

Hine's Emerald Dragonfly Habitat Restoration Project at Waterfall Glen Forest Preserve (updated 9/15/08)

Project History

The Forest Preserve board recently approved a Safe Harbor Agreement with the U.S. Fish and Wildlife Service formalizing plans for conservation projects benefiting the Hine's emerald dragonfly. The insect has been on the federal endangered species list since 1995, and the agreement will allow the District to conduct work as part of the project without being in conflict with the Endangered Species Act.

The restoration will be carried out at Waterfall Glen Forest Preserve in Darien with the goal of creating additional habitat to sustain the endangered insect.

Project Funding

The project will be funded by the Illinois State Toll Highway Authority as a part of its mitigation of the effects of the extension of Interstate 355 to Interstate 80. The Natural Resource Management crew will also contribute time and materials to the project.

Project Overview

Hine's emerald dragonflies have very specific habitat requirements. They rely on groundwater-fed, calcium-rich streamlet systems that are lined with shallow dolomite and limestone and support vegetative structures from cattail stands to high-quality wet prairies and sedge meadows.

The insects have a long life cycle, as much as four to five years from egg to adult. Hine's emerald dragonfly larvae spend much of their time hiding in crayfish burrows though it is not fully understood how they coexist with crayfish in the burrows. With such specific needs, a small disturbance in habitat can dramatically harm a population of the dragonflies.

Researchers from the University of South Dakota will guide the work using groundbreaking restoration methods and gathering data throughout the process. The chosen restoration site has many of the species' preferred conditions already in place. Work will focus on removing invasive plants and improving existing groundwater flow.

Current Status (updated 9/15/08)

The university team is already in place and has been working on other research efforts stemming from the I-355 extension. The first phase of the habitat creation began in July. Subsequent phases and monitoring will take place over several years.

