



FAMILY ECNOMIDAE

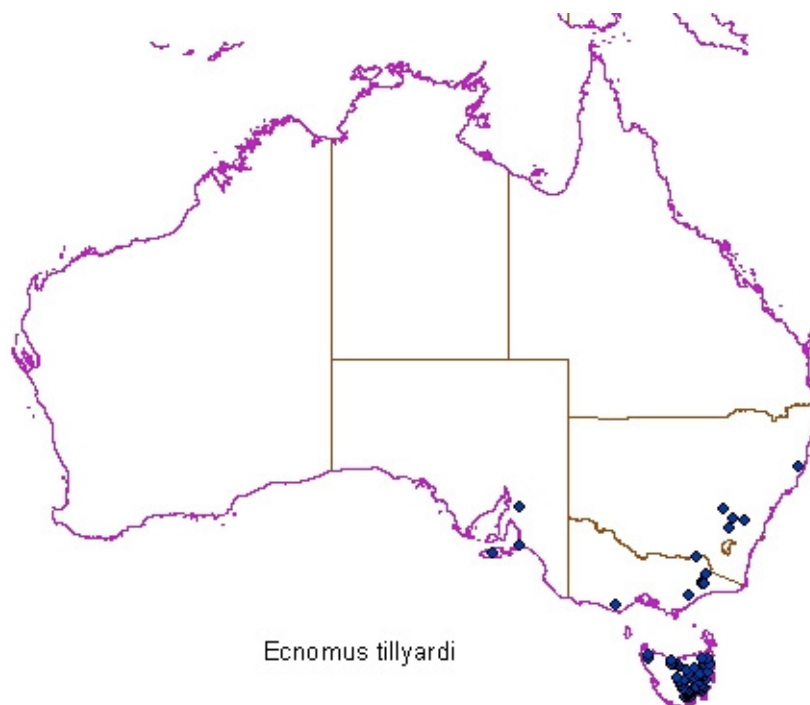
Habitat profile for *Ecnomus tillyardi* Mosely

Ecnomus tillyardi Mosely was recorded from 75 Tasmanian, South Australian, Victorian and New South Wales localities in this study. This is a widespread and common species in lotic and occasionally lentic waters, previously recorded from Tasmania, south-eastern South Australia, Victoria and north-eastern New South Wales (Cartwright 1990).

E. tillyardi was generally recorded in edge and combined habitat samples from low to moderate altitude streams below 651 m (Chart a), <80 km from the source (Chart b), with predominantly cobbles substrate with low (<10%) detritus cover (Chart c). Streams were mainly small to medium in width (<20m wide) (Chart d), depth <0.4 m deep (Chart e), with low alkalinity (<370 mg/L) (Chart f) and moderate to high conductivity (Chart g).

The following generalities can be made about the other parameters listed in the Table: low to moderate recorded water temperatures (range between 7-22 °C), circum-neutral pH mostly between 6.4-8.3, and low turbidity <15 NTU.

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



Distribution of *Ecnomus tillyardi* in Australia.

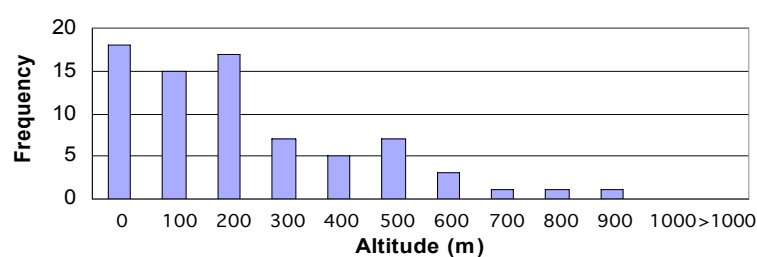


Typical habitat of *Ecnomus tillyardi*

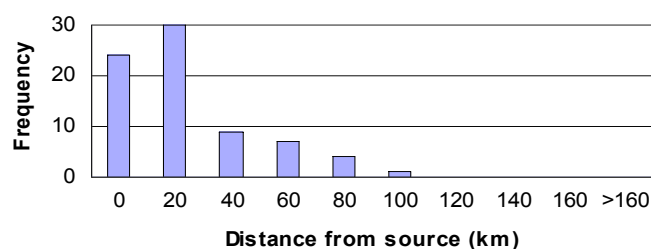


Charts for *Ecnomus tillyardi*

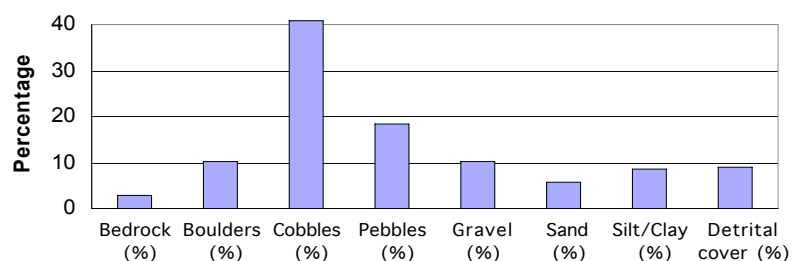
a) Altitude



b) Distance from source

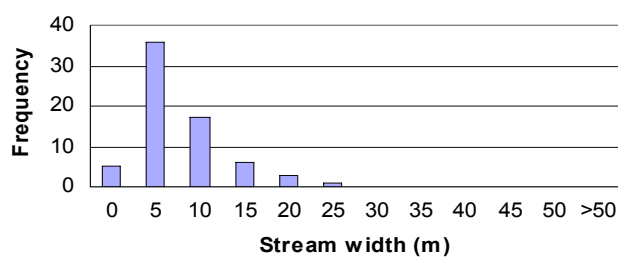


c) Substrate Particle Size

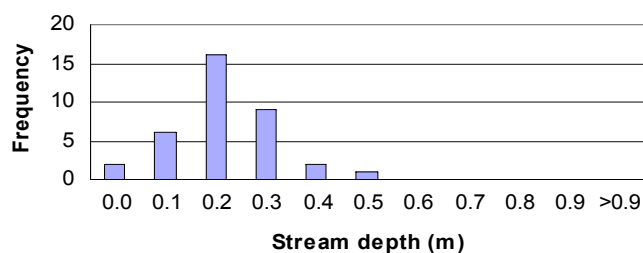




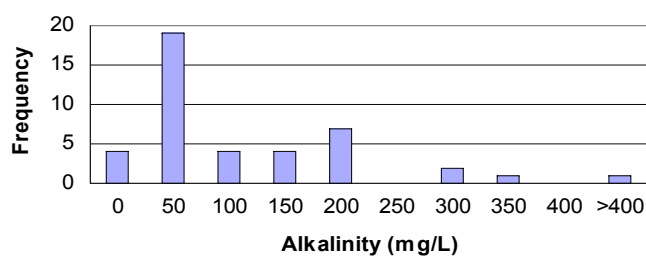
d) Stream Width



e) Depth



f) Alkalinity



g) Conductivity

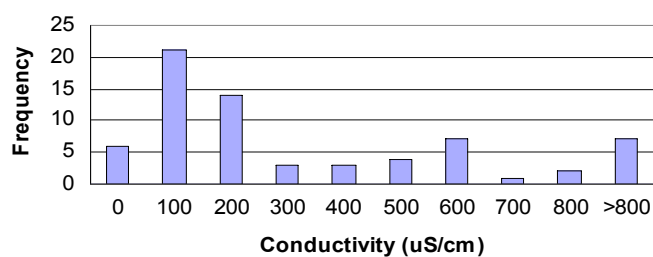




Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *E. tillyardi* (N= number of records).

	Mean	Median	Range	N
Altitude (m)	224	165	10-940	75
Distance from source (km)	25	14	3-94	75
Stream width (m)	7.8	6.3	1-24	68
Stream depth (m)	0.2	0.2	0.1-0.5	36
Water temperature (°C)	13.8	13.4	6.1-23	42
Conductivity (µS/cm)	380	219	4-2005	68
pH	7.2	7.3	4.8-8.7	42
Alkalinity (mg/L)	111	61	1-494	42
Turbidity (NTU)	5.2	4.2	0.2-24.6	42
Total N (mg/L)	0.49	0.33	0.074-2.77	32
NO ₃ -N (mg/L)	0.037	0.012	0.002-0.38	42
Total P (mg/L)	0.033	0.017	0.002-0.39	42
P SR (mg/L)	0.003	0.002	0.002-0.014	31

References

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