



Family Leptophlebiidae

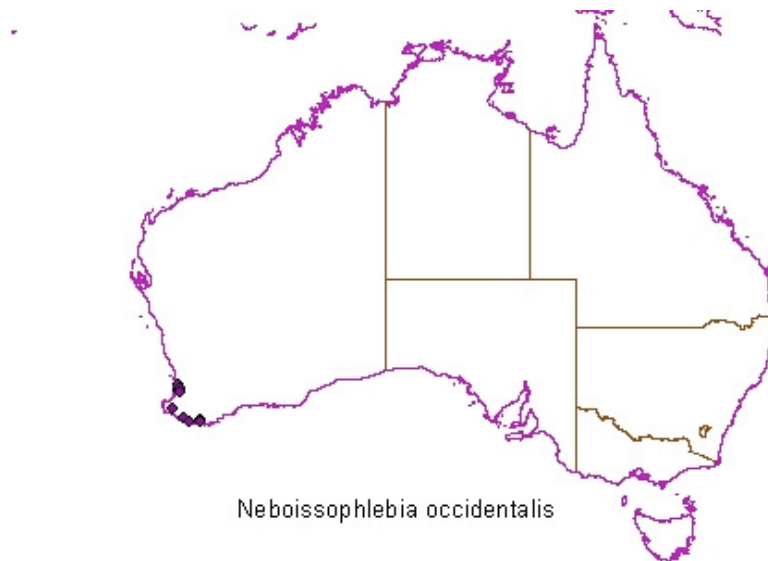
Habitat Profile for *Neboissophlebia occidentalis* Dean

Neboissophlebia occidentalis Dean was described from material from Western Australia (Dean 1987). In this study, *N. occidentalis* was recorded from 10 locations from south-western Western Australia.

Neboissophlebia occidentalis was recorded in channel habitat samples from lowland streams generally <300 m altitude (Chart a), between 2-140 km from the source (Chart b), with predominantly sandy substrate with detritus > 20% cover (Chart c). The streams were small with the width between 1-5 m (Chart c), low alkalinity between 3-23 mg/L (Chart d) and medium conductivity in the range 141-409 $\mu\text{S}/\text{cm}$ (Chart f).

The following generalities can be made about the other parameters listed in the Table: water temperature range 10.7-13.6 °C, pH generally acidic, in range of 4.9-6.9, and very low turbidity (<6 NTU).

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



Distribution of *Neboissophlebia occidentalis* in Australia

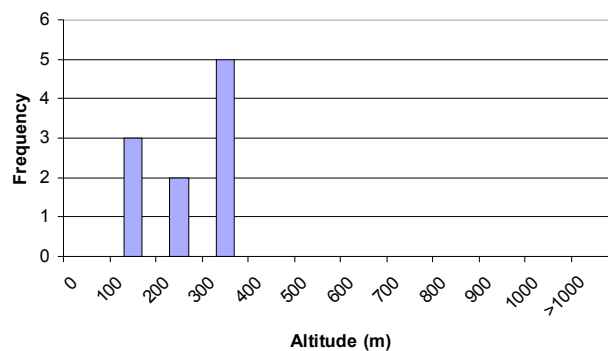


Neboissophlebia occidentalis, nymph and typical habitat

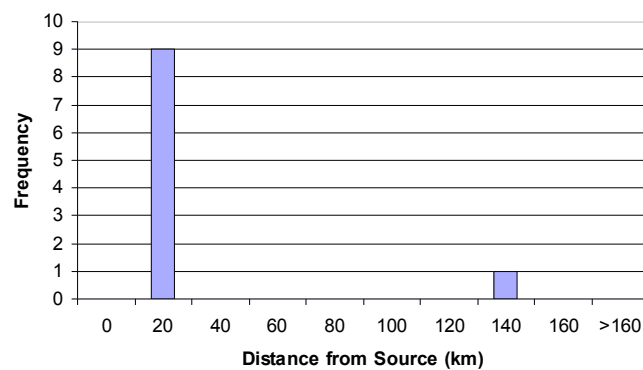


Charts for *Neboissophlebia occidentalis*

a) Altitude

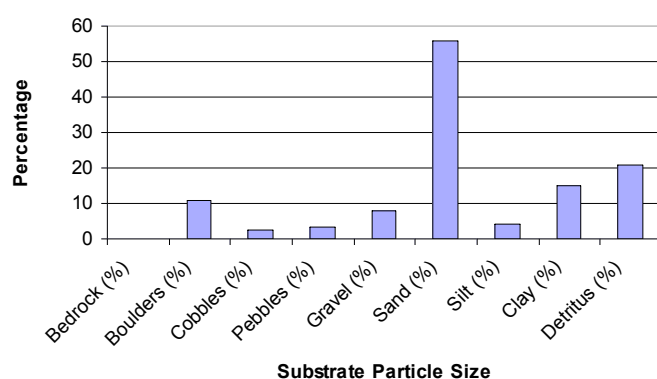


b) Distance from source

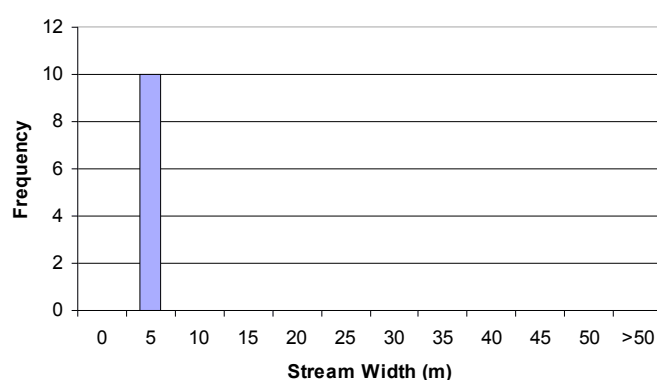




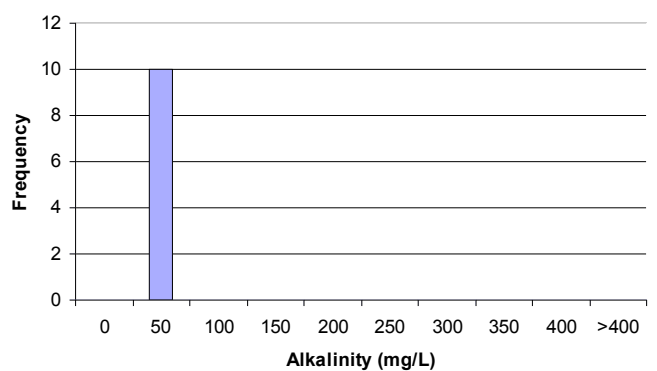
c) Substrate Particle Size



d) Stream Width



e) Alkalinity



f) Conductivity

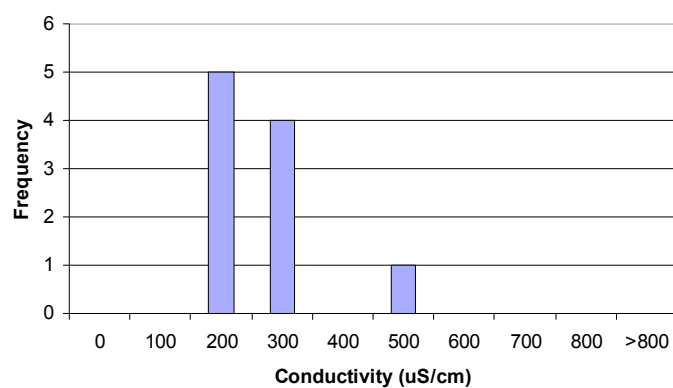




Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *Neboissophlebia occidentalis* (N= number of records).

	Mean	Median	Range	N
Altitude (m)	154	180	10-265	10
Distance from source (km)	22.1	10	2-139	10
Stream width (m)	2.3	2.3	1-5	10
Stream depth (m)				
Water temperature (°C)	12.3	12.5	10.7-13.6	10
Conductivity (µS/cm)	216	190	141-409	10
pH	6.0	6.2	4.9-6.9	10
Turbidity (NTU)	2.1	1.5	1-6	10
NO ₃ -N (mg/L)	0.033	0.020	0.020-0.090	10
Total N (mg/L)	0.313	0.255	0.080-0.660	10
Total P (mg/L)	0.013	0.005	0.005-0.040	10
Alkalinity (mg/L)	9.2	9.0	3-23	10

References

Dean JC (1987) Two new genera of Letophlebiidae (Insecta: Ephemeroptera) from south-western Australia. *Memoirs of the Museum of Victoria* **48**, 91-100.