

## Hine's emerald dragonfly *Somatochlora hineana*

Kingdom: Animalia

Division/Phylum: Arthropoda

Class: Insecta

Order: Odonata

Family: Corduliidae

ILLINOIS STATUS endangered, native

### FEATURES

Hine's emerald dragonfly is about two and one-half inches long with a wingspan of about three and one-third inches. It has bright green eyes and a metallic green body. There are yellow stripes on the side of the body.

### BEHAVIORS

Hine's emerald dragonfly lives in calcareous, spring-fed marshes and sedge meadows that grow over dolomite bedrock. In Illinois, all of those sites are close to the Des Plaines River. Adult males defend small breeding territories. The female lays eggs in shallow water. The eggs may hatch later the same year or overwinter and hatch the following year. The nymphs that emerge from the eggs live in the water for two to four years, molting numerous times. Nymphs eat aquatic insects. After the adult emerges, it lives for about one month, feeding on flying insects. Adults can be found from May through August. This species is endangered federally as well as in the state. The largest remaining breeding population is in Wisconsin. The only other known populations are in northeastern Illinois, northern Michigan and a site in Missouri. Habitat destruction is the main threat to this species, although use of pesticides and other pollutants and reduction in the amount and quality of water in the habitat are issues as well. Work is ongoing in northeastern Illinois regarding this dragonfly and its use of crayfish burrows. Nymphs are known to inhabit Devil crayfish (*Cambarus diogenes*) burrows during cooler times of the year. Studies are trying to determine if increasing the populations of Devil crayfish may be able to assist the survival of the dragonfly.

### HABITATS

Aquatic Habitats

marshes

Woodland Habitats

none

Prairie Habitats

none

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