



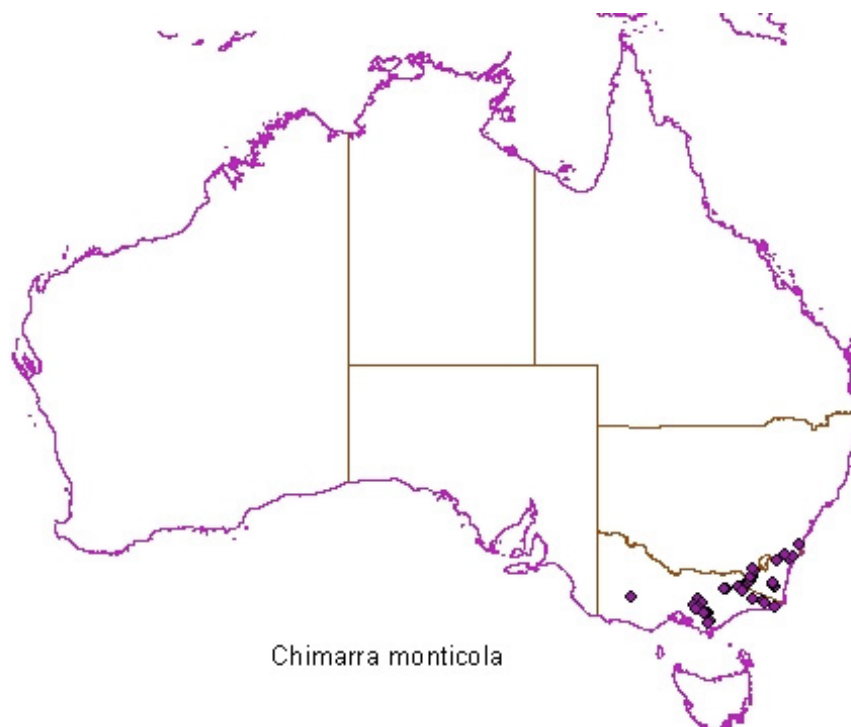
## FAMILY PHILOPOTAMIDAE

### Habitat profile for *Chimarra monticola* Kimmins

*Chimarra monticola* was recorded from 61 Victorian and New South Wales localities in this study. Previous studies include Cartwright (1990), who described the larva and stated that the species “is widely distributed in eastern Victoria, including high altitude streams,” and Cartwright (2002) described it as “a common and widespread species in eastern New South Wales and Victoria.” This species has also been recorded in south-eastern Queensland (Cartwright 1997).

Generally, *C. monticola* was recorded in kick and riffle habitat samples from streams at moderate to high altitudes between 150-1700 m (Chart a), between 4-88 km from the source (Chart b), with predominantly larger sized substrates of cobbles and boulders with low detritus cover (Chart c). Streams were small to medium between 2-20 m wide (Chart d) and generally <0.3m deep (Chart e) with low to moderate alkalinity between 4-50 mg/L (Chart f) and low conductivity <200  $\mu$ S/cm (Chart g). The following generalities can be made about the other parameters listed in the Table: cool to moderate recorded water temperatures between 9-19 °C, pH was circum-neutral in the range of 6.8-7.8, and low turbidity (<14 NTU).

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



Distribution of *Chimarra monticola* in Australia

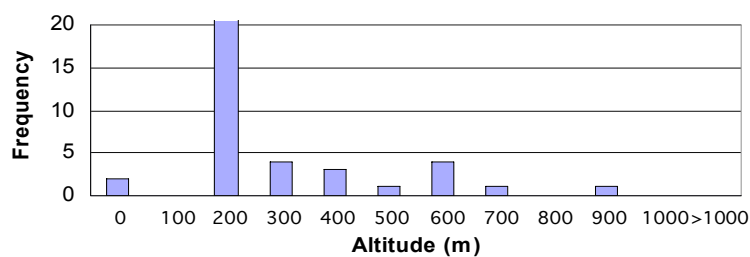


*Chimarra monticola*, nymph and typical habitat

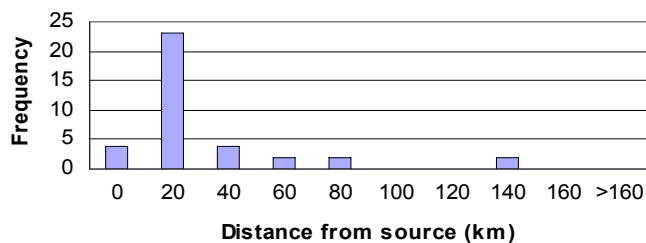


Charts for *Chimarra monticola*

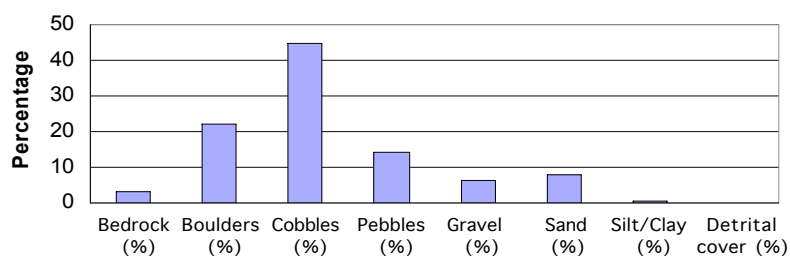
a) Altitude



b) Distance from source

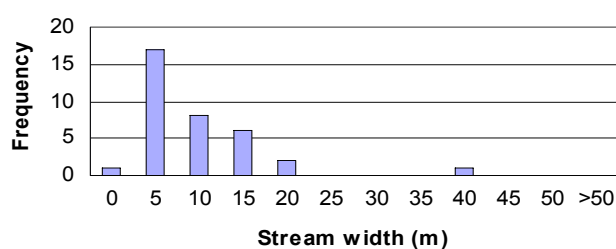


c) Substrate Particle Size

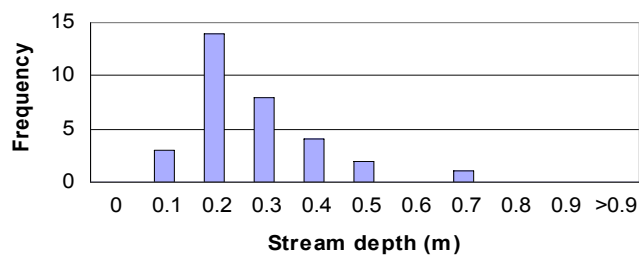




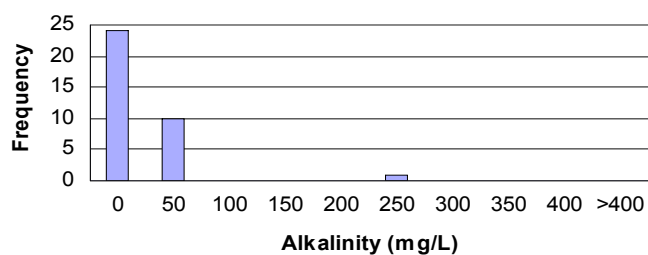
d) Stream Width



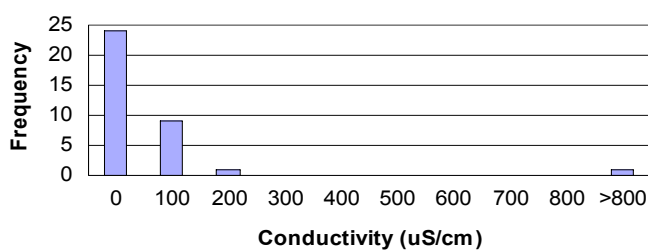
e) Depth



f) Alkalinity



g) Conductivity





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

	Mean	Median	Range	N
Altitude (m)	584	380	20-1700	61
Distance from source (km)	26.6	19	2.5-134	61
Stream width (m)	9.7	7.5	2-40	36
Stream depth (m)	0.27	0.25	0.1-0.65	53
Water temperature (°C)	12.8	12.7	7.7-19	36
Conductivity (µS/cm)	102	38	0-2014	36
pH	7.3	7.4	6.3-8.1	36
Alkalinity (mg/L)	24.3	16	4-240	36
Turbidity (NTU)	3.4	2.9	0.3-13	36
Total N (mg/L)				
NO <sub>3</sub> -N (mg/L)	0.12	0.11	0.003-0.37	31
Total P (mg/L)	0.020	0.016	0.005-0.85	35

## References

Cartwright DI (1990) Taxonomy of the larvae, pupae and females of the Victorian species of *Chimarra* Stephens (Trichoptera: Philopotamidae), with notes on biology and distribution. *Proceedings of the Royal Society of Victoria* **102**, 15-22.

Cartwright DI (1997) 'A key to the species of late instar larvae of Australian Trichoptera (Families Dipseudopsidae, Glossosomatidae, Polycentropodidae, Psychomyiidae, Ecnomidae, Philopotamidae and Tasimiidae).' Unpublished Report prepared for the MRHI/LWRRDC.

Cartwright DI (2002) The Australian species of *Chimarra* Stephens (Trichoptera:Philopotamidae). *Memoirs of the Museum of Victoria* **59**, 393-437.