

APPENDIX 4

Water chemistry from Hine's emerald dragonfly sites

This table presents the water chemistry from known and potential larval habitat sites in Illinois and Wisconsin as reported in Soluk *et al.* (1998). Sampling occurred between 24 July 1996 and 22 July 1997. In Illinois, sampling usually occurred monthly, and in Wisconsin, sampling occurred between May and November. Parameters are presented in ranges. No attempt was made to analyze this data to determine reasons for unusually high or low values. Sampling may have occurred after rain or snow events that would alter the normal chemical parameters, especially the turbidity and alkalinity. An “n” represents the number of samples taken for each test. Water chemistry for Hine's emerald dragonfly sites are also presented in the following reports: Cashatt *et al.* 1991, Cashatt and Vogt (1992), Lin *et al.* (1993), Vogt and Cashatt (1994), Midwest Environmental Services (1995), Mierzwa *et al.* (1995b), Soluk and Swisher (1995), Soluk *et al.* (1996,1998), and TAMS (1997).

Parameter	n	Range of Values for Illinois Sites	n	Range of Values for Wisconsin Sites
pH	95	6.26 - 8.13	12	7.17 - 7.92
Dissolved Oxygen (mg/L)	86	0.46 - 20.42	12	4.17 - 11.74
Salinity (%)	95	0.02 - 0.59	12	0.01 - 0.03
Specific Conductance (mMHOS)	95	230 - 1720	12	168 - 735
Turbidity (NTU)	86	0 - 523	9	0 - 8
Water Temperature (C)	86	3.00 - 24.90	12	5.90 - 17.30
Nitrate (mg/L)	95	<DL - 18.50	12	<DL - 0.25
Chloride (mg/L)	95	15.10 - 138.00	12	0.59 - 35.20
Hardness (mg/L)	95	119.71 - 693.88	12	166.90 - 432.76
Total Alkalinity (mg/L)	87	85.7 - 409	12	149 - 420
Calcium (mg/L)	95	27.4 - 153.0	12	37.8 - 102.0
Iron (mg/L)	95	<0.01 - 1.28	12	<0.01 - 0.67
Lead (mg/L)	95	<0.04 - <0.05	12	<0.04 - <0.05
Magnesium (mg/L)	95	12.4 - 75.7	12	17.6 - 44.8