



Source - IFMAP Michigan Land Cover dataset. Row crops include annual crops planted in rows (e.g. corn and soybeans.)

## Grassland: Row-crop

### Description

Row-cropped areas are agricultural fields that are planted with a single species (usually corn or soybeans) in evenly spaced rows and harvested annually.

### General Condition of Feature

Most of the row crop in the Western Upper Peninsula is considered to be in fair condition as wildlife habitat. Row crop is an uncommon feature in the region.

### Associated Natural Communities

N/A – no native natural communities

### Associated Species of Greatest Conservation Need

#### *BIRDS*

Northern Bobwhite (*Colinus virginianus*)  
Northern Harrier (*Circus cyaneus*)  
Killdeer (*Charadrius vociferus*)  
Common Nighthawk (*Chordeiles minor*)  
Red-headed Woodpecker (*Melanerpes erythrocephalus*)

#### *BIRDS cont.*

Purple Martin (*Progne subis*)  
Savannah Sparrow (*Passerculus sandwichensis*)

#### *MAMMALS*

red bat (*Lasiurus borealis*)  
deer mouse (*Peromyscus maniculatus gracilis*)

### Associated Threats

#### *MODIFICATION OF NATURAL PROCESSES*

- Fragmentation: Development results in subdivision of larger farmed parcels.

#### *HABITAT CONVERSION*

- Industrial, residential and recreational development: Conversion pressure leads to residential and industrial development.

#### *POLLUTION*

- Pesticides and herbicides

#### *OTHER*

- Historic status/current abundance: Row crops are very uncommon in the Western Upper Peninsula and have been rare historically.

### Conservation Actions Needed [Threats addressed]

#### *LAND, WATER, & SPECIES MANAGEMENT*

- Encourage agriculture practices that reduce the use of pesticides and herbicides. [Pesticides and herbicides]

#### *LAW & POLICY*

- Work with municipalities to promote planning and zoning insuring adequate protection for row crop or their conversion to features that have greater value to wildlife. Discourage parcelization and reduction in patch size of existing row crop. [Industrial, residential, and recreational development; Fragmentation]

#### *ECONOMIC & OTHER INCENTIVES*

- Encourage maintenance of row crop features through private land conservation initiatives (CRP, CREP, etc.). Provide sustainable agriculture strategy training to help keep family farms afloat. [Industrial, residential, and recreational development]

### Research and Survey Needs

- Inventory existing row crop within the Western Upper Peninsula to determine current status.
- Determine the impact of soil homogenization on wildlife species diversity.
- Determine the impact on microtopography on wildlife species diversity. Agricultural practices tend to level land, flattening hills and filling potholes, resulting in relocation of topsoil and exposure of soil substrates. How great is this effect across the landscape? What are the implications for restoration of natural features where this has occurred?
- Study the effects of timing and method of harvest and cultivation on the value to wildlife of these systems. Are there other variables associated with harvest and cultivation that affect their value to wildlife? Are there differences in the value to wildlife between spring plowing, fall plowing, and no-till practices?
- Determine the impacts of herbicide and pesticide use. Examine the impacts of genetically engineered crops. How do increased levels of fertilization impact these systems?
- Determine the effects of offsetting high impact tilling practices with higher herbicide use. Is there a combination of tilling and herbicide use which optimizes value to wildlife and economic value?
- Evaluate the impacts of crop rotation on the value to wildlife. How prevalent is crop rotation? Is the type of crop planted significant?

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

- Determine the value of these systems to migrating wildlife. How is value affected by farm management practices?

Monitoring

- Track changes in agricultural practices across the landscape.
- Track fall tillage practices.
- Track economic incentives, locally and nationally, and their impact on crop selection.