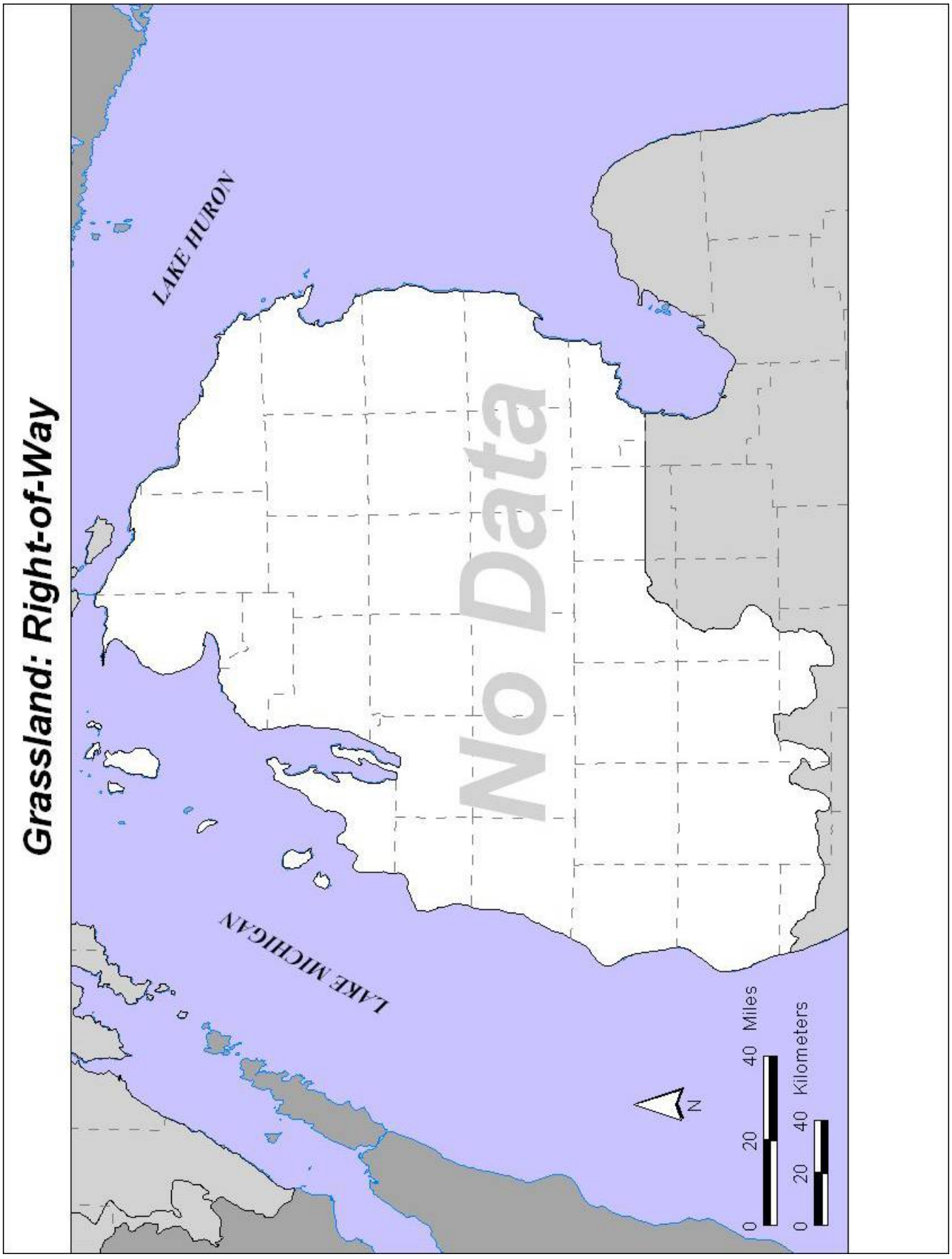
Grassland: Right-of-Way
LAKE HURON
No Data
LAKE MICHIGAN
N
0
20
40 Miles
0
20
40 Kilometers

Grassland: Right-of-way

Description

Rights-of-way 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

Most of the rights-of-way in the Northern Lower Peninsula are considered to be in fair or good condition as wildlife habitat (~85%). Much of the remaining areas are degraded.

Associated Natural Communities

N/A – no native natural communities

Associated Species of Greatest Conservation Need

SNAILS
- widespread column *(Pupilla muscorum)*
- Foster mantleslug *(Pallifera fosteri)*
- Carolina mantleslug *(Philomycus carolinianus)*

INSECTS
- great plains spittlebug *(Lepyronia gibbosa)*
- red-legged spittlebug *(Prosapia ignipectus)*
- a tiger beetle *(Cicindela limbalis)*
- persius duskywing *(Erynnis persius persius)*
- grizzled skipper *(Pyrgus wyandot)*
- ottoe skipper *(Hesperia ottoe)*
- dusted skipper *(Atrytonopsis hianna)*
- early hairstreak *(Erora laeta)*
- Karner blue *(Lycaeides melissa samuelis)*
- tawny crescent *(Phyciodes batesii)*
- phlox moth *(Schinia indiana)*

AMPHIBIANS
- blue-spotted salamander *(Ambystoma laterale)*

REPTILES
- smooth green snake *(Liochlorophis vernalis)*

REPTILES cont.
- queen snake *(Regina septemvittata)*
- eastern massasauga *(Sistrurus catenatus catenatus)*
- wood turtle *(Glyptemys insculpta)*

BIRDS
- Northern Bobwhite *(Colinus virginianus)*
- Eastern Kingbird *(Tyrannus tyrannus)*
- Migrant Loggerhead Shrike *(Lanius ludovicianus migrans)*
- 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)*
- woodland vole *(Microtus pinetorum)*

Associated Threats

MODIFICATION OF NATURAL PROCESSES
- Grazing and mowing patterns: Lack of maintenance results in succession to forested landscape features.
- Altered fire regime
- Altered hydrologic regimes: Ditching along roads may alter local hydrology.

HABITAT CONVERSION
- Industrial, residential, and recreational development: Roadways affect the movement of wildlife and may increase mortality, either through collisions during travel or during scavenging of these animals. Construction of structures (e.g., power lines, roads, pipelines) within rights-of-way disturbs natural communities.

POLLUTION
- Urban, municipal, and industrial: Road salt affects soil and water chemistry.
- Pesticides and herbicides: The use of herbicides may alter local plant communities, but herbicides may be used to maintain rights-of-way.

NON-CONSUMPTIVE BIOLOGICAL RESOURCE USE
- Non-consumptive recreation: Rights-of-way are used as ATV and ORV trails.

BIOLOGICAL INTERACTIONS
- Invasive plants and animals: Invasive species may use rights-of-way as corridors to expand their range.

Conservation Actions Needed [Threats addressed]

LAND, WATER & SPECIES MANAGEMENT
- Manage to approximate natural disturbance regimes using prescribed fire, grazing, mowing, and dispersal of water flow patterns. [Grazing and mowing patterns; Altered fire regime; Altered hydrologic regimes]
- Institute invasive species monitoring, prevention and control programs. [Invasive plants and animals]
- Work with utility companies and transportation agencies to plan right-of-way locations and maintenance techniques. [Pesticides and herbicides; Invasive plants and animals]

LAW & POLICY

- 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?
- 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.