



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-ways are generally considered to be in fair condition in the Western Upper Peninsula.

Associated Natural Communities

N/A – no native natural communities

Associated Species of Greatest Conservation Need

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*)
- wood turtle (*Glyptemys insculpta*)

BIRDS

- Northern Bobwhite (*Colinus virginianus*)

BIRDS cont.

- 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*)
- eastern pipistrelle (*Pipistrellus subflavus*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Grazing and mowing patterns: Many rights-of-way are maintained through regular mowing or grazing activities and convert to shrub or forested feature types in their absence.
- Altered fire regime: A lack of fire may favor the establishment of invasive plant species.
- Fragmentation

POLLUTION

- Pesticides and herbicides: Herbicide use to maintain rights-of-way and eliminate woody vegetation is a common practice.

NONCONSUMPTIVE BIOLOGICAL RESOURCE USE

- Non-consumptive recreation: Many rights-of-way function as ATV/ORV trails.

BIOLOGICAL INTERACTIONS

- Invasive plants and animals: The current prevalence of invasive species may require restoration efforts to establish native plant communities.

Conservation Actions Needed [Threats addressed]

LAND, WATER, & SPECIES MANAGEMENT

- Encourage responsible pesticide and herbicide use to maintain rights-of-way. [Pesticides and herbicides]
- Develop and implement a prescribed burn plan that minimizes the potential for establishment of invasive plants. [Invasive plants and animals; Altered fire regime]
- Restore native plant communities and repair damaged or degraded systems. [Grazing and mowing patterns; Fragmentation]
- Manage to approximate natural disturbance regimes using managed fire, grazing and mowing and prescribed fire. [Altered fire regime; Grazing and mowing patterns]
- Develop mowing guidelines to maintain grassland features within rights-of-way. [Grazing and mowing patterns; Fragmentation]

LAW & POLICY

- Develop and enforce regulations to curtail recreational activities that cause significant damage. [Non-consumptive recreation]

RECREATION

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

Research and Survey Needs

- Determine optimal disturbance patterns to maintain rights-of-way without degrading their value to wildlife.

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

- 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?
- 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.