



FAMILY ECNOMIDAE

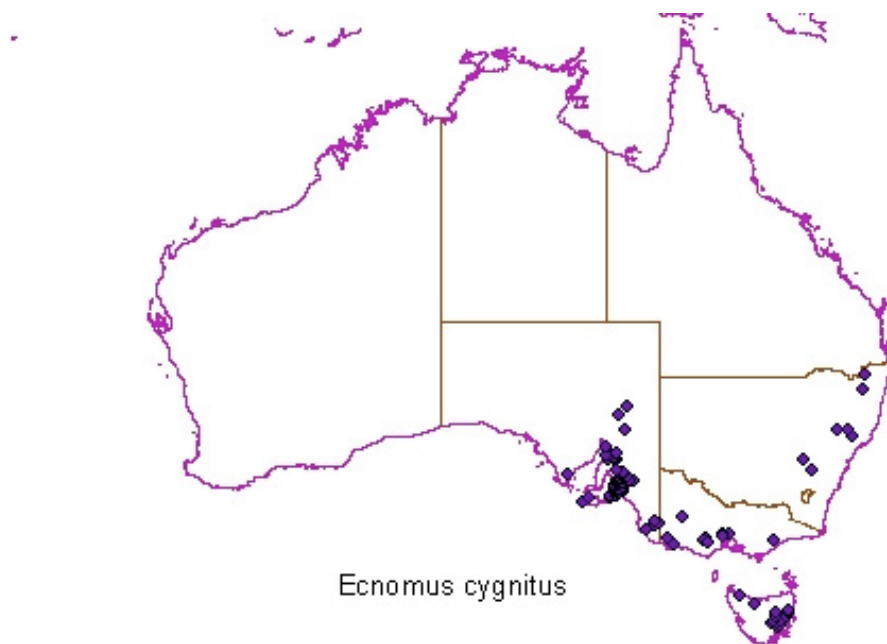
Habitat profile for *Ecnomus cygnitus* Neboiss

Ecnomus cygnitus was recorded from 245 South Australian, Tasmanian, Victorian and New South Wales localities in this study. This species is a very widespread and common species in lotic and occasionally lentic waters, previously recorded from southern SA, Tasmania, and south-eastern Australia north to eastern Queensland (Cartwright 1990).

In this study, *E. cygnitus* was generally recorded in edge and riffle habitat samples from streams below 610 m altitude (Chart a), <136 km from the source (Chart b), with predominantly silt/clay substrate with <20% detritus cover (Chart c). The streams were generally small, mainly <10m wide (Chart d), depth was between 0.1-0.4 m (Chart e), with low to high alkalinity <485 mg/L (Chart f) and moderate to very high conductivity mostly below 7850 $\mu\text{S}/\text{cm}$ (Chart g).

The following generalities can be made about the other parameters listed in the Table: moderate recorded water temperature (range between 10-23 °C), pH mostly slightly alkaline (between 6.8-8.9), and low to high turbidity <73 NTU.

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



Distribution of *Ecnomus cygnitus* in Australia.

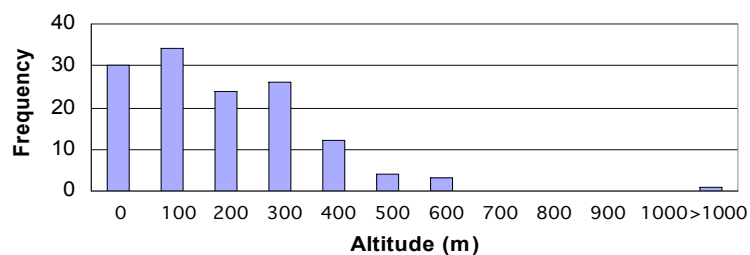


Typical habitat of *Ecnomus cygnitus*

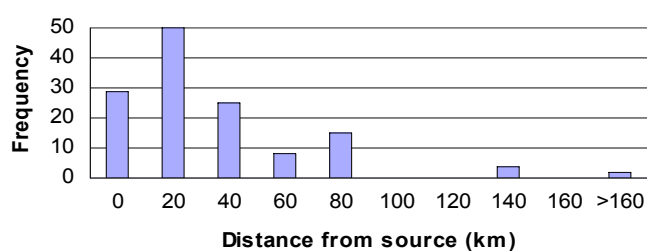


Charts for *Ecnomus cygnitus*

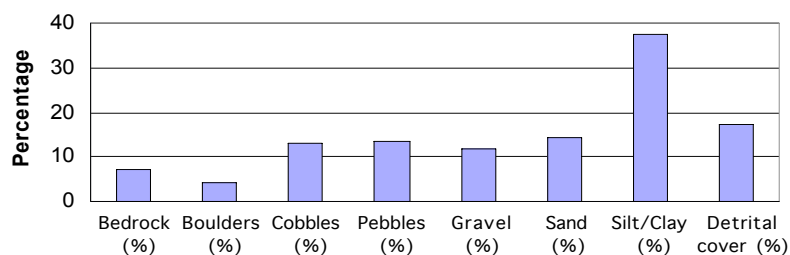
a) Altitude



b) Distance from source

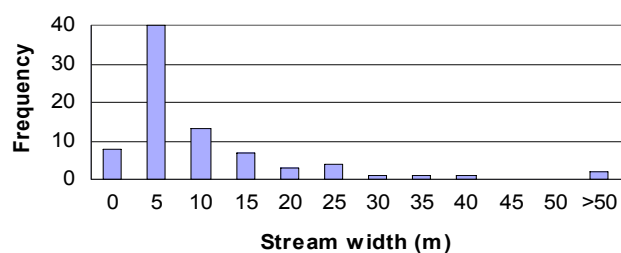


c) Substrate Particle Size

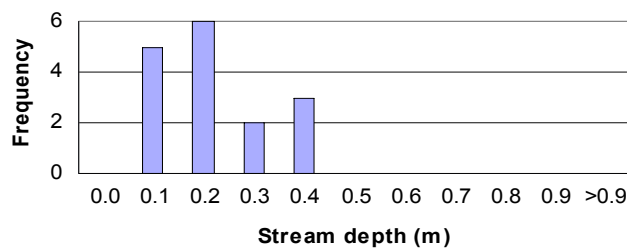




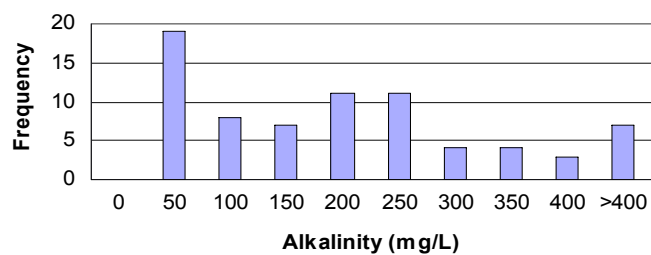
d) Stream Width



e) Depth



f) Alkalinity



g) Conductivity

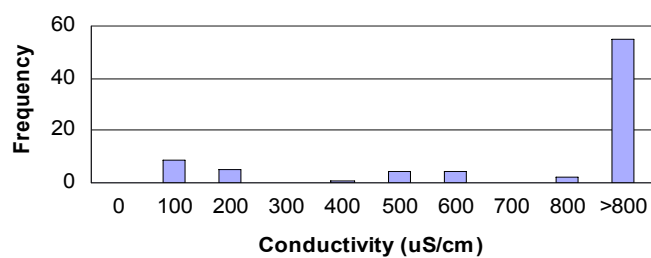




Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *E. cygnitus* (N= number of records).

	Mean	Median	Range	N
Altitude (m)	190	160	5-1100	134
Distance from source (km)	35	24	0.3-175	133
Stream width (m)	10.2	6	1-75	80
Stream depth (m)	0.21	0.2	0.1-0.4	16
Water temperature (°C)	16.4	16.6	7.1-26.5	74
Conductivity (µS/cm)	5988	1529	51-140000	80
pH	7.8	7.9	6.4-9.1	74
Alkalinity (mg/L)	198	188	25-483	74
Turbidity (NTU)	39	3.5	0-2130	73
Total N (mg/L)	1.1	0.67	0.115-8.0	62
NO ₃ -N (mg/L)	0.35	0.018	0.002-7.6	70
Total P (mg/L)	0.16	0.034	0.002-3.5	72
P SR (mg/L)	0.086	0.005	0.002-2.9	60

References

Cartwright DI (1990) The Australian species of *Ecnomus* McLachlan (Trichoptera: Ecnomidae). *Memoirs of the Museum of Victoria* **51**, 1-48.