



FAMILY ECNOMIDAE

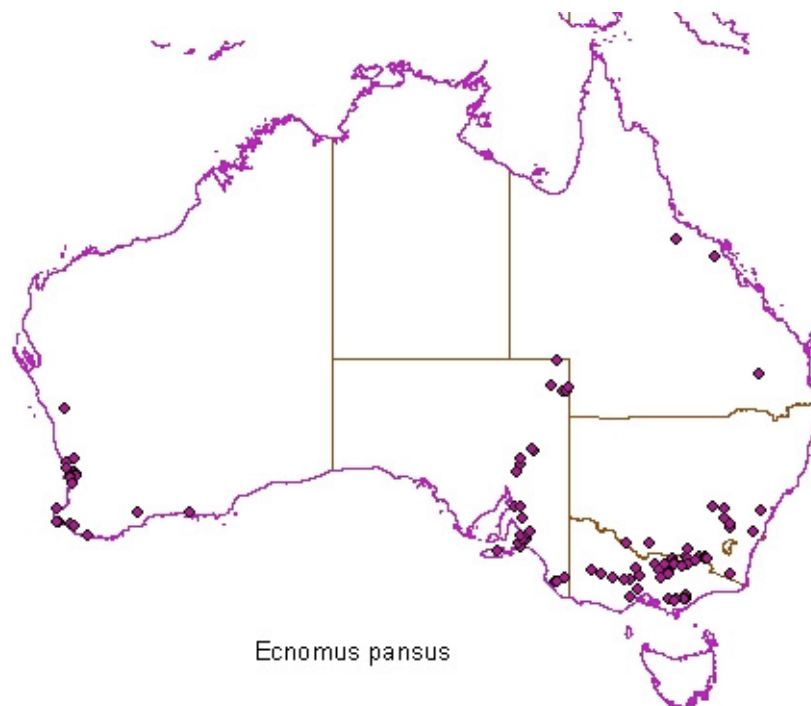
Habitat profile for *Ecnomus pansus* Neboiss

Ecnomus pansus Neboiss was recorded from 155 southern Western Australian, South Australian, Victorian, New South Wales and Queensland localities in this study. This species is a very widespread and common species in lotic and occasionally lentic waters, with adults previously recorded from southern Western Australia, South Australia, Victoria, New South Wales, Queensland and in the southern Northern Territory (Cartwright 1990).

E. pansus was generally recorded sub-equally in edge, kick, sweep and riffle habitat samples from low to moderate altitude streams below 500 m (Chart a), ranging from a small (3 km) and a very large distance (1260 km) from the source (Chart b), with predominantly silt/clay, cobbles and sand substrates with <15% detritus cover (Chart c). The streams were generally <20m wide (Chart d), and depth <0.65 m (Chart e), with low to high alkalinity <465 mg/L (Chart f) and moderate to very high conductivity mostly below 3400 $\mu\text{S}/\text{cm}$ (Chart g).

The following generalities can be made about the other parameters listed in the Table: moderate recorded water temperature ranged between 12-25 °C, pH mostly slightly alkaline (between 6.9-9), and low to high turbidity <120 NTU.

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



Distribution of *Ecnomus pansus* in Australia.

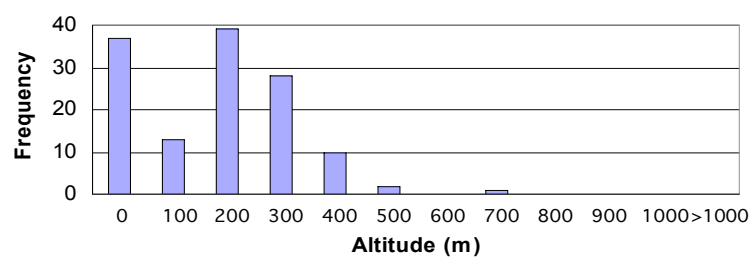


Ecnomus pansus, larva, head and typical habitat

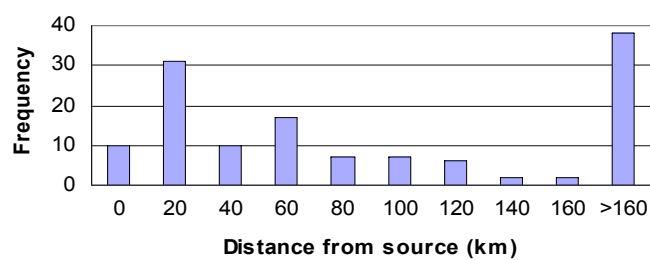


Charts for *Ecnomus pansus*

a) Altitude

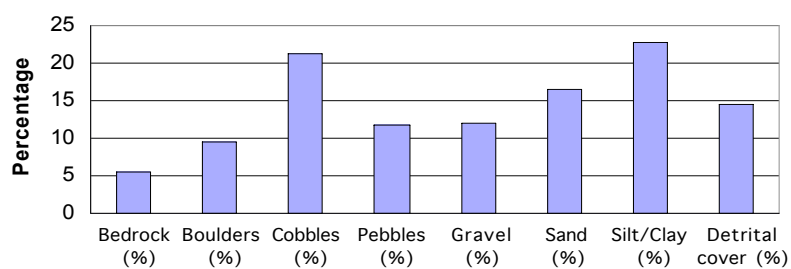


b) Distance from source

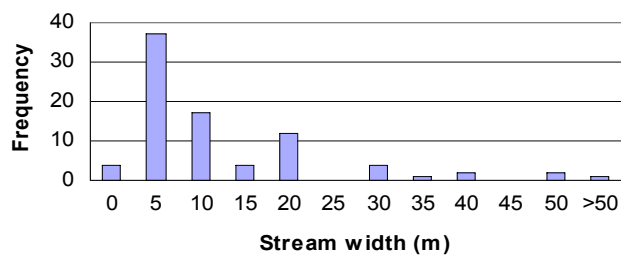




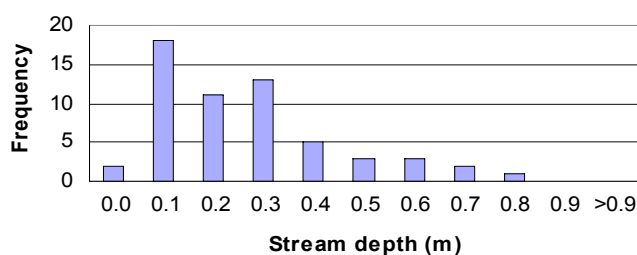
c) Substrate Particle Size



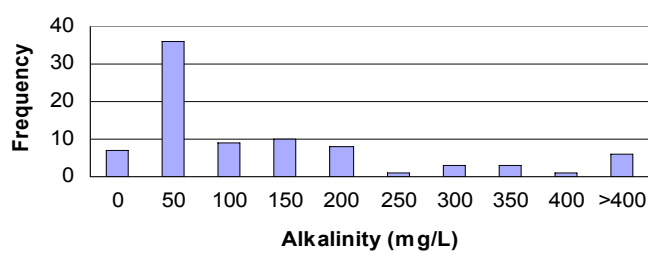
d) Stream Width



e) Depth



f) Alkalinity



g) Conductivity

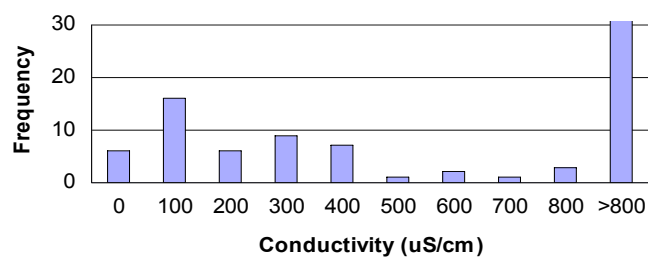




Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *E. pansus* (N= number of records).

	Mean	Median	Range	N
Altitude (m)	186	180	0-650	130
Distance from source (km)	241	62	2.8-1340	130
Stream width (m)	12.5	7.8	1.4-85	84
Stream depth (m)	0.26	0.21	0.04-0.65	58
Water temperature (°C)	17.8	17.7	11-28.6	84
Conductivity (µS/cm)	2378	394	35-44800	82
pH	7.7	7.7	6.5-9.3	84
Alkalinity (mg/L)	131	64.5	11-647	84
Turbidity (NTU)	23	5.9	0.5-660	82
Total N (mg/L)	0.72	0.65	0.125-2.24	32
NO ₃ -N (mg/L)	0.36	0.068	0.0025-3.7	77
Total P (mg/L)	0.34	0.038	0.0025-4.9	79
P SR (mg/L)	0.052	0.005	0.0025-0.67	20

References

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