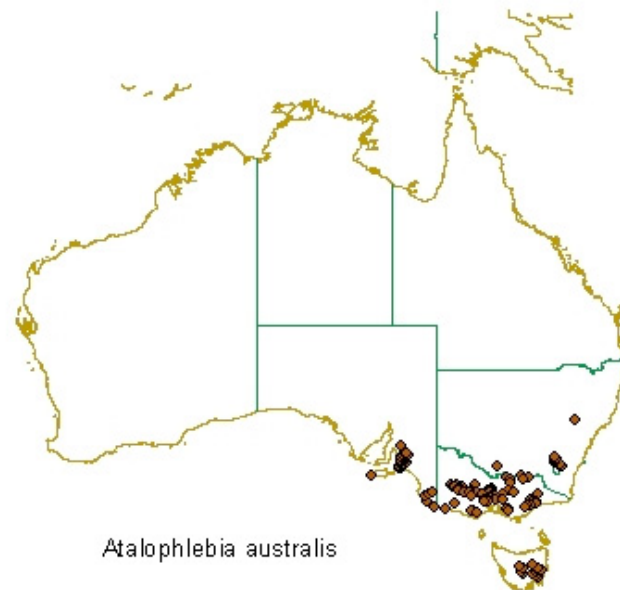
### Habitat Profile for *Atalophlebia australis* (Walker)

*Atalophlebia australis* was recorded from 160 South Australian, Tasmanian, Victorian, New South Wales and ACT localities in this study. A previous study (Tillyard 1933), provides some habitat information – “The nymphs are found under logs, rocks, or stones submerged in the water, either along the edge of the river or close to the shore of the lake”. He recorded the species from the Macquarie River and Lake Leake in Tasmania, and there are records from both rivers and lakes in Victoria (Dean, pers. obs). In South Australia *A. australis* was recorded down the Fleurieu Peninsula and onto Kangaroo Island. Suter (1986) did not record this species south of the Sturt River catchment suggesting this species has extended its distribution in South Australia.

In this study, *A. australis* was generally recorded in sweep and edge habitat samples from streams <540 m altitude (Chart a), < 216 km from the source (Chart b), with a spread of medium substrates from silt to cobble and with low to moderate detritus cover (Chart c). Streams were <45 m wide (Chart d), with mean water depth between 0.1-0.3 m (Chart e), alkalinity between 10-538 mg/L (Chart f) and medium to very high conductivity ranging from 55-4365 µS/cm (Chart g).

The following generalities can be made about the other parameters listed in the Table: recorded water temperature between 8.5-23.5 °C, pH mostly in range of 6.4-8.4 and medium turbidity of <135 NTU.

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



Distribution of *Atalophlebia australis* in Australia.

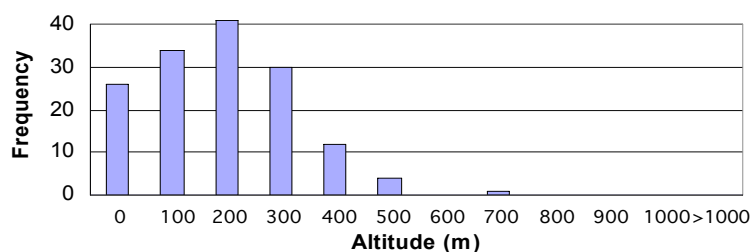


*Atalophlebia australis*, nymph and typical habitat

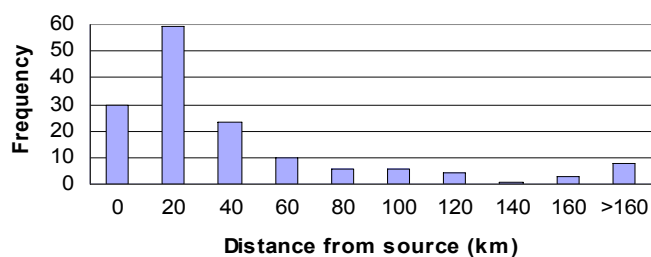


Charts for *Atalophlebia australis*

a) Altitude

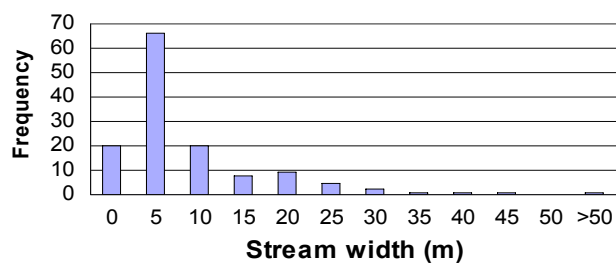


b) Distance from source

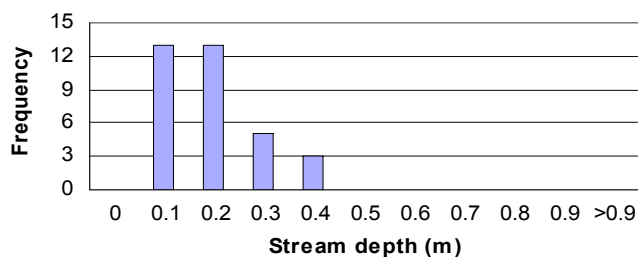




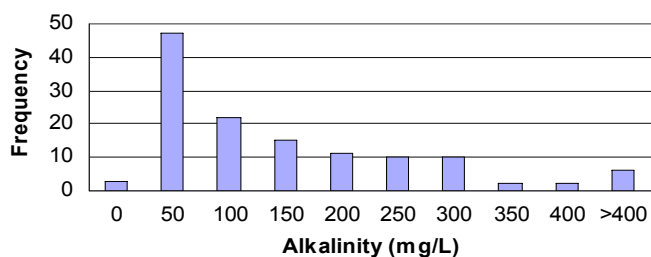
d) Stream Width



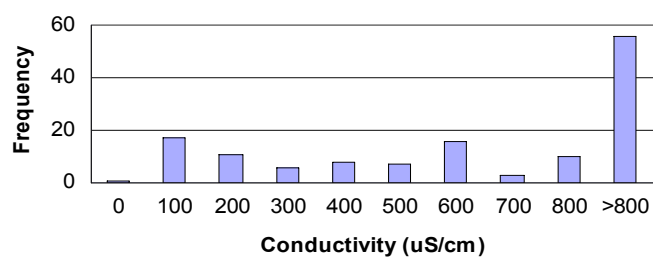
e) Depth



f) Alkalinity



g) Conductivity





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

	Mean	Median	Range	N
Altitude (m)	194	175	5-675	150
Distance from source (km)	63	25	2-1250	150
Stream width (m)	8.9	5.7	0.8-100	136
Stream depth (m)	0.11	0.15	0.01-0.40	64
Water temperature	16.1	16.1	8.1-25.8	131
Conductivity ( $\mu$ S/cm)	1738	712	31-44800	137
pH	7.6	7.5	6.2-9.3	131
Turbidity (NTU)	17.9	7.4	0-420	130
NO <sub>3</sub> -N (mg/L)	0.23	0.02	0-3.8	116
Total N (mg/L)	0.87	0.66	0-2.87	49
Total P (mg/L)	0.20	0.03	0.002-8.9	131
Alkalinity (mg/L)	149	100	10-673	130

#### References

Suter PJ (1986) The Ephemeroptera (Mayflies) of South Australia. *Records of the South Australian Museum* **19**, 339-397.

Tillyard RJ (1933) The mayflies of the Mount Kosciusko region. I. (Plectoptera.) Introduction and Family Siphonuridae. *Proceedings of the Linnaean Society of New South Wales* **58**, 1-32.