Heartland Network and Prairie Cluster Prototype

Program parks host biologically diverse landscapes and watersheds associated with tallgrass prairies, Eastern forests, interior highlands, and the Mississippi River embayment. These parks protect rivers, streams, wetlands, forest, savannas, and prairies along with the plants and animals that depend on them for their survival.

Types of monitoring:

- Populations of rare, threatened, and endangered species: Topeka Shiner, Western Prairie Fringed Orchid, Ozark Hellbender, Indiana Bat, Cerulean Warbler
- Condition of Outstanding Natural Resource Waters
- Effects of prescribed fire management on land cover
- Water quality in streams and springs
- Prairie, savanna, and wetland ecosystem restoration
- Exotic and invasive species encroachment
- Stream condition associated with landscape changes in the watershed

Landscape fragmentation, water pollution, habitat loss, and invasive species invasions have left our National Parks with a unique challenge to preserve remnants of nearly vanished habitats. The Network uses long-term monitoring to provide timely, consistent, credible scientific data to help resource managers make decisions that best preserve and protect these natural resources for public benefit and enjoyment.

For more information please visit our website at:
http://www1.nature.nps.gov/im/units/htln/

In the Field

Park visitors may see scientists working in the water and on land to carefully collect scientific data and gather information for park managers to make good decisions. From terrestrial botany to aquatic ecology, scientists that work for the National Park Service or for partner agencies, organizations, or contractors collect data using the best scientific methods available. But, field work is only the beginning.

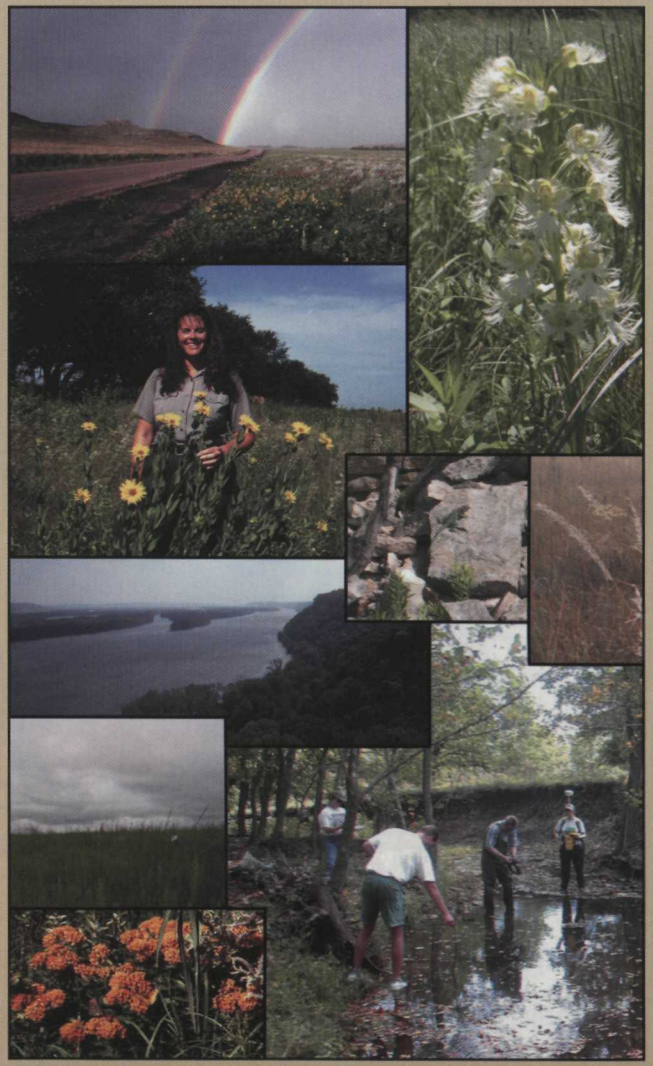
Data managers carefully store information so that it will be available to scientists now and in the future. Scientists analyze and interpret these data to determine status and trends of natural resources and ecosystem health in our parks. Park managers rely on these reports as a basis for resource management decisions. Park rangers share information from the reports with park visitors so that visitors can appreciate the unique resources that the National Park Service protects and preserves for current and future heirs of our natural heritage.

Rev. 01-31-05

The National Park Service

Inventory and Monitoring Program

Heartland Network and Prairie Cluster Prototype



The 1916 Organic Act established the National Park Service and directed it to manage its lands

....to conserve the scenery and the natural and historic objects and the wild life therein and to provide enjoyment of same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

This mission requires the National Park Service to serve as a key partner in preserving public natural and cultural resources in the United States. The NPS ensures that examples of our natural and cultural heritage are available for us, our children, and our grandchildren to enjoy.

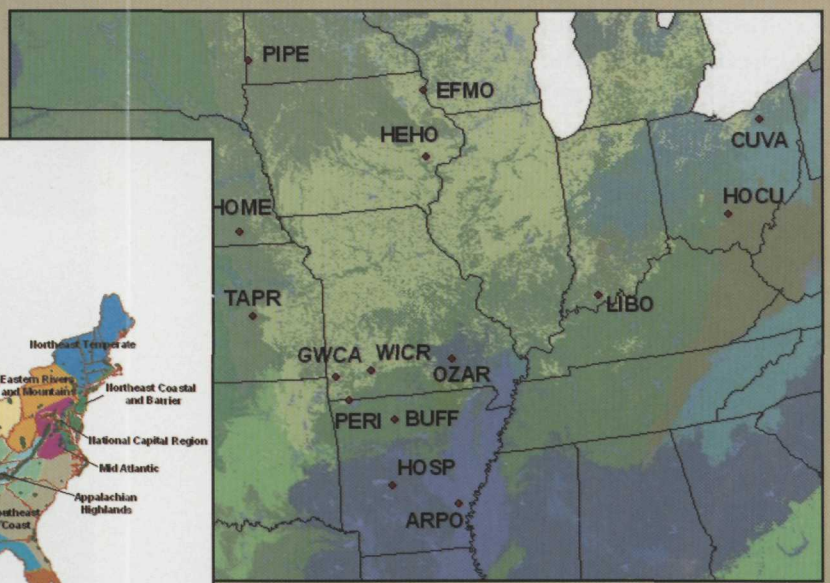
Inventory and Monitoring

In 1990, with a concern for natural resource preservation in our National Parks, the National Park Service initiated a program to inventory and monitor park natural resources. In 2000, the National Park Service expanded the monitoring program to include every National Park Service facility. Scientists monitor natural resources over time to understand changing conditions in parks. This program, known as the Park Vital Signs Monitoring Program, provides scientific information on which parks base management decisions.

Vital Signs Monitoring organized all parks with natural resources into 32 networks across the nation.

Park Vital Signs Monitoring

Parks in each network share resources and professional expertise to monitor indicators of change or "vital signs" within ecosystems. Just as medical doctors measure a patient's vital signs, scientists measure park vital signs to evaluate the health of the ecosystem. The Heartland Network and Prairie Cluster Prototype conduct vital signs monitoring in 15 Midwestern parks that protect a diversity of natural resources. For more information about Vital Signs Monitoring and the 32 networks please visit our website: http://www1.nature.nps.gov/protectingrestoring/IM/inventoryandmonitoring.htm



The purpose of the program is to design and implement long-term ecological monitoring that provides information for park managers to better manage ecosystems.

Arkansas Post NM **(ARPO)** first semi-permanent French settlement in the lower Mississippi Valley

Buffalo NR **(BUFF)** 135 miles along one of the remaining unpolluted, free-flowing rivers in the lower 48 states

Cuyahoga Valley NP **(CUVA)** near Cleveland and Akron, Ohio, 33,000 acres provide refuge for flora and fauna as well as public recreation and solitude

Effigy Mounds NM **(EFMO)** pre-historic mounds on 2,526 acres of forests, prairies, and wetlands along the Mississippi River

George Washington Carver NM **(GWCA)** 210 acres of rolling hills, woodlands, and prairies

Herbert Hoover NHS **(HEHO)** 81 acres of tallgrass prairie and stream within a commemorative site

Homestead NM of America **(HOME)** 195-acre landscape linked to The Homestead Act of 1862

Hopewell Culture NHP **(HOCU)** remnants of Hopewell culture in 1,170-acre site on Scioto River

Hot Springs NP **(HOSP)** 47 hot springs and their watersheds within a city landscape

Lincoln Boyhood NM **(LIBO)** the site of the farm where Abraham Lincoln spent 14 years

Ozark NSR **(OZAR)** 134 miles of clean, clear waters of two rivers in the Ozark Highlands

Pea Ridge NMP **(PERI)** 4,300 acres where the Battle of Pea Ridge saved Missouri for the Union

Pipestone NM **(PIPE)** 282-acre site where Plains Indians have quarried pipestone for over four centuries and continue to quarry it today

Tallgrass Prairie NPreserve **(TAPR)** 10,894 acre example of the once vast tallgrass prairie ecosystem

Wilson's Creek NB **(WICR)** battlefield of first major Civil War engagement west of the Mississippi River, setting the stage for the Battle of Pea Ridge