



Family Oniscigastridae

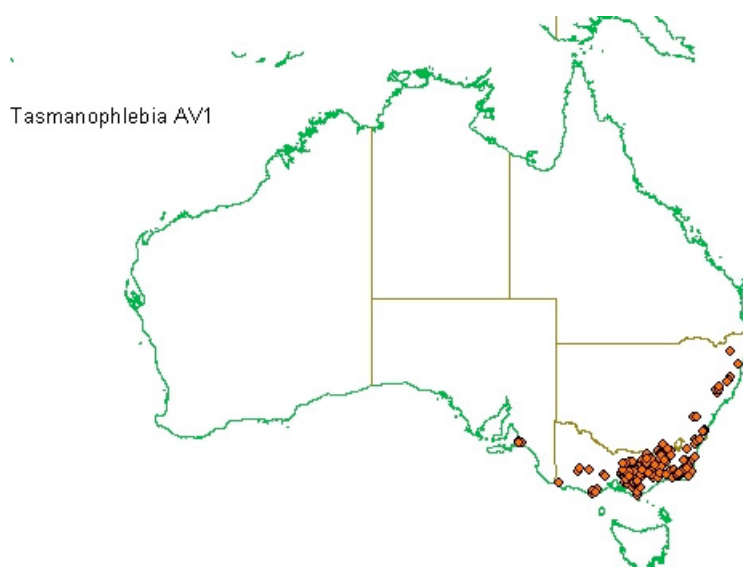
Habitat Profile for *Tasmanophlebia* AV1

Tasmanophlebia AV1 resembles *Tasmanophlebia lacus-coerulei* Tillyard which was described from Blue Lake, Mt. Kosciuszko (Tillyard 1933) but Campbell (1986) claimed that it was only known from the type location. Until the identification can be verified by rearing to adults it is considered more appropriate to refer to this widespread species as *Tasmanophlebia* AV1 and recognise that it may be another complex of species.

Tasmanophlebia AV1 is a widespread species ranging from South Australia (recorded as *Tasmanophlebia* sp by Suter (1986)) to the New South Wales – Queensland border. No nymphs from this family were found in Queensland. *Tasmanophlebia* AV1 was recorded in over 300 samples which were sweep samples collected near the edge of streams from lowland sites below 500m (Chart a) but less than 50km from the stream source (Chart b). The major substrate of the streams was cobbles with a high percentage of sand and 12% detritus (Chart c). Stream size was variable ranging from less than 1m to over 50m in width (Chart d) but most nymphs were collected in shallow water <0.3m in depth (Chart e). The pH of the streams was near neutral and turbidity was generally low but alkalinity (Chart f) and conductivity (Chart g) were highly variable. The maximum conductivity was 1270 μ S/cm and alkalinity was 420mg/L.

The following generalities can be made about the other parameters listed in the Table: recorded water temperature between 2-25 °C, pH mostly in range of 5-8.6 and low turbidity of <40 NTU.

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



Distribution of *Tasmanophlebia* AV1 in Australia.

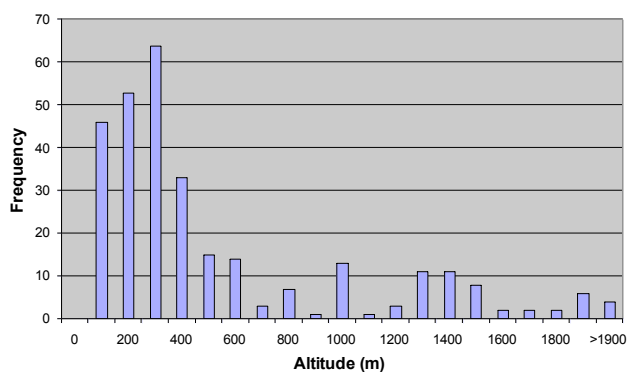


Tasmanophlebia AV1, nymph and typical habitat

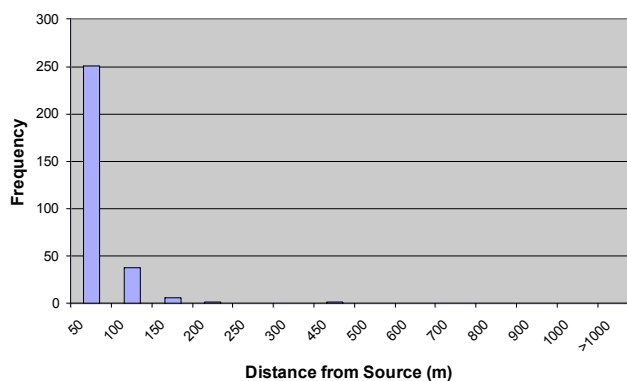


Charts for

a) Altitude

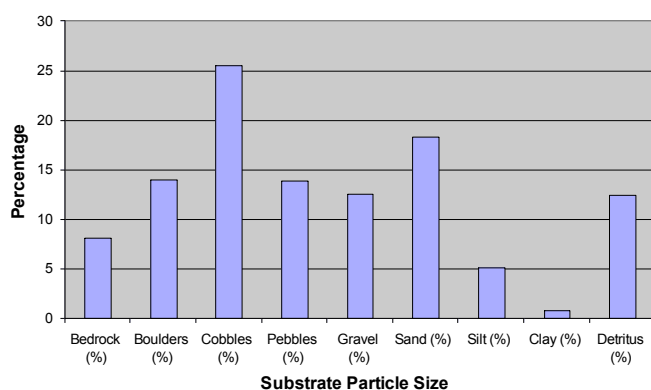


b) Distance from source

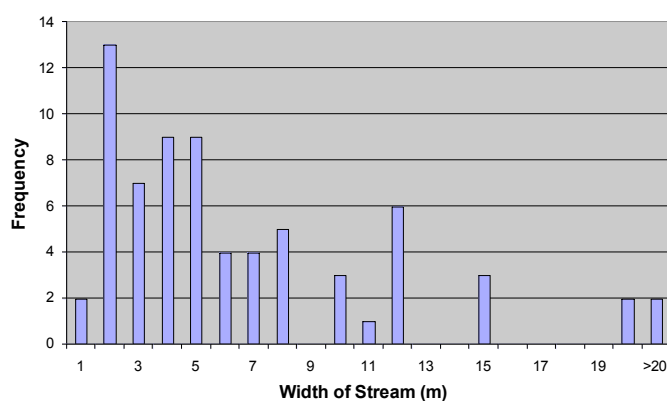




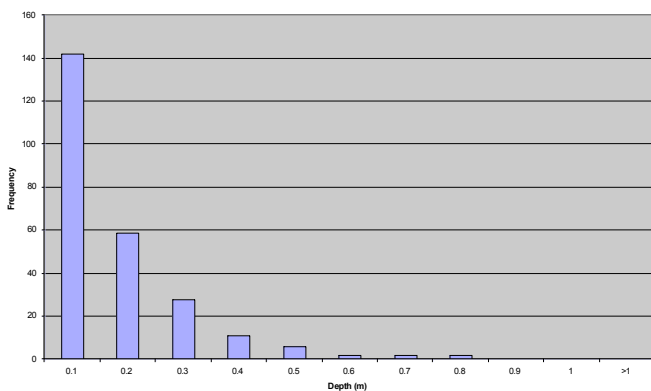
c) Substrate Particle Size



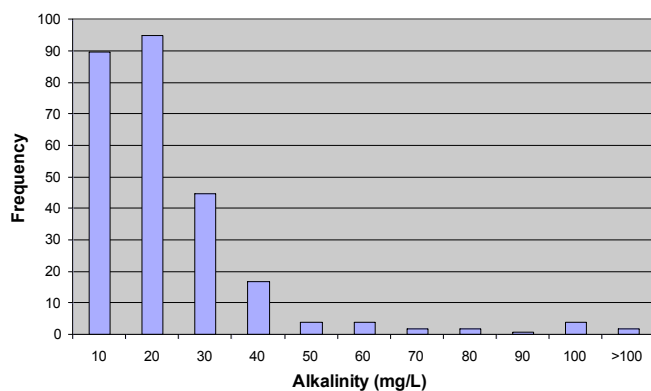
d) Stream Width



e) Depth



f) Alkalinity





g) Conductivity

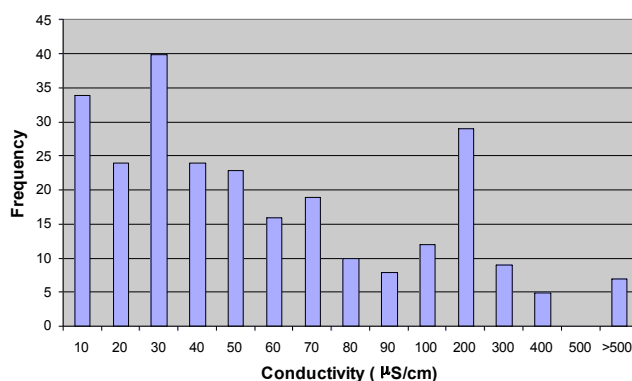


Table. Mean and median physical and chemical parameters for *Tasmanophlebia AV1*.

	Mean	Median	Range	n
Altitude (m)	497	280	15-2020	299
Distance from source (km)	28.3	17	0.2-419	299
Width (m)	7.3	5	0.4-53	71
Depth (m)	0.17	0.1	0.01-0.8	252
Water Temperature (°C)	13.8	13.8	2-25	266
Conductivity (µS/cm)	85.9	45.2	0-1269	260
pH	7.2	7.3	5-8.6	263
Turbidity (NTU)	4.3	2.5	1-40	258
Oxidised Nitrogen (mg/L)	0.057	0.030	0.005-0.120	257
Total N (mg/L)				
Total P (mg/L)	0.023	0.013	0.005-0.031	257
Alkalinity (mg/L)	21.4	16	4-210	266

References

Campbell IC (1986) Life histories of some Australian siphonurid and oligoneurid mayflies (Insecta: Ephemeroptera). *Australian Journal of Marine and Freshwater Research* **37**, 261-288.

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.