



FAMILY PHILOPOTAMIDAE

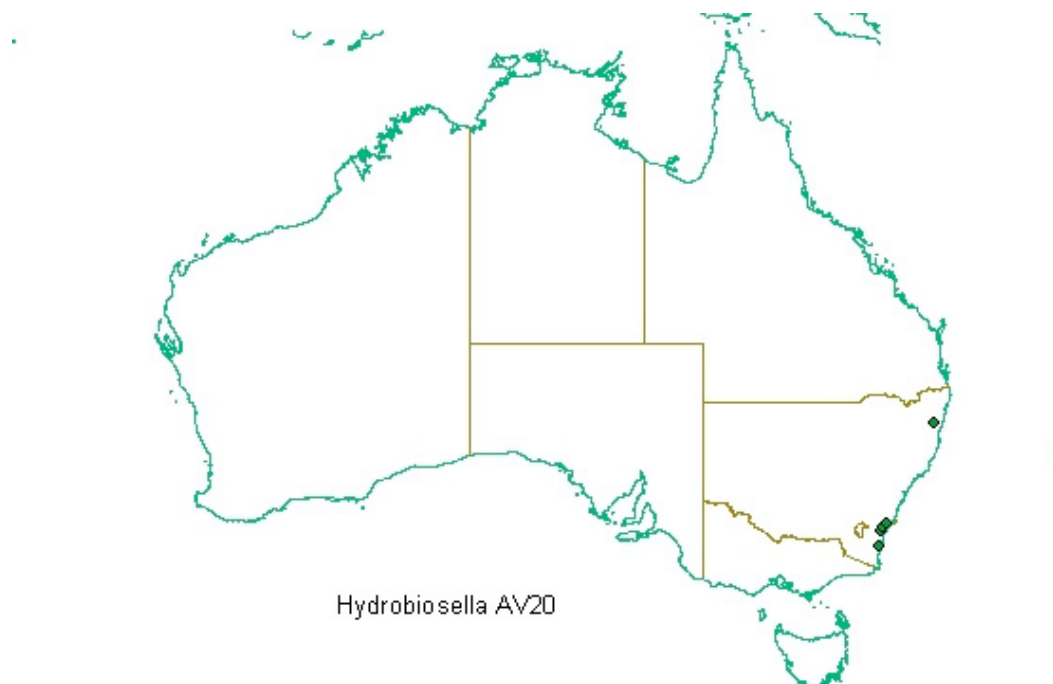
Habitat profile for *Hydrobiosella* sp. AV20

Hydrobiosella sp. AV20 was recorded from only 5 New South Wales localities in this study. This larva has also been recorded from south east Queensland (Cartwright 1997).

Generally *Hydrobiosella* sp. AV20 was recorded in riffle and edge habitat samples from streams at low altitudes between 10-120 m (Chart a), a relatively short distance from the source at between 6-34 km (Chart b), with predominantly larger sized substrates of cobbles, pebbles and boulders with low (<10%) detritus cover (Chart c). The streams were small to medium <8 m wide (Chart d) and shallow (<0.4m) (Chart e) with low alkalinity between 10-47 mg/L (Chart f) and low conductivity between 134-239 $\mu\text{S}/\text{cm}$ (Chart g).

The following generalities can be made about the other parameters listed in the Table: moderate recorded water temperatures between 16.4-21.8°C, acidic to near neutral pH in the range of 6.1-7.1, and very low turbidity (<3.5 NTU).

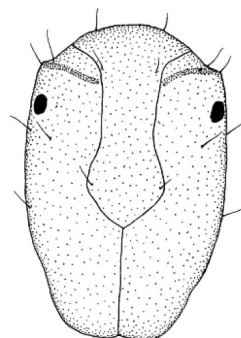
Mean, median and range for selected physical and chemical parameters and habitat categories are given in the Table.



Distribution of *Hydrobiosella* sp AV20 in Australia.

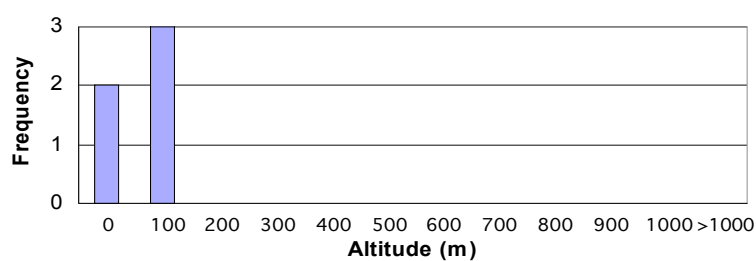


Dorsal view of head of *Hydrobiosella* sp AV20 larva

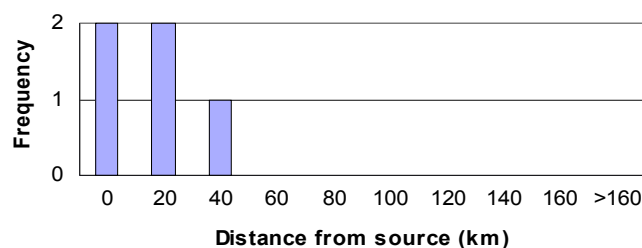


Charts for *Hydrobiosella* sp AV20

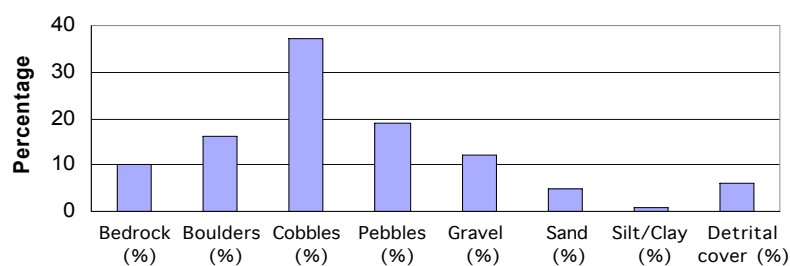
a) Altitude



b) Distance from source

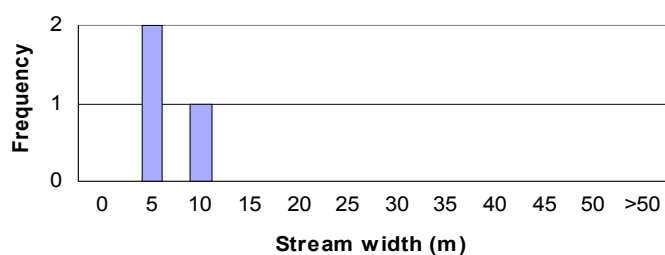


c) Substrate Particle Size

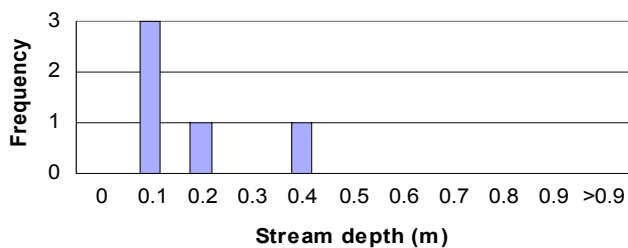




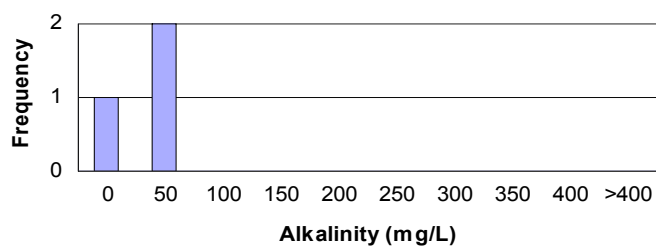
d) Stream Width



e) Depth



f) Alkalinity



g) Conductivity

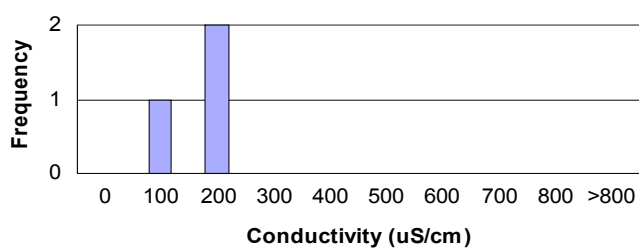




Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *Hydrobiosella* sp. AV20 (N= number of records).

	Mean	Median	Range	N
Altitude (m)	56	60	10-120	5
Distance from source (km)	16	13	5.7-34	5
Stream width (m)	5	4	3-8	3
Stream depth (m)	0.16	0.1	0.05-0.4	5
Water temperature (°C)	19.4	20	16.4-21.8	3
Conductivity (µS/cm)	180	166	134-239	3
pH	6.7	7.0	6.1-7.1	3
Alkalinity (mg/L)	28	27	10-47	3
Turbidity (NTU)	1.5	1.5	0-3.1	2
Total N (mg/L)	0.42	0.42	0.42	1
NO ₃ -N (mg/L)	0.017	0.01	0.01-0.3	3
Total P (mg/L)	0.011	0.01	0.01-0.012	3

References

Cartwright D (1997) 'Preliminary guide to the identification of late instar larvae of Australian Ecnomidae, Philopotamidae and Tasimiidae (Insecta: Trichoptera).'

(Cooperative Research Centre for Freshwater Ecology.: Albury)