The Nature of Our Work

The purpose and programs of the Illinois Natural History Survey
Illinois Natural History Survey scientists study the plants and animals of Illinois and how they interact among the variety of ecosystems throughout the state. Through its research and educational activities, the Survey fosters responsible management and appreciation of the state’s biological resources. With a staff of more than 200 scientists and technicians, it is recognized as the nation’s premier biological survey.

The Survey’s collections of plant and animal specimens are among the largest and oldest in North America, and they are used by researchers from all over the world. Dating to the 1850s, these collections are becoming increasingly valuable as the number of threatened and endangered species grows.

Founded in 1858, the Survey, now a division of the Illinois Department of Energy and Natural Resources, is headquartered on the campus of the University of Illinois at Urbana-Champaign. Field stations and study areas throughout the state add to the Survey’s research capabilities. Organizationally, the Survey consists of a central administrative group plus four scientific units: the Center for Wildlife Ecology, Center for Economic Entomology, Center for Biodiversity, and Center for Aquatic Ecology.

**Center for Wildlife Ecology**

Staff of the Center for Wildlife Ecology conduct research on native and introduced species such as waterfowl, deer, raccoons, and pheasants. The results of this research are communicated to government officials and others making decisions concerning the status, protection, management, and use of wildlife within the state. Scientists in the Center are widely recognized in their areas of expertise, and the leadership and productivity of Center staff over many years have contributed to a distinguished record of research excellence. The following are a few examples of the many topics that are being investigated by Center staff:

- population dynamics of forest birds
- lead poisoning of waterfowl
- genetic conservation of prairie chickens
- impact of farm policies on wildlife
- distribution of badgers in Illinois

**Center for Economic Entomology**

The Center for Economic Entomology serves the citizens of Illinois by investigating and resolving insect-related issues in four important sectors: agriculture, human health, the environment, and the urban setting. Furthermore, it assembles and distributes information pertaining to these research activities. The Center is jointly funded through the Survey and the College of Agriculture of the University of Illinois at Urbana-Champaign. Among the topics currently being addressed by Center scientists are the following:

- ecology of major insect pests
- integrated pest management of major crops
- insects affecting humans and animals
- biological control of agricultural pests
- pesticides and environmental health

**Center for Biodiversity**

Members of the Center for Biodiversity acquire and apply information pertaining to the diversity of life in order to protect, manage, and develop the biotic resources of Illinois in accordance with long-term environmental goals. The Center is especially concerned with the recognition of species, habitats, and ecosystems that appear to be endangered and with the development of conservation strategies for their protection. The work of the Center’s internationally recognized scientists covers a wide range of organisms and subjects, including the following:

- inventories of native and introduced species
- systematic relationships of groups of organisms
- studies of rare species
- analysis and restoration of disturbed ecosystems
- conservation biology theory and application

**Center for Aquatic Ecology**

The mission of the Center for Aquatic Ecology is to study the aquatic ecosystems of Illinois and the biology of the associated plants and animals. Activities target rivers and streams, ponds and impoundments, and Lake Michigan. The Center is recognized as one of the finest freshwater research groups in North America. Among the many topics being researched are the following:

- impact of land/water use on aquatic systems
- restoration of aquatic habitats and communities
- ecological impacts of biological introductions
- alternative fisheries management activities
- protection of aquatic biodiversity
It will be our main final object to furnish the materials for a full and accurate picture of the native plant and animal life of Illinois as it actually exists in our fields, woods, and waters.

—Stephen A. Forbes, first chief of the Illinois Natural History Survey, writing in 1889