

The Middle Mississippi Border Natural Division

Characteristics

The Middle Mississippi Border Natural Division of west-central Illinois consists of a relatively narrow band of river bluffs and rugged terrain bordering the Mississippi River floodplain from Rock Island County to St. Clair County and the lower Illinois floodplain. Forest is the predominate vegetation with interspersed hill prairies common on west-facing bluffs. Limestone cliffs are common features, and the dark-sided salamander and western worm snake are restricted to this division. Forests of this division, close to river foraging areas, are important winter roosting sites for significant concentrations of bald eagles.

Major Habitats & Challenges

Forests - invasive exotic plants (bush honeysuckle), increase of less desirable species (black locust, maple, sassafras), deer browsing, lack of management and poor forestry practices, soil erosion as streams traverse bluff lines and subsequent sedimentation of the river bottomlands are problematic

Open Woodland/Savanna/Barren - invasion by exotic species, lack of management

Grassland - dominance by fescue and other exotic plants, succession to forests, lack of fire/management; conversion to cropland

Primary Communities (bluffs) - lack of knowledge about these communities

Lakes and Ponds - Drainage alteration and intensive agricultural production have resulted in excessive erosion of soils of the upland portions of the Middle Mississippi Border that diminish water quality and depth of ponds and lakes due to sedimentation.

Streams - Peak flood volumes have increased and base flows decreased from historic levels due to drainage alteration. Drainage alteration exacerbates the secondary problems of high turbidity and siltation. In some areas, rural subdivision development may lead to higher nutrient loads in streams receiving septic runoff.

Opportunities

The Middle Mississippi Border Division's Driftless Section has a high proportion of its land in forest and grassland cover. Due to this area's highly erodible crop land, participation in the Conservation Reserve Program is high. The Conservation Reserve Program and other state and federal incentives programs can help achieve habitat objectives and address issues such as altered drainage on private lands. Cost-share for timber stand improvement is available through programs including Illinois Forestry Development Act, and Environmental Quality Incentives Program, and improve wildlife habitat on private forests. Hill prairie

management is being addressed through the Highway 96 Hill Prairie Complex Plan, as well as a statewide program (in development). The Nature Conservancy's Upper Mississippi River Project works in close partnership with other organizations to conserve and restore the Mississippi river and its major tributaries by improving water quality, restoring healthy river flows, and reclaiming floodplains as natural habitat.

Management Guidelines

Landscapes

Forests - Increase forest cover by at least 21,600 acres; 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). Forests should grade into open woodland or savanna habitats on all adjacent uplands.

Open Woodland/Savanna/Barrens - Increase open woodland, savanna, & barrens by at least 7,500 acres. Pro-actively manage existing habitat that is not already in a management agreement or long term protection program. 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). Savanna or open woodland habitats should be encouraged in isolated woodland blocks under 15 acres in size.

Grasslands - Increase grassland habitat by 31,000 acres. Encourage sound management practices to maintain and increase the extent of hill prairies and other grasslands through landowner education and assistance, prescribed burning, selective woody encroachment removal and exotics control (mechanical, chemical, or fire).

Streams - Encourage sound management practices to maintain and upgrade the quality of streams through landowner education and assistance, adjacent buffer and riparian corridors to filter herbicide runoff, and correcting degradation caused by sedimentation and development.

Natural communities

Hill prairies, limestone cliffs/bluffs

Critical species

Brassy minnow, slender madtom, banded sculpin, dark-sided salamander, western worm snake, timber rattlesnake, brown creeper, northern harrier (winter), short-eared owl (winter), bobcat

Emphasis Game Species

Channel catfish, flathead catfish, smallmouth bass, largemouth bass, bluegill, wild

turkey, white-tailed deer, fox and gray squirrel, raccoon, red and gray fox, coyote

Nongame Indicator Species

Forest - eastern box turtle, great horned owl, eastern screech-owl, black-capped chickadee, white-breasted nuthatch, white-footed mice

Open Woodland/Savanna - copperhead, great horned owl, eastern screech-owl, blue jay, black-capped chickadee, white-breasted nuthatch, white-footed mice

Bluffs - copperhead, turkey vulture

Streams - creek chub, southern redbelly dace, shorthead redhorse, fantail darter, orangethroat darter, slenderhead darter

Recreational Opportunities

Deer and turkey hunting, catfish fishing, mushroom hunting, fall driving tours (e.g. Pere Marquette State park), winter eagle watching

Educational/Interpretive

Pere Marquette State Park (Fishing Fair, Eagle Days), Great Rivers Museum at Lock & Dam 26, Lewis and Clark Museum, Kampsville Archaeological Museum, McCulley Heritage Project

Natural Resource Commodities

Timber, trapping, ginseng and other marketable roots, hunting (especially white-tailed deer and turkey), commercial fishing

Conservation Opportunity Area

Pere Marquette State Park

Protected Lands - 8,000-acre Pere Marquette State Park

Priority Resources - large forested area, hill prairies, major rivers, bald eagles

Key Actions - develop a plan to deal with the numerous exotic plant species

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