



Grassland: Right-of-way

Description

Right-of-ways are linear features associated with roadways, railways, powerlines, pipelines, etc. Generally they contain grassland communities that run linearly through another feature (e.g., forests, row crop).

General Condition of Feature

Rights-of-way are generally considered to be in fair condition in the Eastern Upper Peninsula.

Associated Natural Communities

N/A – no native natural communities

Associated Species of Greatest Conservation Need

SNAILS

widespread column (*Pupilla muscorum*)

INSECTS

a tiger beetle (*Cicindela limbalis*)

early hairstreak (*Erora laeta*)

tawny crescent (*Phyciodes batesii*)

AMPHIBIANS

blue-spotted salamander (*Ambystoma laterale*)

REPTILES

smooth green snake (*Liochlorophis vernalis*)

eastern massasauga (*Sistrurus catenatus catenatus*)

REPTILES cont.

wood turtle (*Glyptemys insculpta*)

BIRDS

Northern Bobwhite (*Colinus virginianus*)

Eastern Kingbird (*Tyrannus tyrannus*)

Field Sparrow (*Spizella pusilla*)

Vesper Sparrow (*Pooecetes gramineus*)

Dickcissel (*Spiza americana*)

Western Meadowlark (*Sturnella neglecta*)

MAMMALS

northern bat or northern myotis (*Myotis septentrionalis*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Grazing and mowing patterns: Lack of maintenance results in succession to forested landscape features. The timing of grazing or mowing may affect community composition.

HABITAT CONVERSION

- Industrial, residential, and recreational development

POLLUTION

- Pesticides and herbicides: Herbicides used to maintain rights-of-way may pose a threat to species that are obligate residents of the right-of-way.

NON-CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Non-consumptive recreation: Uncontrolled ATV and ORV use can impact these systems.

Conservation Actions Needed [Threats addressed]

LAND, WATER & SPECIES MANAGEMENT

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

LAW & POLICY

- Work with municipalities to develop planning and zoning ordinances which incorporate right-of-way features within urban and suburban matrices. [Industrial, residential, and recreational development]
- Develop and enforce regulations to curtail recreational activities that cause significant damage. [Non-consumptive recreation]

RECREATION

- Promote responsible ATV and ORV use. [Non-consumptive recreation]

Research and Survey Needs

- Determine optimal disturbance patterns to maintain rights-of-way without degrading their value to wildlife.
- Examine how the width of rights-of-way and their vegetative species composition affect their value to wildlife. Are there other variables of right-of-way condition that influence their importance to wildlife? Does the feature type or species composition of the surrounding matrix have a significant effect on the importance of rights-of-ways to wildlife?
- Determine the impacts of development (gas pipelines, electrical lines, etc.) of rights-of-way. Is this a function of disturbance or fragmentation?
- Examine both the positive and negative effects of rights-of-way to wildlife. These systems contribute to fragmentation but may also provide travel corridors or patches of necessary habitat. Is there an optimal amount of right-of-way which balances these effects?
- Determine whether rights-of-way function as sinks. Determine how this varies by species?

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

- Inventory right-of-way management methodologies. How prevalent are these techniques? What are the impacts of each technique on wildlife?
- Evaluate the impacts of rights-of-way on invasive and non-invasive species. Quantify the role of rights-of-way as corridors for invasive species. Quantify the role of rights-of-way as barriers to non-invasive and native species.

Monitoring

- Track the acreage and distribution of rights-of-way across the landscape.
- Track changes in floristic composition within rights-of-way.