



FAMILY PHILOPOTAMIDAE

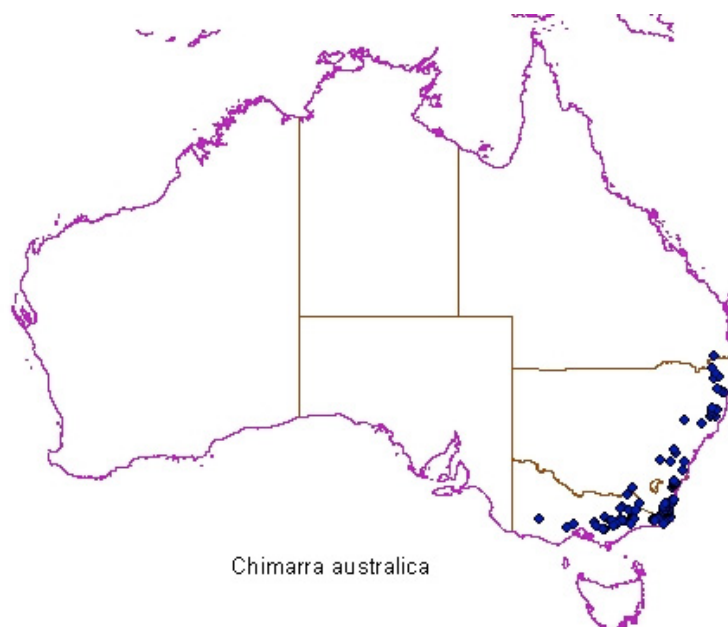
Habitat profile for *Chimarra australica* (Ulmer)

Chimarra australica (Ulmer) was recorded from 133 Victorian, New South Wales and Queensland localities in this study. Previous studies include Cartwright (1990) who described the larva and stated that the species “is widespread in eastern Victoria, but there are no records from high altitude streams,” and Cartwright (2002), who described the adult as “a very common, widespread and slightly variable species throughout eastern Australia.”

Generally, *C. australica* was recorded in riffle and kick habitat samples from streams mainly at low to moderate altitudes between 20-940 m (Chart a), between 0.7-118 km from the source (Chart b), with predominantly larger sized substrates of cobbles and boulders with <5% detritus cover (Chart c). Streams were between 1.5-30 m wide (Chart d) and <0.3m deep (Chart e) with low to moderate alkalinity between 5-92 mg/L (Chart f) and low to moderate conductivity mainly between 16-409 μ S/cm (Chart g).

The following generalities can be made about the other parameters listed in the Table: moderate recorded water temperatures between 9.6-23.6 °C, mostly slightly alkaline pH in the range of 6-8.3, 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 australica* in Australia.

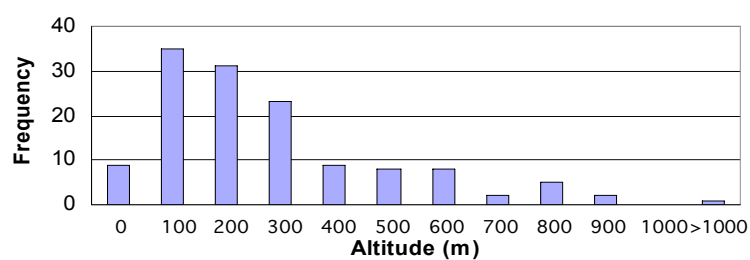


Typical habitat of *Chimarra australica*

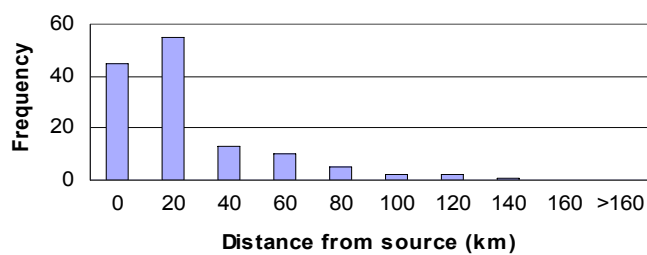


Charts for *Chimarra australica*

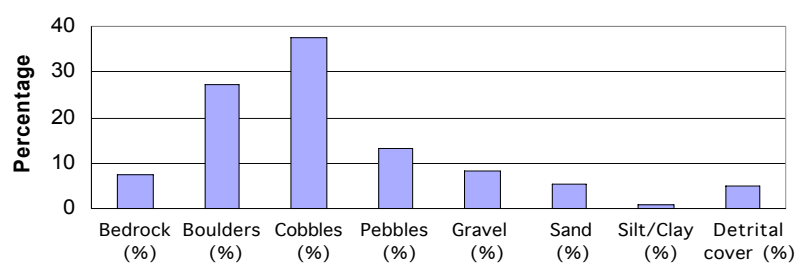
a) Altitude



b) Distance from source

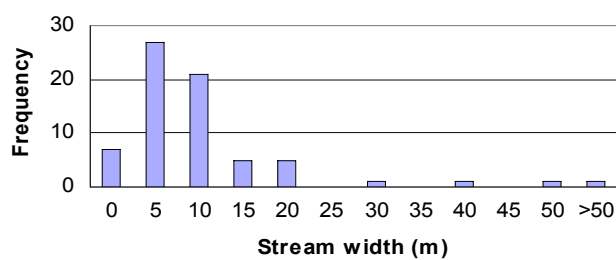


c) Substrate Particle Size

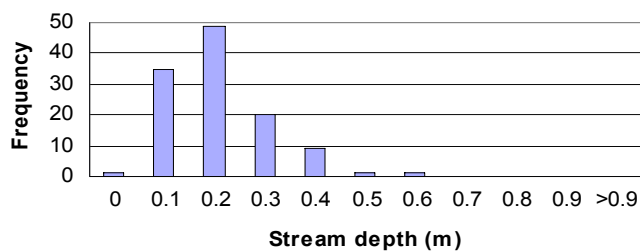




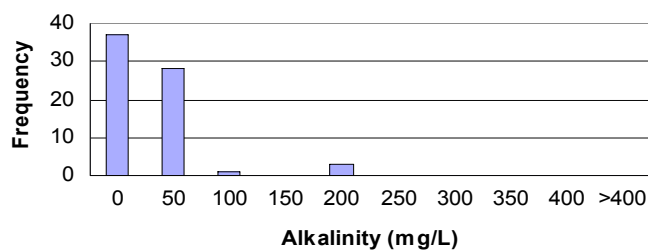
d) Stream Width



e) Depth



f) Alkalinity



g) Conductivity

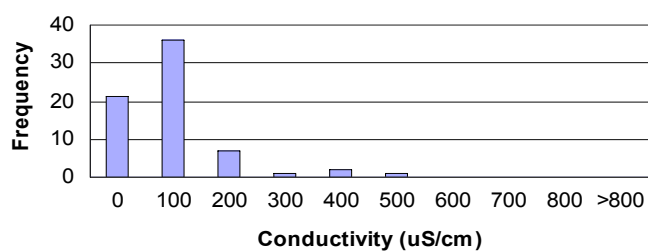




Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *C. australica* (N= number of records).

	Mean	Median	Range	N
Altitude (m)	280	210	10-1100	133
Distance from source (km)	24	13	0.7-134	133
Stream width (m)	9.9	8	1.5-55	69
Stream depth (m)	0.20	0.2	0.03-0.6	116
Water temperature (°C)	16.1	16.3	6.2-23.6	69
Conductivity (µS/cm)	97	67	6-455	68
pH	7.3	7.35	5.6-8.4	69
Alkalinity (mg/L)	31	20	5-200	69
Turbidity (NTU)	3.3	2.0	0-34.5	67
Total N (mg/L)	0.21	0.21	0.21	1
NO ₃ -N (mg/L)	0.042	0.013	0.003-0.25	57
Total P (mg/L)	0.020	0.011	0.005-0.14	60

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