

## **The Western Forest-Prairie Natural Division**

### **Characteristics**

The Western Forest-Prairie Natural Division of west-central Illinois is a strongly dissected glacial till plain of Illinoian and Kansan age. Open woodland was the predominant vegetation, with considerable prairie on the level uplands. This character is reflected today with forests in riparian zones and on steep hillsides, and agriculture and rural grasslands in upland areas. This division has a well-developed natural drainage system with major streams having significant flood plains. Land use patterns of this division and the Southern Till Plain are similar, and five-lined skink, ground skink and ornate box turtle are animals characteristic of these two divisions.

### **Major Habitats & Challenges**

Forests - destruction by bulldozing/brush clearing, excessive deer browsing, livestock grazing has degraded structure and floral diversity, invasive species, lack of proper timber management and fire are reducing oak-hickory and open forests; gully erosion on steeply sloped forest lands is problematic

Open Woodland/Barren/Savanna - succession to closed forest; other problems in these habitats are similar to challenges in forest of the division; poor management has diminished the abundance and quality of savanna-type habitats

Grasslands - scarcity due to conversion to cropland; destruction of prairies occurred so long ago, there is little awareness or motivation to restore this ecosystem; pastures are monotypic cool-season grasses and have little structural diversity; dominance by tall fescue and exotic plants; several thousand acres of Conservation Reserve Program grasslands lack management exclusive of compliance mandated periodic mowing these grasslands have poor structure and plant diversity, and offer limited wildlife habitat benefits

Streams - sedimentation, water quality, peak flood volumes have increased and base flows decreased due to drainage alteration, primarily in rural landscapes; dissected topography, drainage alteration, and agricultural tillage exacerbate the secondary problems of high turbidity and siltation, caused by erosion of loess soils from upland sources and stream channels

Lakes and Ponds - drainage alteration and agricultural tillage have resulted in excessive erosion of loess soils, diminishing water quality and reducing depth of ponds and lakes

### **Opportunities**

Due to topography vulnerable to erosion, the natural division is a diverse mix of forest and grassland habitat in addition to cropland. Improving the quality of existing habitats on private lands, with technical assistance and incentives, is essential. Managed grazing is one

such tool for improving and maintaining grassland and open woodland habitats. State and federal farm programs, such as the Conservation Reserve Program and the Conservation Reserve Enhancement Program, can achieve many of the habitat goals for additional reforestation and grassland establishment along field borders, waterways and riparian areas on private land. The Western Forest-Prairie Natural Division is renowned for outstanding white-tailed deer and wild turkey resources. Management for a landscape mosaic of grassland/prairie, savanna, and woodland will sustain these emphasis species and benefit an array of species in greatest need of conservation.

The Lamoine River Ecosystem Partnership of local citizens can facilitate popular support, funding (C2000 and other sources), implementation and evaluation of habitat and watershed improvement. Several Illinois Department of Natural Resources-owned sites can serve as examples of habitat types and models for biodiversity management.

## **Management Guidelines**

### Landscapes

An emphasis on managing habitats (grassland and forest edges) that will support and enhance characteristic habitat (shrubland, grassland, weedy patches and interspersed cropland) for northern bobwhite and eastern cottontail rabbit should be a habitat priority for the division.

Forest - Increase by 46,800 acres. Forests should grade into open woodland or savanna habitats on adjacent uplands. Forested blocks of at least 500 acres should be inventoried and prioritized for addition or linking to other forests blocks. Encourage sound management practices to promote healthy upland forests through landowner education/assistance, prescribed burning, timber stand improvements, and exotics control (mechanical, chemical, or fire).

Open Woodland, Savanna, Barrens - Because savanna was both common as a transitional band between prairie and forest, and as large landscapes of a mix of prairie and trees, it is difficult to determine functional sizes of savanna needed to encompass the breadth of flora and fauna typical of savanna. Analysis of historic vegetation and disturbance regimes and present conditions is needed to make decisions on where forest, prairie or savanna management is appropriate. An increase of 45,000 acres is needed to meet wildlife objectives. Savanna, barrens, or open woodland habitat should be encouraged in all isolated woodlots under 15 acres in size. Encourage sound management practices to maintain and increase the extent of natural savannas and barrens through landowner education and assistance, prescribed burning, selective woody encroachment removal and exotics control (mechanical, chemical, or fire).

Grassland - Increase by 135,000 acres to meet wildlife objectives; at least one ecological pattern grassland complex should be identified for consideration at locations of former large prairies. Enhance the quality of existing pastures and idle grasslands with fescue

conversion, improved grazing practices, prescribed fire, soil disturbance and other techniques. The CP-33 practice of the Conservation Reserve Program has a minimum of a 30-foot grassy field border for establishment; the CP-2 warm-season grass practice is functional as quality nesting and roosting cover for an abundance of wildlife species regardless of acreage. Open, treeless, upland grasslands more than 0.5 mile wide are especially important to Species in Greatest Need of Conservation.

Streams - Riparian forests should be at least 2 times as wide as the adjacent stream for all drainages.

#### Natural communities

Prairie remnants, glacial drift hill prairie, dry-mesic savannas, dry-mesic barrens, seeps, barrens, riparian corridors, large blocks of oak-hickory forest

#### Critical species

Creek heelsplitter and monkeyface, regal fritillary, darter species, shiner species, freckled madtom, Kirtland's snake, slender glass lizard, bald eagle, loggerhead shrike, brown creeper, barn owl, northern harrier, upland sandpiper, short-eared owl, Henslow's sparrow, cerulean warbler, Bewick's wren, bobcat, Franklin's ground squirrel, gray fox, Indiana bat, river otter

#### Emphasis Game Species

Uplands - northern bobwhite, white-tailed deer, wild turkey, American woodcock, fox and gray squirrel

Streams - channel catfish, flathead catfish, smallmouth bass, largemouth bass, beaver, raccoon, wood duck, mallard

Lakes and ponds - bluegill, largemouth bass

#### Nongame Indicator Species

Stream - creek chub, blacknose dace, northern hogsucker, shorthead redhorse, stonecat, fantail darter, orangethroat darter, slenderhead darter

Grassland - 13-lined ground squirrel, bobolink, eastern and western meadowlarks, dickcissel, sedge wren

Open Woodland/Savanna/Barren - red-headed woodpecker, eastern kingbird, Baltimore oriole, yellow-billed cuckoo, Bell's vireo, indigo bunting, field sparrow

Forest - pileated woodpecker, Cooper's hawk, Kentucky warbler, American redstart, brown creeper, bobcat

## **Recreational Opportunities**

Hunting, especially for white-tailed deer and wild turkey, draws people from the entire nation to this region. Deer quality is nationally/internationally renown. Catfish and pond fishing, mushroom hunting, fall driving tours (e.g.. Spoon River Drive).

## **Educational/Interpretive**

Dickson Mounds Museum

## **Natural Resource Commodities**

Commercial hunting, especially for deer, is a very important commodity that drives land purchases, land uses, and income potential in this division. Forest products (e.g. timber production) have a strong economic market here. Fur trapping, livestock forage (hay/pasture), Spoon River commercial fishing.

## **Conservation Opportunity Areas**

### Lower LaMoine River

Protected areas - Conservation Reserve Enhancement Program contracts

Priority resources - extensive upland oak-hickory forest, open woodland/savanna, and bottomland forest

Partners - Lamoine River Watershed Partnership, Illinois Department of Natural Resources, Natural Resources Conservation Service, Quail Unlimited, National Wild Turkey Federation

Implementation resources - Conservation Reserve Program, Conservation Reserve Enhancement Program, Forestry Incentive Program, Supplemental Incentive Program, Forestry Development Act, Private Land Incentive Program, Acres for Wildlife Program

### Siloam Springs Complex

Protected areas - Siloam Springs State Park and Buckhorn Unit, Weinberg-King State Park including Cecil White and Scripps units

Priority resources - extensive upland oak-hickory forest, open woodland/savanna, and prairie remnants

Key Actions - Determine appropriate extent of grassland, open woodland and forest; restore open woodlands and savannas

Partners - Illinois Department of Natural Resources, Natural Resources Conservation Service, Quail Unlimited, National Wild Turkey Federation

Implementation resources - Conservation Reserve Program, Conservation Reserve Enhancement Program, Forestry Incentive Program, Supplemental Incentive Program, Forestry Development Act, Private Land Incentive Program, Acres for Wildlife Program

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