

## Introduction

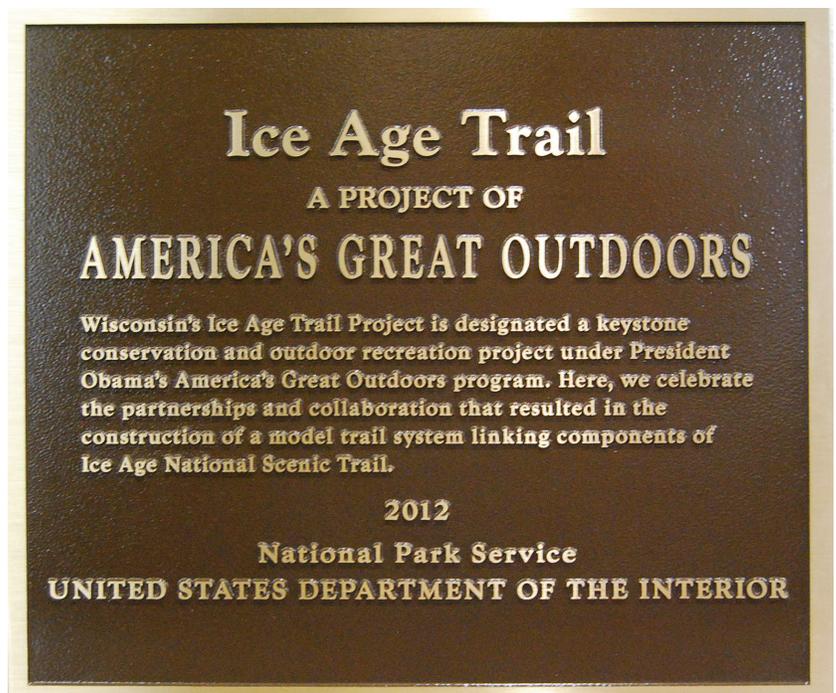
The Ice Age National Scenic Trail (Ice Age NST) is one of only eleven such trails in the United States. The trail follows the edge of the extent of the Wisconsin glaciation of some 10-30,000 years ago, highlighting an amazing array of glaciated features that includes moraines, kettles, kames, drumlins, erratics, kettle lakes, potholes, eskers, marshes, melt-water channels, gorges, ice-walled lake plains, outwash plains, and glacial lakebeds. These features are considered to be among the world's best examples of a glaciated landscape.

While many of the nation's 19 National Historic Trails have interpretive plans, the Ice Age NST is one of the first National Scenic Trails to create one. This plan will center on the (approximately) 70-mile segment of the trail that stretches from the Ice Age Complex at Cross Plains (Dane County) to the Aldo Leopold Shack (Sauk County). This segment was recently identified by the Federal government as one of 100 America's Great Outdoors (AGO) projects. (Two projects were selected in each state; the other Wisconsin project is the Lake Michigan Water Trail). These projects center on outdoor recreation, and are intended to help Americans connect or reconnect with nature, with special emphasis on urban populations and youth. With the AGO segment of the Ice Age Trail within a two-hour drive of a population of over 11 million

people (including Milwaukee and Chicago), it is a prime candidate to help the nation meet those goals. In addition, the segment supports AGO goals that include large landscape conservation, preservation of natural and culturally significant areas, and support for creative public-private partnerships.

The trail segment selected for the AGO program – and for interpretive planning – includes two Ice Age National Scientific Reserves (Cross Plains Complex and Devils Lake State Park), the Baraboo Range, which is the Midwest's largest National Natural Landmark, and the Leopold Shack, a National Historic Landmark. The Long-Range Interpretive Plan (LRIP) may serve as a model plan for the interpretation of other Ice Age Trail segments in the future.

The AGO segment of the Ice Age NST presently includes two operating



visitor contact stations, and one planned for the future. The contact stations are the Visitor Center and Nature Center at Devil's Lake State Park, and the Aldo Leopold Center. A future visitor center will be located at the Cross Plains Complex. While the visitor and nature centers offer opportunities for interpreting the trail's stories, the LRIP focuses on the trail only, not on interior, museum-style exhibits.

### About the Long-Range Interpretive Plan

The National Park Service (NPS) has adopted a unified planning approach for interpretation and education. This approach combines planning for interpretive media, personal interpretive services, and education programs as a single initiative. The Long-Range Interpretive Plan is intended to help parks identify target audiences, clarify objectives, and make programming choices. It defines the overall vision and long-term interpretive goals of the park, including recommendations for the best mix of media and personal services that will effectively convey park themes, and serves as a guide to effective, goal-driven interpretation by defining realistic strategies and actions that work toward achievement of those goals.

Although LRIPs share common elements, each is customized to meet individual park needs. While it considers past interpretive programming, the LRIP is primarily

a forward-looking document that concentrates on actions needed to create or sustain a vigorous and effective interpretive program for the future.

The Long-Range Interpretive Plan process features two phases. One, the Foundation phase articulates significance, themes, and target audiences. The Foundation Document addresses those elements of the plan, and includes a review of existing conditions.

The second phase of the LRIP process recommends interpretive services, media, and partnerships for the site. A Full Text Draft, which includes the revised Foundation Document, articulates those elements, and, after review, the Long Range Interpretive Plan is finalized.

While the LRIP for the Ice Age Trail references and is based, in part, on elements of a recently completed General Management Plan (Record of Decision 2013) for the 1,700- acre Ice Age Complex at Cross Plains, the LRIP for the AGO-designated segment of the Ice Age NST is a separate, stand-alone document, with significance statements and primary interpretive themes centered specifically on the trail.

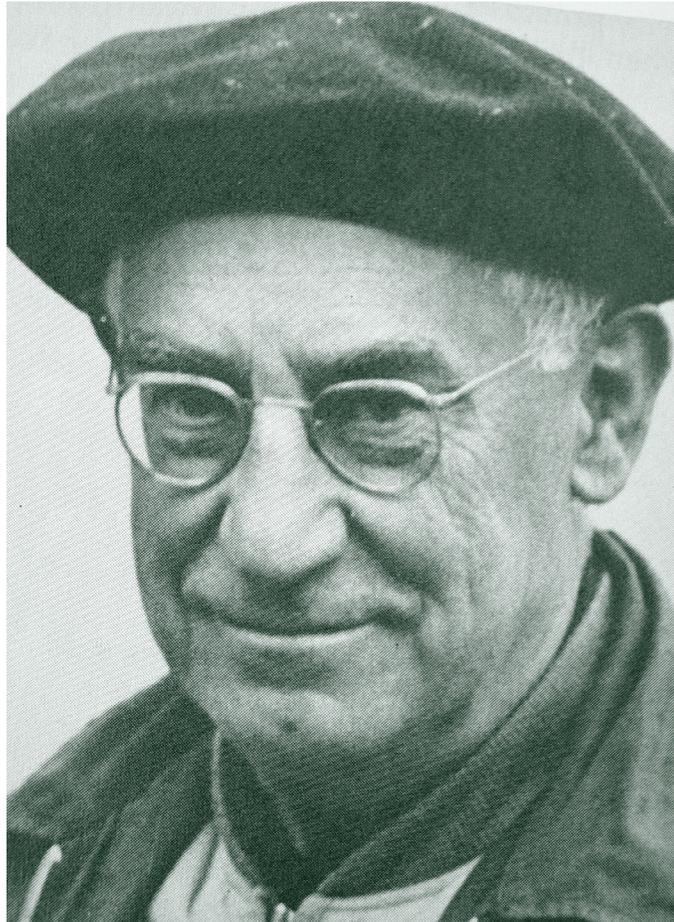
## Legislative Background

The idea for the Ice Age Trail began in 1958 with a Milwaukee lawyer named Ray Zillmer, who had a vision of a long, linear park winding through Wisconsin along the glacier's terminal moraine. In 1964, Congress directed the Secretary of the Interior to designate collections of the most significant geologic features left by the last glacial advance as the Ice Age National Scientific Reserve, whose purpose is to protect, preserve, and interpret Wisconsin's glacial landscape features. As a result, nine sites were identified as official units of the preserve. (They are Two Creeks Buried Forest, Kettle Moraine State Forest North Unit, Campbellsport Drumlins, Horicon Marsh Wildlife Area, Cross Plains Complex, Devil's Lake State Park, Mill Bluff State Park, Chippewa Moraine State Recreation Area, and Interstate State Park.)

The entire trail is within the state of Wisconsin. In 1980, Congress recognized the national significance of the Ice Age Trail by authorizing it as a National Scenic Trail through an amendment to the National Trails Systems Act in 1980 (Public Law 96-370; 16 USC 1244 (a)(10)). The Ice Age Trail passes through six of the nine Scientific Reserve Units. In 1987 the State of Wisconsin named it Wisconsin's first (and, to date, only) State Scenic Trail.

## Purpose

Purpose statements describe why a site was set aside and what specific



**Ray Zillmer,**  
visionary founder  
of the Ice Age Trail

purposes exist for it. The purpose of the trail as stated in the Ice Age Complex at Cross Plain's General Management Plan was adapted to apply to the AGO trail segment. The purpose of the Ice Age NST, AGO segment, is:

- *To ensure protection, preservation, and interpretation of the nationally significant resources and values associated with continental glaciation in Wisconsin, including moraines, erratics, potholes, outwash plains, kettle holes, tunnel channels, drumlins, swamps, lakes, and other reminders of the Wisconsin Ice Age.*



View toward Baraboo Range and Devil's Lake State Park from Riverland Conservancy, Sauk County. Photo courtesy Ice Age Trail Alliance

- *To establish a superlative segment of the Ice Age National Scenic Trail and provide information and interpretation about the trail to the public at significant sites along its route.*
- *To provide outdoor recreational and educational opportunities in support of and compatible with the conservation and enjoyment of the nationally significant scenic, historic, natural, and cultural resources along the trail.*

## Statements of Significance

Significance statements describe what is distinctive about the combined resources of the trail. The statements can reflect natural, cultural, scientific, recreational, and inspirational values, as well as other aspects. These statements summarize the importance of the trail to the nation's natural and cultural heritage. The significance of the Ice Age NST is:

- *Nowhere are the marks of continental glaciation upon the land more impressive than along the Ice Age National Scenic Trail and in the Ice Age National Scientific Reserve units in Wisconsin. The meandering landscape that exhibits the marks of the glacier's farthest advance is a showplace of moraines, kettles, drumlins, erratics, kettle lakes, potholes, marshes, meltwater channels, gorges, outwash plains, and glacial lake beds.*
- *The Ice Age National Scenic Trail's path of glacial features provides outstanding opportunities for recreation, education, scientific observation, citizen science, inspiration, solitude, and enjoyment.*
- *The Ice Age National Scenic Trail provides outstanding opportunities to observe, monitor, and understand the impacts of environmental conditions.*
- *The AGO segment of the Ice Age National Scenic Trail offers outstanding biodiversity and remarkable scenic values while linking several nationally significant sites, such as the Baraboo Range (the Midwest's largest National Natural Landmark) and the Aldo Leopold Shack and Farm (National Historic Landmark) – all within a few hours' drive of 11 million people.*

## Primary Interpretive Themes

Primary interpretive themes describe what needs to be interpreted in order to provide people with opportunities to understand and appreciate the park's purpose and significance. They embody the most important ideas or concepts communicated to the public about the trail. They convey the significance of the resource, and highlight the links between tangible elements, intangible meanings, and universal concepts that are inherent in the park's resources. The themes connect resources to larger processes, systems, ideas, and values, and emphasize the relevance of park stories. They define the core content of the educational opportunities the park offers, and serve as the building blocks upon which interpretive services and educational programs are based. The primary interpretive themes for the trail are:

- ***The Landscape:*** The Ice Age National Scenic Trail landscape and its features uniquely illustrate the contrast between glaciated and unglaciated landscapes, demonstrating the dramatic earth-shaping power of glaciers, and creating the Wisconsin that we know today.
- ***People and the Land:*** The landscapes, both glaciated and unglaciated, have affected human migration, settlement patterns, land use, spiritual life, the economy, and values of the land for thousands of years.
- ***Environmental Conditions:*** The AGO segment of the Ice Age National Scenic Trail, which includes a remarkable range of biodiversity, is a living laboratory for observing, monitoring, and understanding how environmental conditions affect the landscape, ecosystems, and the way we live today, and may live tomorrow.
- ***Ice Age National Scenic Trail:*** The Ice Age National Scenic Trail is a long distance footpath that provides a premier hiking experience. It is a partnership park that is being created and sustained by a multitude of agencies, organizations, and volunteers. It provides tremendous benefits to individuals and communities that include: development of trail building, leadership and service skills; opportunities to leave a mark and contribute to the future, strengthen family and community ties, reconnect with and explore nature; provide space for spiritual contemplation; improve health/wellness; link communities both physically and socially; connect to the past; celebrate regional identity, and a sense of place.
- ***The America's Great Outdoors Project.*** The AGO segment of the Ice Age National Scenic Trail was designated to protect our natural heritage and to create recreational opportunities through federal, state, tribal, non-profit, and local community partnerships. While the other theme statements in the LRIP may apply to other sections

of the Ice Age NST, the AGO theme is focused specifically on that trail segment, and centers on outreach to urban and youth audiences.

- **Stewardship:** Restoring and maintaining healthy and diverse ecosystems along the Ice Age National Scenic Trail connects people with the land, helps inspire development of a land ethic, and creates active stewardship opportunities.

Each of the primary interpretive themes embodies abundant potential topics for interpretation. Some of these are listed. Please see “Next steps for the Long-Range Interpretive Plan” (in the Recommendations section), for a description of the next steps involved in capturing the meaning and relevance of each of these topics, along with how and where to interpret them.

- **The Landscape:** the process of glaciation; comparison of glaciated and unglaciated landscape; how glaciated landscape features were formed; the age of visible features on the landscape; and where within the glacier various features are formed.
- **People and the Land:** the impact of the landscape on human migration, settlement patterns, land use, and the economy; land management strategies of Native peoples; effigy mounds; prominent conservationists from the area; cultural history of the region.

- **Environmental Conditions:** surviving remnants of native vegetation; biodiversity and geology’s impact; natural communities; green corridor concept; natural communities; the dynamic landscape; topography; soils; climate; environmental conditions; phenology; conservation movement.

- **Ice Age National Scenic Trail:** Partnership park managed by NPS, DNR, Ice Age Trail Alliance (IATA), and others; built and maintained by an outstanding volunteer force; links communities along the trail physically and socially; protection of significant features; construction of trail and support facilities; provides a spiritual connection with nature; strengthens people’s ties as they work together to create and preserve the trail and its values; through-hikers (all 1,200 miles) and section hikers (including the “Thousand-Milers”).

- **America’s Great Outdoors Project:** the Department of the Interior’s AGO initiative; AGO’s promise to future generations; landscape conservation and partnerships; increasing public awareness of the importance of conservation; restoration of ecosystems within the Ice Age Trail corridor and surrounding areas; public land management; activities for young adults; goals centered on attracting new trail users, including minority and urban populations.

- **Stewardship: POTENTIAL TOPICS** ecosystem management strategies;

long tradition of stewardship; volunteer contributions to ecosystem management; invasive species; restoring and maintaining healthy sustainable ecosystems; preservation of scenic views, biodiversity, and geological features;

development of a land ethic; the rewards of nurturing a landscape (it nurtures us back); learning the value of nature; connectedness/interdependence between humans and nature; investment in the future; engaging with one's world.

**Ice Age Trail hikers on Mecan River Segment, Waushara County**



## Management Goals

These goals describe management’s intent in offering interpretive and educational programs and services. The goals for interpretive products and services are:

- To create public awareness of the Ice Age Trail and the value it brings to our lives—scenic, recreational, wellness/health, scientific, spiritual and personal relevance.
- To connect people on the trail with the significance of the landforms they will see; and to help them understand how those land forms were created and to imagine the scene 20,000 years ago when the glacier was still present.
- To create public awareness that the Ice Age Trail is a Long Distance National Scenic Trail that is used as a backbone connecting public lands and other trails across the state.
- To connect urban populations to the great outdoors for their enjoyment and to gain appreciation for the natural environment.
- To provide youth with a nature immersion experience and environmental education, a place for creative play, and to inspire them to be the land stewards of the future.

## Audience Segments

The basis for categorizing audience segments for the interpretation and

education program lies in whether or not a particular audience requires communication in a way that is distinct from that of the general audience. Factors to consider include the life experiences of the individual or group, level of education, learning styles, language, cultural traditions, time available for interaction, and others. The Ice Age NST’s audiences are:

- **Local audience.** Given the nature of the trail and its connection to trail communities, this may be the Ice Age NST’s most important audience. Not only does it include casual users of the trail for daily exercise and dog walking, but it also includes opportunities for citizen science and volunteering. The local audience needs interpretive strategies that will sustain their interest and keep them returning to the trail.
- **General audience.** The general audience for the trail could be defined as “out-of-town-travelers.” They arrive by car, will observe landscape features and experience interpretive media, but may or may not hike or walk on the trail.
- **Curriculum-driven audience.** This audience comes with specific curriculum goals in mind. One target age group is 7th grade students, who study Wisconsin geology. Other targets include scouting groups that are meeting badge or community service requirements, high school and college students with service

requirements, home-schooled students, charter schools, private schools, and the senior study group, Road Scholar.

- **Virtual audience.** A certain number of visitors will access the Ice Age NST via the NPS and Ice Age Trail Alliance webpages. These include people who are planning to visit, as well as those for whom the internet will be their only experience of the trail. The virtual audience can also be considered those who access interpretation via smart phone applications, although they are more likely to be on or near the trail when they do so.
- **Families.** This audience overlaps with others, but the emphasis is on connecting with family, getting children outdoors, and teaching whole families outdoor skills so they can continue to enjoy nature on their own.
- **Recreation audience.** This year-round user group includes hikers, walkers, and winter sports enthusiasts. They come to the trail for fun and activity more than interpretation, so the interpretive elements need to be strategically posed in order to reach them. Services for this group may go beyond interpretation, to facilitating their experience by providing amenities, “concierge”-style services, and even a shuttle. Rather than “dog walkers,” this audience includes those who like to hike with their dogs. In addition, themes might be presented dif-



ferently to different audiences, not only through a variety of media, but emphasizing specific aspects of those themes.

- **Non-English speakers.** This audience may require multilingual media.
- **Minority and urban populations.** This audience may require special outreach and additional research into how they can best be reached. Urban outreach strategies employed by other AGO units may provide a starting point to development of the Ice Age NST’s own approach to these audiences.
- **Physically/cognitively challenged audience.** Universal design concepts will make interpretive media accessible to most. Physical adaptations to the trail where feasible will support not only visitors with disabilities, but also families with small children and senior citizens.

**Snow shoeing on Ice Age Trail in Kettle Moraine, Southern Unit. Photo courtesy Ice Age Trail Alliance**



Pasque Flower at Mecan River State Fishery Area, Waushara County

## Desired Visitor Experiences

Statements of desired visitor experiences describe how the park's interpretation and education program facilitates intellectual, inspirational, emotional, and physical experiences for visitors. These statements describe what visitors to the park would like to learn, feel, do, or experience when visiting the park (either in person or remotely). These experiences for the Ice Age NST include:

- Visitors want to experience the trail as a place to escape the stress and chaos of everyday life, where they can find solitude, serenity, silence, and spirituality as they connect with the natural world, finding personal relevance in their experiences.
- Visitors want to experience the sights and sounds of nature. They want to see and smell spring wild flowers and other plants, trace with their fingers the striations in bedrock left by the glacier, hear birdcalls, and see animals or their signs.
- Visitors want to understand how the glacial features they see were formed. They want to learn to read the landscape, to identify each kind of feature, to understand how each was created, and to visualize the land as it may have looked thousands of years ago when the glacier was present. They want to learn how the glacial landscape has influenced the way

people have lived on the land for millennia.

- Visitors want to hike the trail as a means to building and maintaining physical fitness, health, and strength. They want to be able to hike safely and confidently.
- Visitors want to experience beautiful natural views of pastoral and agricultural landscapes that are free of intrusions such as houses, roads, and other signs of modern development.
- Visitors want to connect with families and friends while connecting with nature.

## Issues and Opportunities

This section notes issues and opportunities inside and outside the park, resource-based issues, and internal issues that affect interpretation and education. Collectively, it reflects the perspectives of upper management, as well as staff members and stakeholders. Issues and opportunities for the Ice Age NST include:

- ***Opportunities to reach new audiences.*** The selection of a segment of the Ice Age NST as part of the America’s Great Outdoors (AGO) project provides a superlative opportunity to identify the trail’s educational and interpretive potential resources, and to serve new audiences.
  - o Many people are not aware of the national significance

of the trail: that it is in fact a “National Scenic Trail.”

- o Service to urban audiences will require new, innovative marketing strategies.
  - o The “No Child Left Inside” movement provides excellent opportunities for the Ice Age NST to participate in a nationwide initiative to get more children acquainted with and comfortable in natural surroundings.
  - o The trail provides opportunities for classroom field trips, but administering and delivering school programs can be difficult given current fiscal limitations and constraints on students’ time.
  - o The Ice Age Trail Alliance has sponsored an audience survey by UW-Whitewater, funded by a transportation grant, that provides valuable information about visitor demographics and the trail’s economic impact. Please see below for highlights of the study. The full Joint Effort Marketing Report is available at <http://www.iceaget-rail.org/economic-impact>.
  - o The plan provides the opportunity to identify new technologies to interpret the trail and reach new audiences.
- ***Need for improved user services.*** The trail and its connecting routes

can seem confusing and hard to learn. Good orientation to the trail, including pre-visit, pre-hike, and on-trail locations, represent a critical need. There is also a need for more highway signs directing people to trail segments.

- o There is a need for public transportation to trailheads if the trail is to effectively serve urban audiences.
- o There is a need for more places to camp along the trail.
- **Support.** The Ice Age NST is supported by a strong triad composed of the National Park Service (NPS), Wisconsin Department of Natural Resources (DNR), and the Ice Age Trail Alliance (IATA). The AGO segment of the trail is also supported by the Aldo Leopold Foundation, Baraboo Range Preservation Association, Natural Conservancy, and Dane, Sauk and Columbia County Parks and Recreation Departments. In addition, a national organization, the Partnership for the National Trails System, assists with lobbying expertise and federal funding requests; and the Knowles-Nelson State Stewardship Program and the Land and Water Conservation Fund provide monies to protect lands for the trail.
  - o Many townships, municipalities, and conservation organizations have also been supportive of the Ice Age Trail.
- o While the trail has many strong partners, there remains a need for better communication among groups in the region that share similar mission, values, and goals.
- o Twenty-one trail chapters for the overall trail provide an exceptionally dedicated group of volunteers who handle nearly all trail construction and maintenance. This devoted corps of volunteers is the pride of the National Park Service. The Dane, Sauk, and Columbia County chapters are active in supporting the AGO segment of the trail.
- o The Mobile Skills Crew (MSC), in its tenth year of operation, is a statewide group of volunteers, trained in advanced crew leadership and trail construction techniques, who bring their knowledge and expertise to coordinate, manage, and train volunteers for local trail-building projects. The program provides invaluable service by bringing professional quality management and sustainable trail standards to the trail development system.
- o The Swamplovers project at Table Bluff, a private nonprofit organization that is connected to the Ice Age Trail, provides an excellent example of how hunting and conservation can exist in harmony.

- **Trail-building.** The trail as planned statewide is only half-complete. Land acquisition to connect existing trail segments continues to provide both challenges and opportunities as management seeks to fulfill the plans for the whole trail.
  - o Approximately 60% of the 70-mile AGO Ice Age NST through Dane, Southern Columbia County and Sauk County still needs to be acquired and the trail constructed.
  - o Acquisition within the Ice Age Complex at Cross Plains continues with approximately half of the park in public ownership. Purchase of a few key parcels will allow the Ice Age NST to cross the property. The National Park Service purchase of the former Wilkie farmstead provides new opportunities for interpretation and education, along with the responsibility of deciding on the best future use for the existing farm buildings, and on the most appropriate kinds of visitor services to be provided at the Complex.
- **Land stewardship.** Areas along the Ice Age Trail that are currently protected require regular maintenance and vegetative management. As part of the mission of the Ice Age NST, agencies and volunteers are also enhancing and restoring the land surrounding the trail to indigenous native plant communities.
  - o There is a great deal of interest locally and statewide in prairie re-creation and restoration, a trend that strongly supports the Ice Age NST mission. However, there is a need for education of the public regarding the nature of the pre-contact landscape in order for such programs to be well received. The public frequently has concerns over the necessary removal of trees and shrubs, and the burning required to create a prairie.
- **Interpretive media.** Although not all visitors will have smart phones, there is widespread support for using smart phone technology and other electronic media to interpret aspects of the glacial landscape.
  - o DNR has recently produced a film that includes a series of animations that show the process of glaciation and how the resulting landforms were created.
  - o There is a need to extend interpretation through publications and souvenirs that visitors can bring home with them.
- **A planning model.** The LRIP for this trail segment may serve as a model for planning for other Ice Age Trail segments, and perhaps even for other national scenic trails.



View of Indian Lake and prairie at Indian Lake County Park, Dane County