



Prairie Returns

To The *Prairie State*

Imagine yourself in the middle of a rolling prairie landscape. Big bluestem, Indiangrass and various flowers extend as far as you can see in every direction, with only the outline of a grove of trees in the distance. Bison graze on the prairie grasses while bobolinks sing their bubbly exuberant song and upland sandpipers call their wolf whistle in the distance. Soon you realize there's something missing. There are no buildings in sight and no automobile noise.

Now imagine yourself only 40 miles southwest of Chicago. Here the prairie dreamscape of times past is now a vision for the future. The day is rapidly approaching when you may be able to view and interact with the tallgrass prairie

Story & Photos
by
William Glass

ecosystem as you've never been able to before in our state. You'll be able to experience the Midwestern tallgrass prairie of Illinois much as settlers here experienced it in the early 1800s. One day soon you may be visiting the proposed Midewin National Tallgrass Prairie – Illinois' first national grassland.

The proposed Midewin National Tallgrass Prairie is a 19,000 acre

cornerstone of a 40,000 acre complex of wildlands called the Prairie Parklands Macrosite. Located at the confluence of the Des Plaines, Kankakee, and Illinois rivers in Will and Grundy Counties, the macrosite lies mostly in the Grand Prairie Natural Division of Illinois, the once vast area of tallgrass prairie that covered central and northcentral Illinois in presettlement times. The proposed Midewin National Tallgrass Prairie occupies the former Joliet Army Ammunition Plant.

In addition to the Midewin National Tallgrass Prairie, the Prairie Parklands Macrosite includes Goose Lake Prairie State Park, Des Plaines Conservation Area, Heidecke Fish and Wildlife Area, the Department of Defense's

Joliet Training Area, and satellite natural areas owned or leased by the Illinois Department of Natural Resources and Forest Preserve District of Will County. This large macrosite will protect over 20 different natural communities and will provide habitat for 16 Illinois endangered and threatened species, one federal endangered species, 6 federal candidate species and many area-sensitive animal species. The macrosite will preserve the largest grassland in Illinois and provide habitat for grassland animals that are rapidly declining due to habitat fragmentation. Midewin National Tallgrass Prairie will provide visitors with scenes of what Illinois was like prior to settlement, while teaching the importance of protecting and restoring native plant communities with their plants and animals.

The Joliet Army Ammunition Plant was built in 1939 to produce munitions for World War II. The plant made TNT and DNT for explosives, tetryl for booster charges and lead azide for primers. During peak production the plant produced 5.5 million tons of TNT



Upland sandpiper—photographed at the Joliet Army Ammunition Plant

a week. After World War II the plant was put on standby status and was reactivated during the Korean and Vietnam conflicts. Since the Vietnam conflict, only small quantities of munitions have been produced. In the early 1990's the Army decided to close the plant (development of other types of munitions like plastic explosives made TNT production obsolete) and surplus the land. Only a portion of the huge complex was actually used for munitions production. The remaining land was buffer. Much of the buffer land is leased for agricultural uses (grazing, small grain production and hay.) The 24,500 acre former ammunition plant, includes 1,462 buildings, 200 miles of roads, 166 miles of railroad tracks and 392 storage igloos. Most of

the buildings are in areas where munitions were produced, assembled and loaded. Munitions were once stored in earth-covered concrete igloos which are located in several locations at the plant.

Today, the Joliet Army Ammunition Plant is a relatively wild place where grassland birds such as upland sandpipers are common in the pastures, coyotes can be seen hunting throughout the site, and white-tailed deer abound. The Illinois Department of Natural Resources has been conducting grassland bird surveys there since 1983. These annual surveys have documented that the ammunition plant has the largest population of Illinois endangered upland sandpipers in the entire state and the largest concentration in northern Illinois of the Illinois threatened loggerhead shrike. Large populations of many other area-sensitive grassland birds also occur at the Joliet Army Ammunition Plant.

In 1993, the Army contracted with the Illinois Department of Natural Resources and The Nature Conservancy to perform an endangered and threatened species survey of the Joliet Army Ammunition Plant and Joliet Training Area. These surveys discovered many more state threatened and endangered species as well as several federal candidate species. Many area-sensitive birds and habitat-restricted insect species were also found. Twelve listed

Endangered and threatened species and federal candidate species that breed, winter, or forage on an annual basis at the Joliet Army Ammunition Plant, Will County, Illinois.

Species	Listing Status	Use Status
Black-crowned Night-heron	SE	F
Common Moorhen	ST	B
Great Egret	SE	F
King Rail	ST	B
Long-eared Owl	SE	W
Loggerhead Shrike	ST, FC	B
Northern Harrier	SE	B
Pied-billed Grebe	ST	B
Short-eared Owl	SE	W
Upland Sandpiper	SE	B
Henslow's Sparrow	ST	B
Crawe's Sedge	ST	B
Marsh Yellow Cress	SE	B
Slender Sandwort	SE	B
Spreading Sedge	ST	B
Quillwort	SE	B
Blanding's Turtle	FC	B
Erynium Stem Borer	SE, FC	B
Red-veined Leafhopper	ST, FC	B

FC=federal candidate SE=state endangered ST=state threatened
F=foraging use B=breeding use W=winter use

birds are known to use the site for breeding, wintering or foraging; in addition, five listed plants and two listed insects are known from the site. The surveys also identified several dolomite prairies which are very rare plant communities. The U.S. Fish and Wildlife Service and The Nature Conservancy list dolomite prairie as one of the rarest natural communities in North America.

With the planned Army closure of the Joliet Army Ammunition Plant, many proposals surfaced with ideas about what to do with the property. Congressman George Sangmeister (now retired) put together a 24 member committee which included all the varied interests in the property. On April 8, 1994, the Joliet Arsenal Citizens Planning Commission unanimously voted to adopt a concept plan for the Joliet Army Ammunition Plant. This visionary plan would create the 19,000 acre Midewin Tallgrass Prairie via a federal to federal land transfer from the Army to the U.S. Forest Service. It also called for the conversion of 3000 acres of old munitions production areas into two large industrial parks, the development of a 910 acre National Veterans Cemetery and the siting of a much needed 425 acre county landfill. Bills were introduced in the 103rd Congress to carry out these goals. The House passed the bill unanimously, but in the Senate



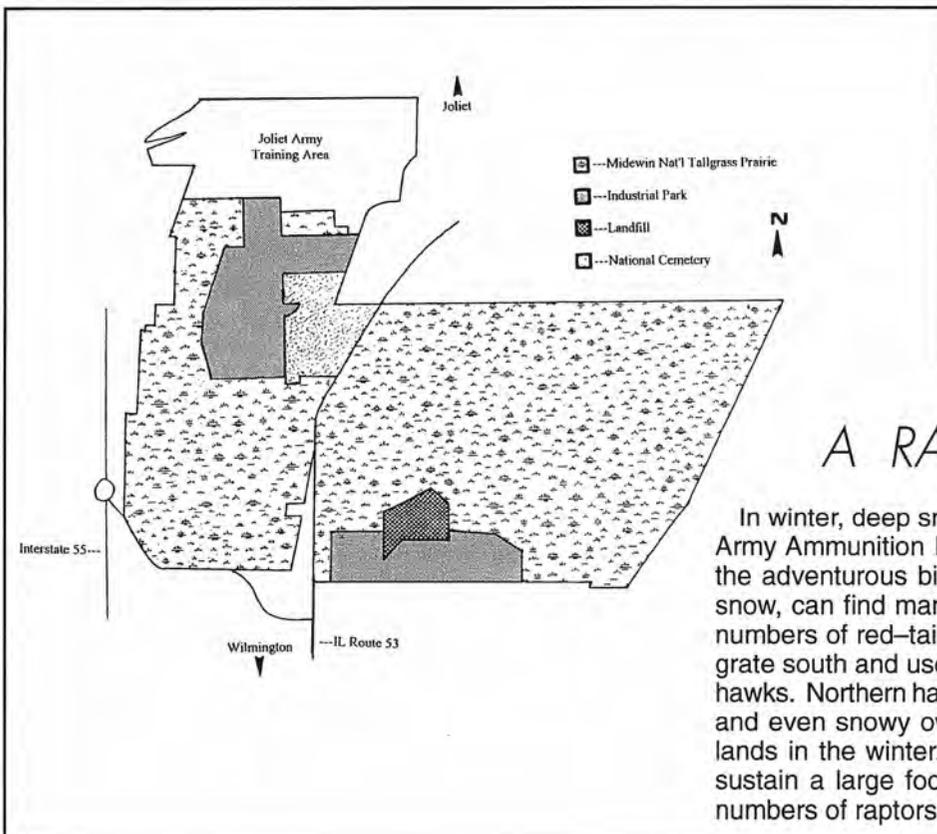
Old munitions manufacturing area of the Joliet Army Ammunition Plant which is to be converted to an industrial park.

time ran out before the bill could reach the floor for a vote.

This year, newly elected Congressman Jerry Weller made this proposal his top conservation priority and introduced the Illinois Land Conservation Act of 1995 on January 26th and Senators Paul Simon and Carol Moseley-Braun introduced a companion bill in the Senate. On July 31, 1995 the House bill passed; the Senate bill is still

pending. The House bill passed due to hard work by many conservation groups including: the Illinois Department of Natural Resources, U.S. Forest Service, Prairie Parklands Alliance, Illinois Audubon, Audubon Council of Illinois, Sierra Club, The Conservation Fund, Openlands Project and The Nature Conservancy to name a few. More work is necessary to get the Senate version of the bill passed before adjournment.

The proposed transfer and reuse plan has been heralded as a model for other armed forces base closures. The Joliet Arsenal Citizens Planning Commission worked together and came up with compromises that considered the varied needs and opinions of many, resulting in an acceptable plan at the local level. As an example of the cooperation, consider the Department of Veteran Affairs (VA) interest in Hoff Woods. The VA wanted to use the Hoff



A RAPTOR PARADISE

In winter, deep snow drifts make getting around the Joliet Army Ammunition Plant difficult. During the winter months the adventurous bird watcher, willing to wade through the snow, can find many raptors wintering on the area. Large numbers of red-tailed hawks and rough-legged hawks migrate south and use the area along with resident red-tailed hawks. Northern harriers, short-eared owls, long-eared owls and even snowy owls can be found foraging in the grasslands in the winter. The expansive grasslands are able to sustain a large food base, resultingly attracting extensive numbers of raptors.

A Thorny Tradition at the Joliet Arsenal

While walking in the spring through the grasslands at the Joliet Army Ammunition Plant, it's possible to find thorny trees adorned with strange objects. These trees are decorated by male loggerhead shrikes. Male loggerheads will impale prey items on thorns to advertise their food gathering abilities to females. A wide diversity of prey items can be found, including voles, mice, small birds, snakes, butterflies, bees, earthworms and crayfish. Later, once the young have hatched and fledged, the adults will impale prey for the young to feed on.



*Newly fledged loggerhead shrike—
photographed at the Joliet Army
Ammunition Plant*

Woods area for a national cemetery. This old prairie grove was fragmented by hayfields and croplands. Their original plan called for internments in the open fields within the woods. Once the importance of maintaining the grove for forest interior birds such as wood thrushes was pointed out, the VA agreed to restore and preserve the woods and place the internments outside the woods. The VA will work with the Illinois Department of Natural Resources and U.S. Forest Service to restore and manage the woods to improve its quality for interior woodland wildlife such as cerulean warblers, ovenbirds and yellow-throated vireos. The fragmented portions inside the woods will be replanted to close the interior of the grove.

Besides converting a former munitions plant into a peace-time use in the form of open space, much needed jobs will be provided to the local community at the two industrial parks. Revenue

from the industrial park property will go to the federal government to reduce the federal debt. The broad-based support that developed for reuse of the Joliet Army Ammunition Plant has been watched closely by conservation groups throughout the country, with the hope that this example will serve as a blueprint for future cooperative efforts on base closure projects.

The Midewin Tallgrass Prairie will be administered and managed by the U.S. Forest Service in cooperation with the Illinois Department of Natural Resources and non-profit groups such as The Nature Conservancy. The Forest Service will hold future public planning meetings to collect input from all concerned citizens. Some suggestions are to reconstruct large tracts of former prairie; restore existing prairie, prairie groves and wetlands; and also providing for outdoor recreation such as bicycling, hiking, picnicking, camping, nature observation and hunting. Volun-

teers will be an integral part of reconstruction and restorations. This innovative cooperative approach will combine the resources and talents of different agencies and groups to help make the dream of a large tallgrass prairie in the "Prairie State" a reality.

The infrastructure of the Joliet Army Ammunition Plant lends itself to the development of numerous recreational uses. The many miles of railroad will be ideal for developing hiking trails. A tramway has been suggested to take visitors through the prairie on the former railroad tracks. Four streams cross the area, but the many existing railroad bridges allow for the trail systems to access most portions of the area.

The Forest Service hopes to open an office at the site this fall. The Illinois Department of Natural Resources will also house some personnel at this office to help manage the grassland. Midewin Tallgrass Prairie has gotten off to an excellent start. Even before for-

mal passage, over \$1,000,000 has been raised for the project, highlighted by a \$250,000 grant from the John D. and Catherine T. MacArthur Foundation. Thanks to the efforts of Congressman Sidney Yates, a \$350,000 appropriation was made available to the Forest Service from the 1995 budget and \$400,000 has passed the House for fiscal year 1996. This money is vital to keep things moving forward on this project.

After passage, the army will start turning over clean portions of the arsenal to the Forest Service after six months. Portions of the Midewin National Tallgrass Prairie could be open to limited access sometime next year, and in the not too distant future visitors will be walking amidst big bluestem and Indian grass.

Bill Glass is a Natural Heritage Biologist with the Illinois Department of Natural Resources in the north-eastern portion of the state. Bill lives in Oak Lawn and is a nature photographer who has had photographs published in national publications.



Prairie Parklands Macrosite: A Case Study of Managing Habitat On A Landscape Scale

by William Glass

The Prairie Parklands Macrosite would create the largest prairie and grassland east of the Mississippi River. The goal of the Prairie Parklands Macrosite and macrosites in general is to preserve, protect, and restore Illinois' natural diversity, provide for the outdoor recreational needs of the people of Illinois, and enhance the economic attraction of the State of Illinois. Although many macrosites will include large tracts of public owned land, macrosites can also include corporate and private property if the owners choose to be partners. Many innovative land protection techniques such as incentive programs, cost-sharing and easements can be used with private landowners.

This type of large scale cooperation attempts to protect areas of significant natural quality through willing partnerships. Governor Jim Edgar recently signed the Conservation 2000 bill, that provides funding to get these projects started. Conservation 2000 and the Macrosite Program should significantly help preserve Illinois' natural diversity through partnerships with governmental agencies, corporate entities and private individuals.

The large size and diversity of the macrosite allows for a landscape approach to management. For example, the large size of the macrosite provides a means of solving the paradoxical problem of managing for area-sensitive species that have quite different habitat requirements.

According to recent research, North American grassland birds have been shown to be suffering steeper, more consistent and widespread population declines than any other bird group. Almost 50% of the grassland bird species that breed in the Midwest are listed as endangered or threatened in at least one state in the region. On a national level the grasshopper sparrow and Henslow's sparrow are among the fastest declining songbirds, while in Illinois the bobolink is the fastest declining songbird. Two factors which are thought to contribute to these declines are fragmentation of large grassland habitats and habitat management practices.

How do we reverse these declines? The simple way is to try and reverse the factors contributing to the decline. At the Prairie Parklands Macrosite, fragmentation and management practices can be addressed. The large size of this macrosite with its thousands of acres of grassland, when combined with thoughtful management of agricultural lands, should provide the grassland habitat necessary for area-sensitive birds such as the short-eared owl and northern harrier. Because of the land's large size and diversity, it'll be possible to practice good management techniques that will favor both grassland wildlife and agricultural economy.

Most of Illinois' present grassland preserves are quite small. Area-sensitive birds can't successfully breed in these small areas, and even if they do their numbers are so meager that they are susceptible to random catastrophic events. Here's an example of how it'll be possible to manage optimally for birds with different habitat needs, on a landscape scale: Henslow's sparrows prefer medium-sized grasslands with tall grass and an established duff layer to build their nests in. These sparrows are very sensitive to fire, because fire re-

Grand Prairie Macrosite

Core Area

Midewin National Tallgrass Prairie	USFS
Joliet Training Area	DOD
Goose Lake Prairie State Park and Nature Preserve	IDNR
Heidecke Fish and Wildlife Area	IDNR
Collins Station Prairie	
Des Plaines Conservation Area	IDNR
Grant Creek Prairie Nature Preserve	
Des Plaines Dolomite Prairie	
Blodgett Road Dolomite Prairie	

Other Areas Within Twelve Miles

Hitts Siding Prairie	IDNR
Wilmington Shrub Prairie Nature Preserve	IDNR
Braidwood Dunes and Savanna Nature Preserve	FPDWC
Sand Ridge Savanna Nature Preserve	FPDWC
Kankakee River State Park and Nature Preserve	IDNR
Mazonia-Braidwood Fish and Wildlife Area	IDNR
I and M Canal National Heritage Corridor	IDNR & NPS
McKinley Woods Forest Preserve	FPDWC
Short Pioneer Cemetery Prairie Nature Preserve	Private
Corporate Owned Wildlands	

USFS--U.S. Forest Service DOD--Department of Defense
 IDNR--Illinois Department of Natural Resources
 FPDWC--Forest Preserve District of Will County
 NPS--National Park Service