



Grassland: Fence row

Description

Fence rows are a linear area of idle vegetation that interrupts large blocks of continuous grassland (e.g., hedge row adjacent to pasture or row crop).

General Condition of Feature

Most of the fence rows in the Eastern Upper Peninsula are considered to be fair or good condition as wildlife habitat (~80%). Most of the remaining areas are considered degraded. Fence rows are a fairly rare component of the landscape in the Eastern Upper Peninsula.

Associated Natural Communities

N/A – no native natural communities

Associated Species of Greatest Conservation Need

REPTILES

blue racer (*Coluber constrictor foxii*)
western fox snake (*Elaphe vulpina*)
eastern massasauga (*Sistrurus catenatus*
catenatus)

BIRDS

Sharp-tailed Grouse (*Tympanuchus phasianellus*)
Northern Bobwhite (*Colinus virginianus*)

BIRDS cont.

Eastern Kingbird (*Tyrannus tyrannus*)
Northern Mockingbird (*Mimus polyglottos*)
Brown Thrasher (*Toxostoma rufum*)
Vesper Sparrow (*Pooecetes gramineus*)
Dickcissel (*Spiza americana*)

MAMMALS

red bat (*Lasiurus borealis*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Grazing and mowing patterns: Lack of maintenance results in succession to forested landscape features. Farm abandonment results in succession to shrub and forested feature types around fence rows.

BIOLOGICAL INTERACTIONS

- Invasive plants and animals: Some fence rows are composed of invasive plant species.

OTHER

- Historic status/current abundance: This is not a major feature of the landscape in the Eastern Upper Peninsula and was not historically.

Conservation Actions Needed [Threats addressed]

LAND, WATER & SPECIES MANAGEMENT

- Manage to approximate natural disturbance regimes using controlled grazing and mowing. [Grazing and mowing patterns]
- Institute invasive species monitoring, prevention and control programs. [Invasive plants and animals]

EDUCATION & AWARENESS

- Promote agricultural practices which retain fence rows within farm fields. [Grazing and mowing patterns]

Research and Survey Needs

- Examine how the width of fence rows and their vegetative species composition affect their value to wildlife. Are there other variables of fence row condition that influence their value to wildlife? Does the feature type or species composition of the surrounding matrix have a significant effect on the value to wildlife?
- Determine the effects of management and maintenance of fence rows on wildlife within fence rows and in the surrounding matrix.
- Examine both the positive and negative values of fence rows to wildlife. These systems contribute to fragmentation but may also provide travel corridors or patches of necessary habitat. Is there an optimal amount of fence row which balances these effects? Increased field size and cultivation on agricultural land generally results in fewer and smaller fence rows. Is there a combination of fence row and cultivation which optimizes the value to wildlife and economic return?
- Determine whether fence rows function as sinks. Determine how this varies by species?
- Inventory fence row management methodologies. How prevalent are these techniques? What are the impacts of each technique on wildlife?
- Evaluate the impacts of fence rows on invasive and non-invasive species. Quantify the role of fence rows as corridors for invasive species. Quantify the role of fence rows as barriers to native species.
- Develop a functional definition of fence row. At what point (size, configuration, etc.) does a fence row become a patch or does it become the surrounding matrix? Is a fence row adjacent to a right-of-way functionally different than a fence row isolated within a grassland matrix?

MICHIGAN'S WILDLIFE ACTION PLAN
TERRESTRIAL SYSTEMS: EASTERN UPPER PENINSULA

Monitoring

- Track acreage and distribution of fence rows across the landscape.
- Track changes in the floristic composition of fence rows.
- Analyze changes in agricultural practices and their impact on the abundance and distribution of fence rows.