



## Family Coenagrionidae

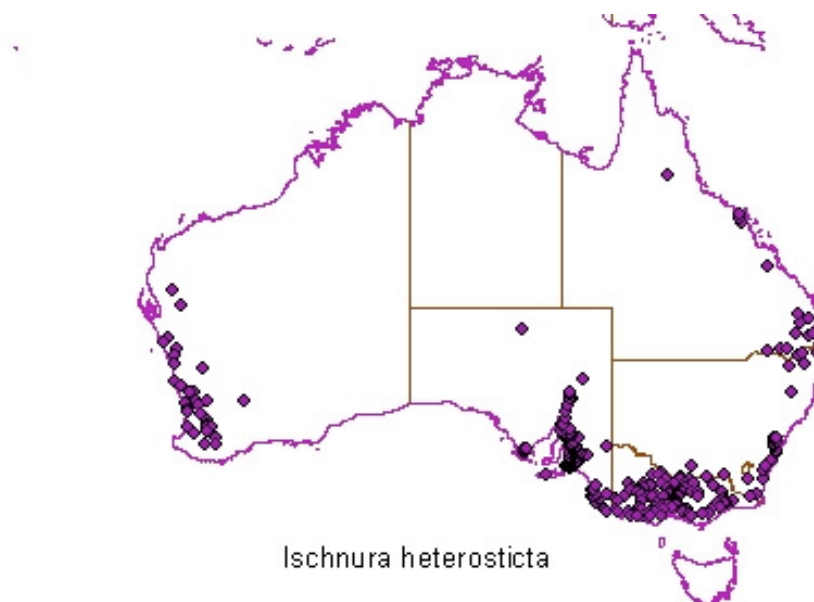
### Habitat Profile for *Ischnura heterosticta* (Burmeister)

*Ischnura heterosticta* (Burmeister) is a widespread damselfly and is found in all states and territories in Australia although the subspecies *I. heterosticta tasmanica* is restricted to Tasmania. (Houston and Watson 1988; Watson *et al.* 1991). In this study they were recorded from 410 samples from the mainland states in Queensland, New South Wales, Victoria, South Australia and in Western Australia.

*Ischnura heterosticta* was generally found in edge, sweeps and macrophyte habitats in lowland streams and pools generally below altitudes of 300m (Chart a), and over a wide range of distances from the stream source, but generally <60km from the source (Chart b) with substrate dominated by silt and sand with <20% detrital cover (Chart c). The streams were generally <0.3m deep (Chart e) and <10m wide (Chart d) with moderate alkalinity generally <200mg/L (Chart f) and with very high conductivity > 800  $\mu$ S/cm (Chart g).

The following generalities can be made about the other parameters listed in the Table: water temperature between 8.2-33.8 °C, pH was alkaline in the range of 3.5-9.2 and low to high turbidity (0.3-420 NTU).

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



Distribution of *Ischnura heterosticta* in Australia.

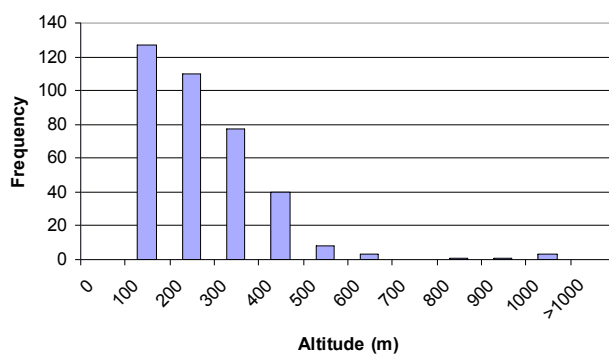


*Ischnura heterosticta*, nymph and typical habitat

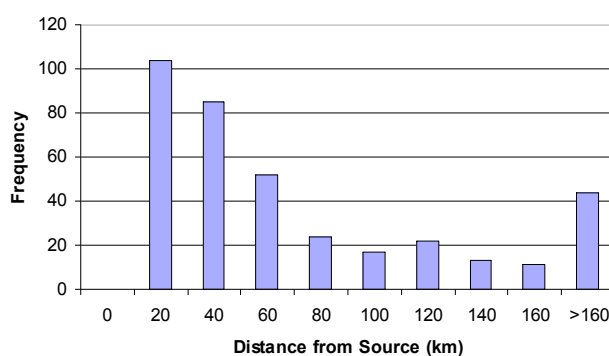


Charts for *Ischnura heterosticta*

a) Altitude

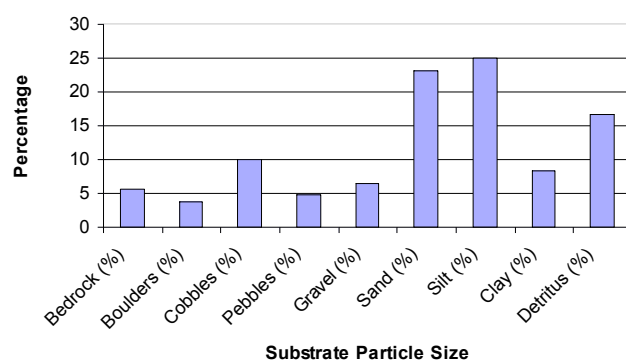


b) Distance from source

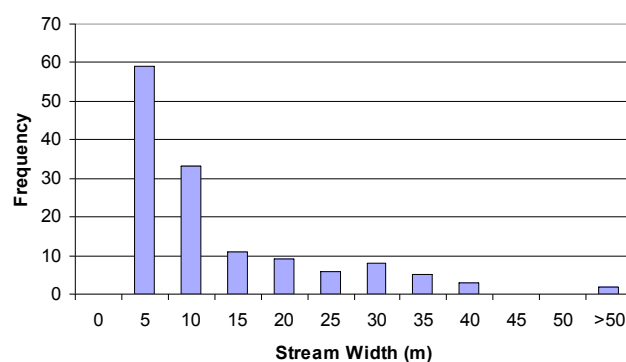




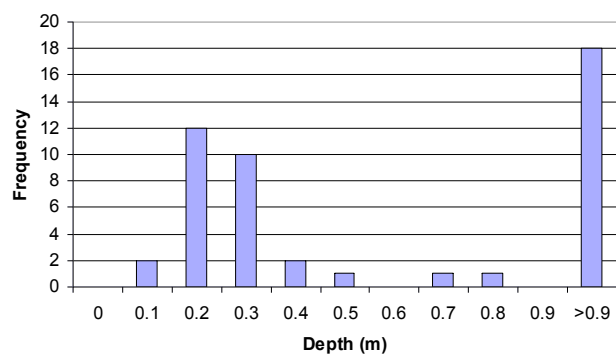
c) Substrate Particle Size



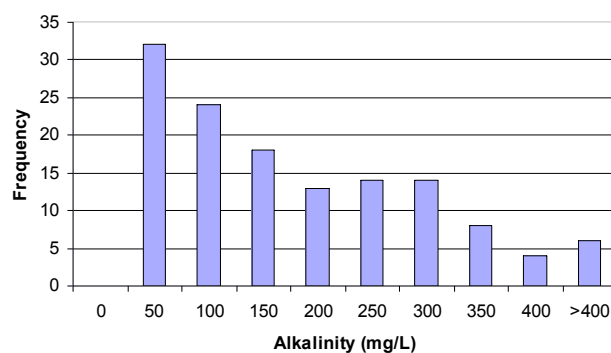
d) Stream Width



e) Depth

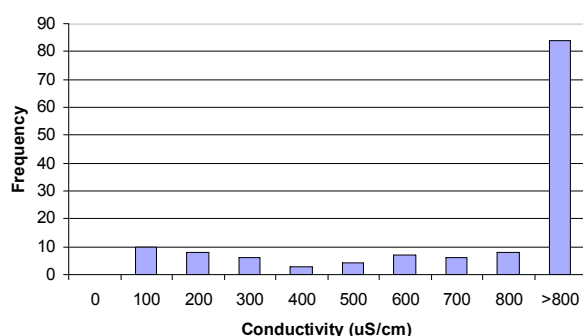


f) Alkalinity





g) Conductivity



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

	Mean	Median	Range	N
Altitude (m)	179	154	5-990	370
Distance from source (km)	68.1	39.0	1.2-533	372
Width (m)	13.0	6.2	1-285	136
Depth (m)	0.73	0.30	0.08-1.5	47
Water temperature (°C)	16.7	16.4	8.2-33.8	136
Conductivity (µS/cm)	3954	1355	30-44800	136
pH	7.8	7.8	3.5-9.2	136
Turbidity (NTU)	18.3	4.9	0.3-420	131
Oxidised Nitrogen (mg/L)	0.354	0.020	0.003-5.270	135
Total N (mg/L)	0.869	0.658	0.025-7.060	90
Total P (mg/L)	0.197	0.029	0.004-5.500	135
Alkalinity (mg/L)	135	135	10-673	133

References

Houston WWK, Watson JAL (1988) Odonata. In 'Zoological Catalogue of Australia'. (Eds DW Walton and WWK Houston) pp. 33-132. (Australian Government Publishing Service: Canberra)

Watson JAL, Theischinger G, Abbey HM (1991) 'The Australian Dragonflies. A guide to the identification, distributions and habitats of Australian Odonata.' (CSIRO: Canberra and Melbourne)