



## FAMILY ECNOMIDAE

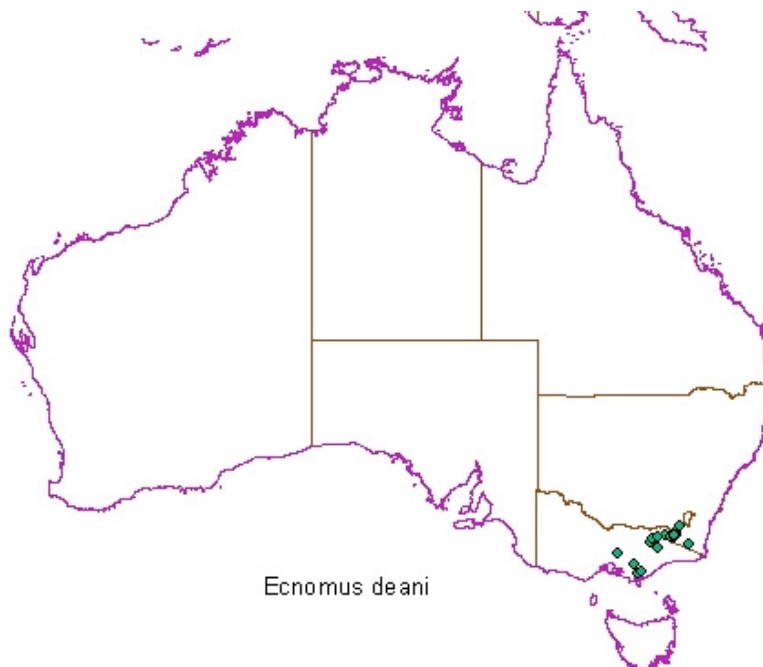
### Habitat profile for *Ecnomus deani* Cartwright

*Ecnomus deani* Cartwright was recorded from 48 Victorian and New South Wales localities in this study. This is a relatively common species, with adults previously recorded from eastern Victoria and New South Wales, including from higher altitudes (Cartwright 1990).

*E. deani* was generally recorded in edge and sweep habitat samples from medium to very high altitude streams between 180-1920 m (Chart a), between 3.7-65 km from the source (Chart b), with predominantly boulders, cobble and gravel substrates with moderate (<15%) detritus cover (Chart c). The streams were generally <10m wide (Chart d), depth was between 0.1-0.5 cm (Chart e), with low to moderate alkalinity between 10-44 mg/L (Chart f) and low to moderate conductivity mostly below 180  $\mu$ S/cm (Chart g).

The following generalities can be made about the other parameters listed in the Table: recorded water temperature ranged from a cold 6 to a moderate 17 °C, slightly acidic pH mostly between 5.3-8, and low turbidity <12 NTU.

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



Distribution of *Ecnomus deani* in Australia.

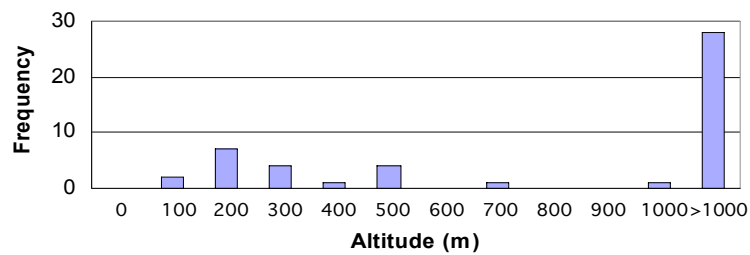


## Typical habitat of *Ecnomus deani*

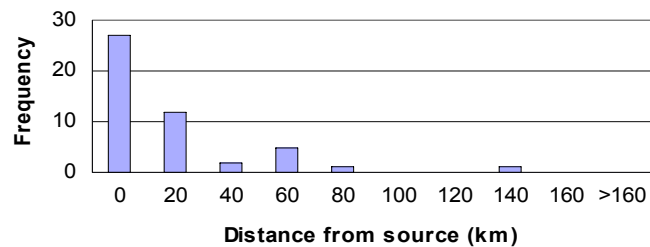


## Charts for *Ecnomus deani*

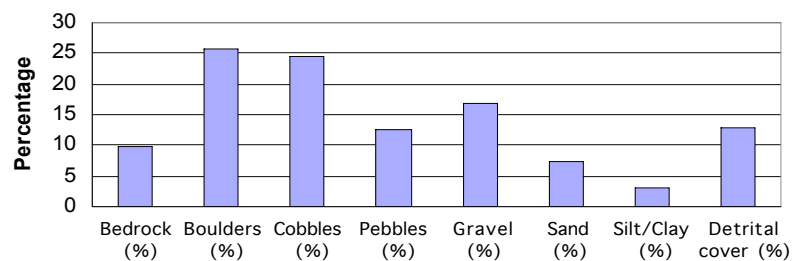
### a) Altitude



### b) Distance from source

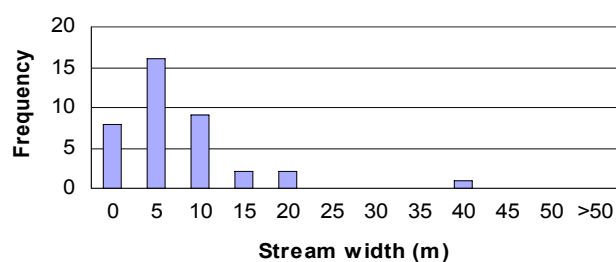


### c) Substrate Particle Size

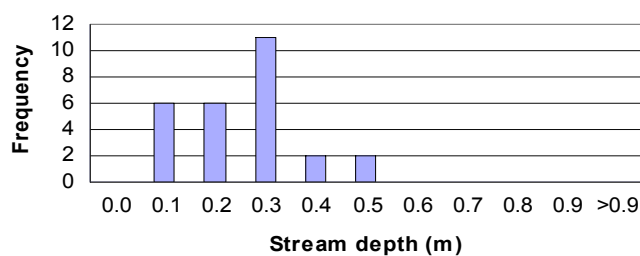




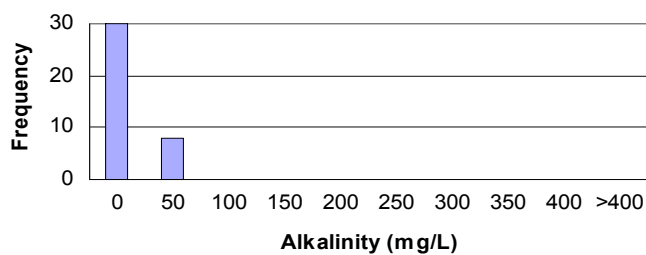
d) Stream Width



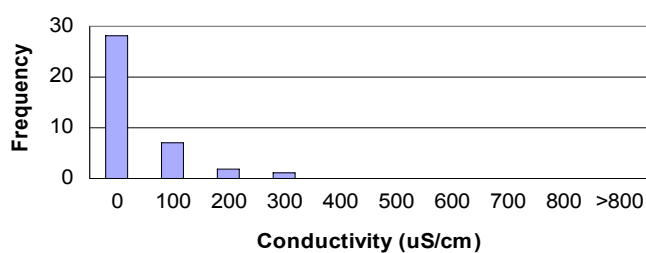
e) Depth



f) Alkalinity



g) Conductivity





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

	Mean	Median	Range	N
Altitude (m)	1130	1560	100-1920	48
Distance from source (km)	19	8.8	1.6-134	48
Stream width (m)	7.5	5	1-40	38
Stream depth (m)	0.25	0.25	0.05-0.5	27
Water temperature (°C)	12	11.9	4.2-20.3	38
Conductivity (µS/cm)	45	7.5	0-298	38
pH	7.1	7.4	5.3-8	35
Alkalinity (mg/L)	18.4	10	9-62	38
Turbidity (NTU)	2.8	1.4	0-12	35
Total N (mg/L)				
NO <sub>3</sub> -N (mg/L)	0.076	0.01	0.002-0.61	37
Total P (mg/L)	0.019	0.01	0.009-0.11	38

## References

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