



Family Gripopterygidae

Habitat Profile for *Dinotoperla evansi* Kimmins

Dinotoperla evansi Kimmins is also an endemic South Australian species and was described by Kimmins (1951) from adults collected near Adelaide. Suter and Bishop (1990) described the nymphs and recorded *D. evansi* from 79 localities ranging from intermittent to permanent streams and farm dams. In this study *D. evansi* was recorded from 227 samples and was widespread from near Port Augusta in the southern Flinders Ranges through the Mt Lofty Ranges to Kangaroo Island and also in the south-east of the state.

D. evansi was recorded from streams at altitudes generally <300m above sea level (Chart a) and close to the stream source (usually <20km) (Chart b) and the substrate was dominated by sand, silt and clay with 20% detrital cover (Chart c). Streams had high alkalinity (Chart d) and high conductivity between 12 μ S/cm and 14,000 μ S/cm (Chart f).

The following generalities can be made about the other parameters listed in the Table: relatively high temperature (10.6-24.5 °C), pH was alkaline, range 6.6-9.4 and highly variable turbidity (0.3-2130 NTU).

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



Distribution of *Dinotoperla evansi* in Australia.

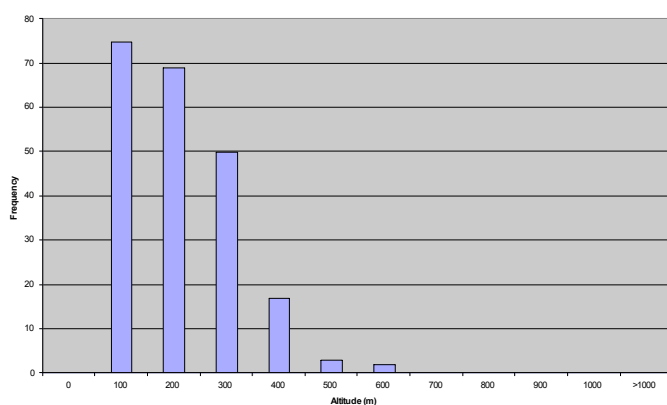


Typical habitat of *Dinotoperla evansi*

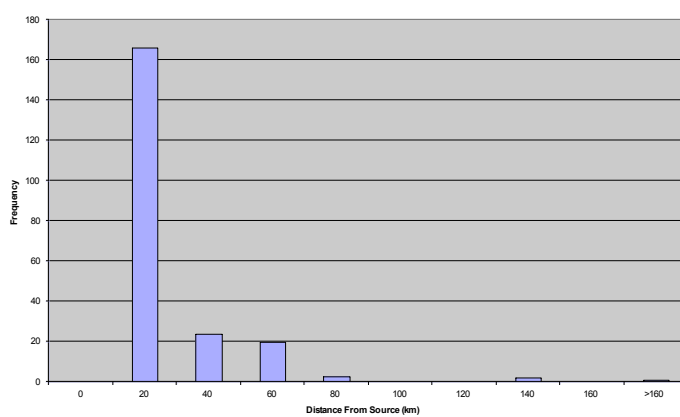


Charts for *Dinotoperla evansi*

a) Altitude

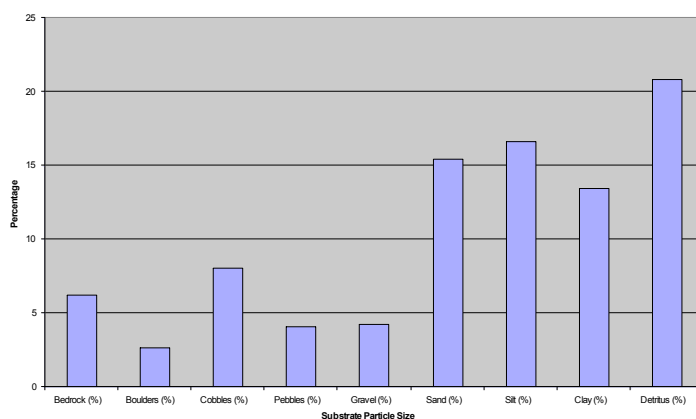


b) Distance from source

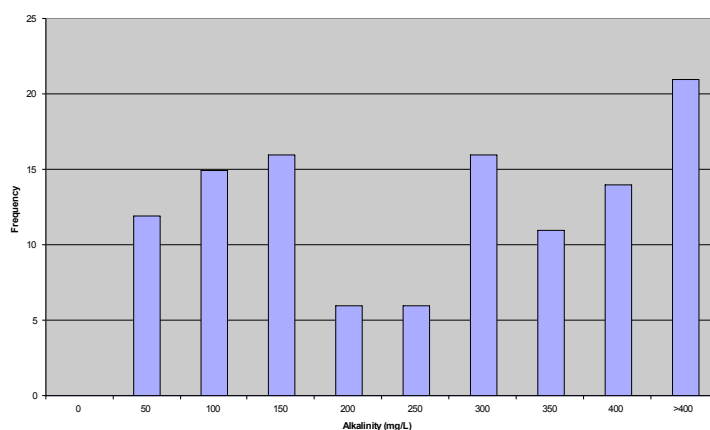




c) Substrate Particle Size



d) Alkalinity



e) Conductivity

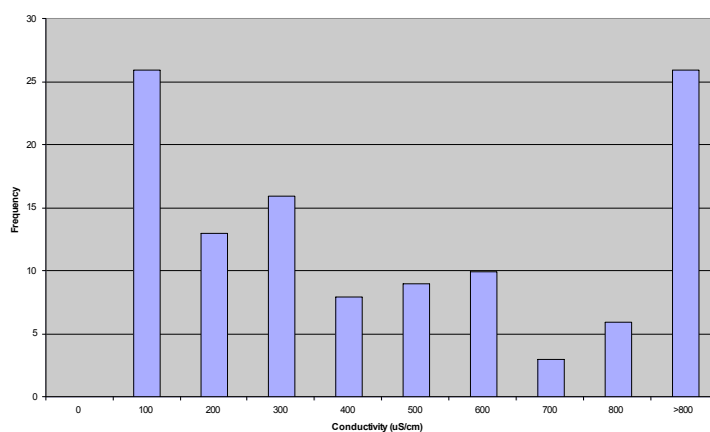




Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *Dinotoperla evansi* (N= number of records).

	Mean	Median	Range	N
Altitude (m)	156	155	5-525	216
Distance from source (km)	35.8	13.2	3.2-63	216
Width (m)				
Depth (m)				
Water Temperature (°C)	16.2	16.0	10.6-24.5	116
Conductivity (µS/cm)	751	335	12-14000	116
pH	8.0	8.0	6.6-9.4	116
Turbidity (NTU)	75	5	0.26-2130	116
NO3-N (mg/L)	0.248	0.012	0.003-10.8	116
Total N (mg/L)	1.11	0.762	0.160-11.4	116
Total P (mg/L)	0.252	0.034	0.003-1.20	116
Alkalinity (mg/L)	249	264	16-648	116

References

Kimmins DE (1951) A revision of the Australian and Tasmanian Gripopterygidae and Nemouridae (Plecoptera). *Bulletin of the British Museum of Natural History (Entomology)* **2**, 45-93.

Suter PJ, Bishop JE (1990) Stoneflies (Plecoptera) of South Australia. In 'Mayflies and Stoneflies: Life Histories and Biology'. (Ed. IC Campbell) pp. 189-207. (Kluwer Academic Press: Dordrecht)