



## 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

Much of the fence row in the Northern Lower Peninsula is considered to be degraded or very degraded as wildlife habitat (~60%). Most of the remaining areas are considered to be in fair or good condition.

### Associated Natural Communities

N/A – no native natural communities

### Associated Species of Greatest Conservation Need

#### REPTILES

blue racer (*Coluber constrictor foxii*)  
black rat snake (*Elaphe obsoleta obsoleta*)  
eastern massasauga (*Sistrurus catenatus catenatus*)

#### BIRDS

Sharp-tailed Grouse (*Tympanuchus phasianellus*)  
Northern Bobwhite (*Colinus virginianus*)  
Eastern Kingbird (*Tyrannus tyrannus*)  
Migrant Loggerhead Shrike (*Lanius ludovicianus migrans*)

#### BIRDS cont.

Northern Mockingbird (*Mimus polyglottos*)  
Brown Thrasher (*Toxostoma rufum*)  
Yellow-breasted Chat (*Icteria virens*)  
Vesper Sparrow (*Pooecetes gramineus*)  
Dickcissel (*Spiza americana*)

#### MAMMALS

red bat (*Lasiurus borealis*)  
least weasel (*Mustela nivalis*)  
woodland vole (*Microtus pinetorum*)

### Associated Threats

#### MODIFICATION OF NATURAL PROCESSES

- Grazing and mowing patterns: Lack of maintenance results in succession to forested landscape features.

#### HABITAT CONVERSION

- Conversion to agriculture: Intensive farming practices that don't allow for untilled areas threaten the existence of fence rows.

### Conservation Actions Needed [Threats addressed]

#### LAND, WATER & SPECIES MANAGEMENT

- Manage to approximate natural disturbance regimes using controlled grazing and mowing. [Grazing and mowing patterns]

#### EDUCATION & AWARENESS

- Promote agricultural practices that retain fence rows in crop fields. [Conversion to agriculture]

### 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 wildlife value? Does the feature type or species composition of the surrounding matrix have a significant effect on wildlife value?
- 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 wildlife value 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?

### Monitoring

- Track acreage and distribution of fence rows across the landscape.
- Track changes in the floristic composition of fence rows.

**MICHIGAN'S WILDLIFE ACTION PLAN  
TERRESTRIAL SYSTEMS: NORTHERN LOWER PENINSULA**

- Analyze changes in agricultural practices and their impact on the abundance and distribution of fence rows.