



FAMILY HYDROPSYCHIDAE

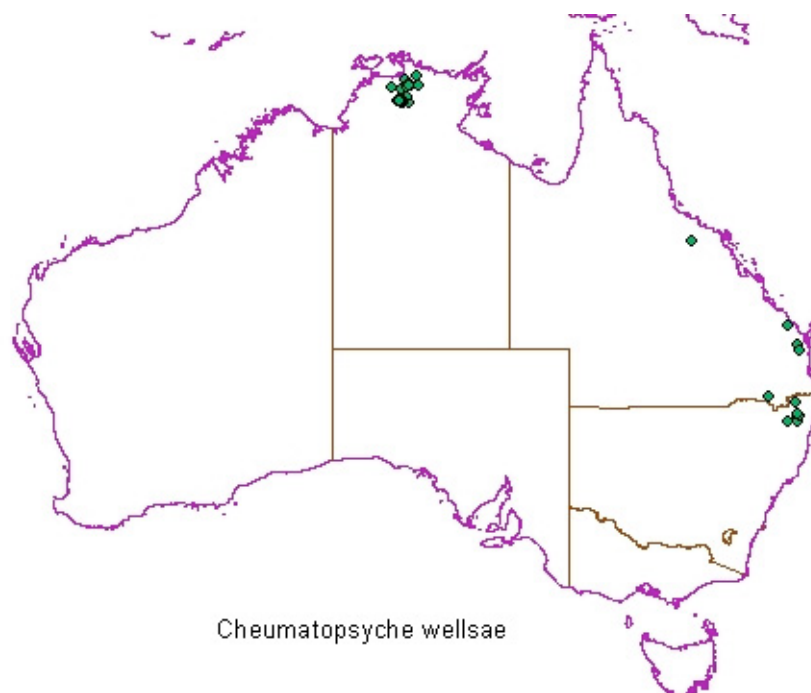
Habitat profile for *Cheumatopsyche wellsae* Dean

Cheumatopsyche wellsae was recorded from 44 New South Wales, Queensland and Northern Territory localities in this study. This species is a widespread northern species, with adults previously recorded from eastern Queensland, Northern Territory and northern Western Australia (Dean 2001).

In this study *C. wellsae* was recorded mainly in riffle habitat samples from streams between 11-370 m altitude (Chart a), 8-570 km from the source (Chart b), with a relatively even mix of substrates decreasing slightly from bedrock through to sand substrate with low (6%) detritus cover (Chart c). The streams were medium to large, between 12-40 m wide (Chart d) and shallow between 0.1-0.5 m deep (Chart e), with low alkalinity between 29-135 mg/L (Chart f) and moderate conductivity ranging from 128-770 $\mu\text{S}/\text{cm}$ (Chart g).

The following generalities can be made about the other parameters listed in the Table: moderate to high recorded water temperature of 14-27.5 °C, slightly alkaline pH in the range 7.3-8.8 and mostly low turbidity (<111 NTU).

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



Distribution of *Cheumatopsyche wellsae* in Australia.

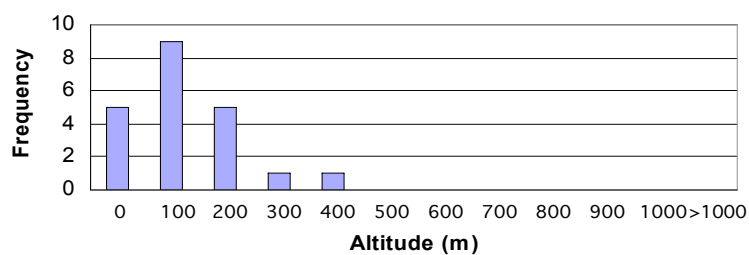


Typical habitat of *Cheumatopsyche wellsae*

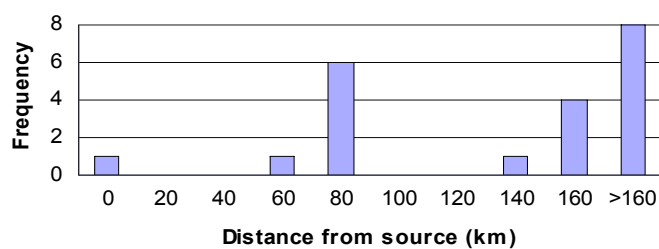


Charts for *Cheumatopsyche wellsae*

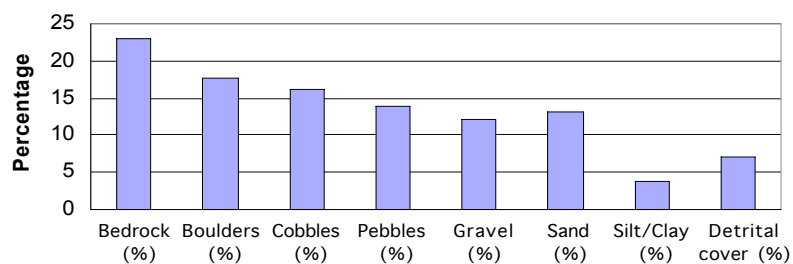
a) Altitude



b) Distance from source

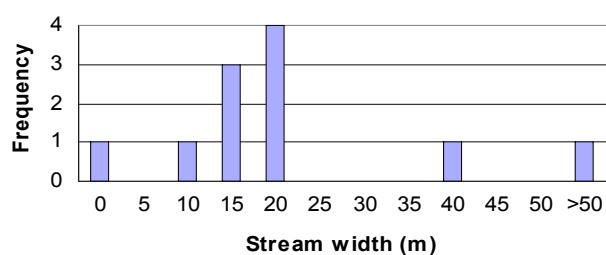


c) Substrate Particle Size

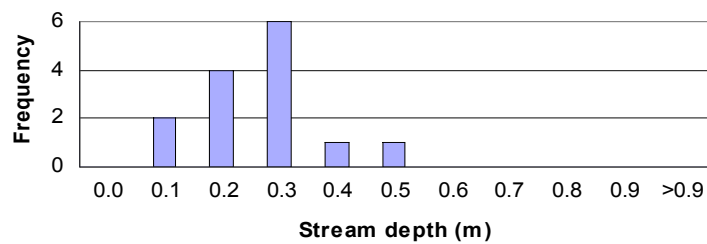




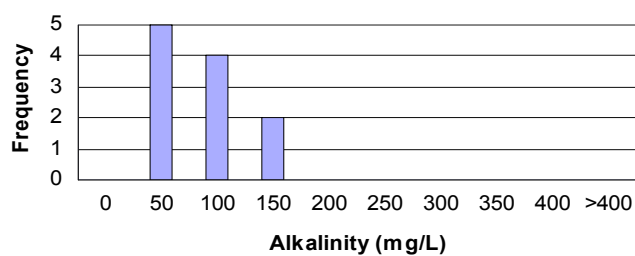
d) Stream Width



e) Depth



f) Alkalinity



g) Conductivity

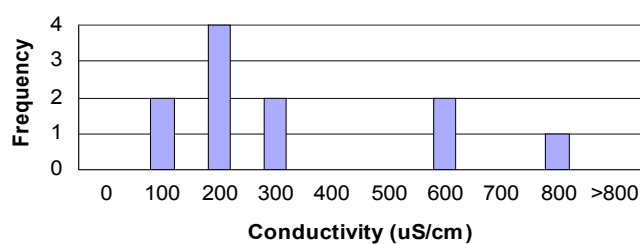




Table. Mean, median and range for selected physical and chemical parameters and habitat categories for *C. wellsae* (N= number of records).

	Mean	Median	Range	N
Altitude (m)	110	100	11-370	21
Distance from source (km)	155	152.5	8-571	21
Stream width (m)	23.4	20	2-80	11
Stream depth (m)	0.25	0.25	0.1-0.5	14
Water temperature (°C)	20.6	20.7	14-27.5	11
Conductivity (µS/cm)	325	202	128-770	11
pH	7.95	7.9	7.3-8.8	11
Alkalinity (mg/L)	78	80	29-135	11
Turbidity (NTU)	11.7	1.0	0-110	11
Total N (mg/L)	0.52	0.45	0-1.2	11
NO ₃ -N (mg/L)	0.41	0.01	0.01-2	5
Total P (mg/L)	0.058	0.018	0.01-0.35	11

References

Dean JC (2001) New species of Hydropsychidae (Insecta : Trichoptera) from Northern Australia. *Memoirs of the Museum of Victoria* **58**, 231-246.