Inventory of Roadside Prairies Illinois Department of Transportation District 9

Illinois Natural History Survey Center for Biodiversity Technical Report (10) 2003

> William C. Handel Technical Scientist

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Prepared for:

Illinois Department of Transportation Bureau of Design and Environment 2300 South Dirksen Parkway Springfield, Illinois 62764

INTRODUCTION

The Illinois Department of Transportation (IDOT) has been interested in mapping roadside prairie since 1992. A formal request was made in 1998 by Rich Nowack to map prairie while traveling to other IDOT project areas, and as time allowed. IDOT's justification for this project was to preserve prairie habitat, and limit accidental mowing and herbicide spraying of native prairie remnants. In 2000, IDOT made this project a priority. In the 2001 field season, a more detailed and systematic approach was taken to survey prairies in Illinois. This report and final GIS map is the result of the information gathered during the 2002 field season in IDOT District 9.

MATERIALS AND METHODS

A significant amount of remaining prairie in Illinois is located in joint rights-of-way of railroads and roads. This is due to the protection from cultivation and other disturbances. Using the Geographic Information System (GIS), a map of District 9 was generated for field use. A final map is provided with this report. This map illustrated all areas where a road and railroad were within 400 ft of each other. Using this map, these areas were systematically checked for native prairie remnants. For the majority of the remnants, a limited survey was warranted. This consisted of stopping at regular intervals to generate species lists and gather data needed to characterize each site. If a prairie was considered high quality, more time was spent surveying the remnant; however, the scale of this statewide made detailed surveys of each remnant impractical.

During 2001, IDOT District 5 was surveyed throughout the growing season (Handel 2002). Early surveys resulted in better recording of spring and early summer flora. The disadvantage of early sampling was that it was slower, and identification of warm-season grasses and forbs was more difficult. Warm-season grasses at this time often needed a close examination to identify species and abundance. Late surveys, especially September to October, allow for quick identification of remnants because the native grasses are the most visible at this time. The drawback of late surveys, is that spring and summer flora

are overlooked because they have gone dormant or they are obscured by the taller fall vegetation. A similar roadside survey in Minnesota was conducted mainly in the late summer and fall (Bolin et al. 1988). To cover more area in 2002, surveying was done in two phases, April to July and then again in August to October. The first phase was to eliminate areas of roadside that have been destroyed or were very low quality. This saved valuable time during the peek survey period in late summer and fall when attention could be more focused on surveying extant remnants.

The following data were recorded on each remnant. The evaluator(s), date, and county were recorded for each site. GPS readings for starting and ending points were taken on the majority sites. On a few small sites a central point was taken. The location was mapped using roads and other reference points. A quality rating of 1, 2, or 3 was assigned to the remnants, with number 1 being the best quality and 3 being the poorest quality. Some remnants had a combination of two or more quality classes. For example, there could be one small high-quality section (1) within a larger degraded remnant (3). The type of plant community or communities that were present was noted, for example dry-mesic prairie. Width, distance to edge of pavement, and length of each remnant were recorded. Evidence of management or the presence of signs protecting prairie vegetation were noted. The status of the railroad and presence of prairie habitat on the side away from the highway also were recorded. Threats to each remnant were recorded. This included exotics, woody invasion, or man-made disturbances such as mowing, cultivation, or spraying. Finally, a species list was generated for each remnant. Species were excluded if they occurred just in the roadside ditch or in the railroad ballast. Exotics were only counted if they were found in the remnant. Relative abundance was recorded for each species observed on a 1 to 5 scale. Botanical nomenclature follows Mohlenbrock (1986). Community classification follows White (1978). I was very liberal with the lower rating class 3 prairie. Active management, such as controlled burning, probably has not occurred on these remnants for a long period. Vast improvement of similar degraded prairie habitat has been demonstrated after active management was implemented (Handel 2000). In other highway prairie studies after active management

was implemented, prairie improved and some rare species maintained or slightly increased in abundance (Bolin et al. 1988).

TERMS USED IN SITE DESCRIPTIONS

Relative Abundance Values (RAV):

- 1. Rare
- 2. Occasional
- 3. Common
- 4. Abundant
- 5. Dominant

Quality Classes

- 1. This class was reserved for highest quality prairie remnants. These sites have a low abundance of exotic species. Forb diversity and density is high. In class 1, conservative prairie species are present. These sites roughly parallel a rating of Illinois Natural Area Inventory (INAI) grade A or B (White 1978). A more detailed survey, including quantitative data would be needed to determine if they truly qualify for INAI status.
- 2. These remnants still have a matrix of native forbs and grasses remaining. The prairie is somewhat degraded, however there is still some resemblance of a prairie community. Class 2 remnants are characterized by presence of the major warmseason grasses and disturbance-tolerant forbs. In some cases conservative species occur in low abundance. Class 2 prairie would roughly parallel an INAI rating of grade C.
- 3. Highly degraded prairie was ranked as Class 3. In class 3 remnants, prairie species were present but the community was highly disturbed. Exotic species usually dominate portions of the remnant. There can be some conservative species present, but the majority of the species are common prairie grasses and a few disturbance-tolerant forbs. Class 3 has also been reserved for areas that are solid stands of prairie grasses. This would be roughly parallel an INAI rating of grade D.

PRAIRIE COMMUNITIES IN ILLINOIS

Because of their rarity, species diversity, and vulnerability to habitat degradation, prairie communities are of special concern in Illinois. Prairie was the dominant community type in the state before 1820 (Iverson et al. 1989). After the invention of the steel plow, areas of prairie were quickly converted to agricultural crops. Of the estimated 22,000,000 acres of prairie that occurred in the state, only 2,352 acres of high-quality prairie remained by 1976, about 1/100th of 1% (White 1978). In IDOT District 9 prairie was concentrated in the northern half of the district. The amount of prairie in District 9 in 1820 was

approximately 206,900 acres. In 1976 the total acreage of high quality prairie (A or B) remaining in District 9 was 1.6 acres or .0007% (White 1978). There are no specific data on the amount of grade C - D prairie remaining in IDOT District 9. It is known that there has been a significant decline in prairie throughout the state since the Natural Areas Inventory was completed in 1976. Encroachment by woody vegetation, conversion to agricultural crops in railroad rights-of-way, and lack of management all have contributed to the decline of prairie communities statewide. If active management is implemented it may result in an increase in the diversity and abundance of native species, as well as a reduction of cool- season exotics, hence a higher-quality community. The remaining grade C - D rights-of-way prairie remnants are an extremely important biological and economic resource. They may not be as floristically diverse as grade A or B remnants, but they serve important functions in the Illinois landscape:

- 1. They provide cover and dispersal corridors for prairie flora and fauna.
- 2. With the decrease in prairie habitat and the increased need for habitat reconstruction and restoration, remnants provide an invaluable source of seed of local ecotypes.
- 3. They provide refugia for species that have been eliminated from the nearby landscape and they sometimes link areas of higher quality prairies, allowing for the dispersal of species and genetic exchange from one remnant to another.
- 4. Because they are often linear in shape, they may cross several soil types and moisture gradients, creating a community of high floristic and faunistic diversity throughout a given landscape.
- 5. Practical benefits to highway departments include the potential for a reduction in the cost of roadside maintenance, and increased erosion control when native vegetation communities are present (USDT 1975).
- 6. Native prairie remnants that are managed correctly can also reduce the presence of exotic and noxious weeds along highway corridors.

- 7. Prairie remnants provide habitat for game species. Millions of dollars are spent each year on creating habitat for species such Ring-necked Pheasant (*Phasianus colchicus*) and Northern Bobwhite (*Colinus virginanus*). Often this artificial habitat consists of one or two prairie grass species. These plantings may provide emergency cover from harsh winter weather, but they are inferior to the native remnants that provide not only cover, but also high concentrations of food from plant seeds and insects that exist in these natural remnants.
- 8. In areas of the state where habitat has disappeared because of development or intensive agriculture these remnants are often the only natural communities of any type that remain on a regional scale.

RESULTS AND DISCUSSION

General Information and Quality

Prairies are marked in **yellow** and numbered (1 to 7) on the map. This number corresponds to a data sheet in the report. The information is summarized in Tables 1 - 3. Five additional sites were mapped but data were not collected. These five sites were mowed several times during the growing season. These areas are mapped on the District 9 Prairie Remnant Map in red with a letter **M**. Prairie was seen at some of these sites in past years during other survey work. In late fall, the characteristic golden color of the native grasses was evident at these sites even though they were mowed. Several trips were made to get data on these areas. Unfortunately, the mowing never allowed for a proper survey. If the roadside mowing was limited to 3 feet past the roadside ditch and where intersections exist, this prairie survey would have been more complete. Local municipalities and farmers appeared to be mowing some of these remnants.

According to the GIS mapping, there were approximately 298.9 miles of joint roadway and railroad rights-of-way in District 9. Seven prairie and savanna remnants were located in these joint rights-of-ways in District 7 during the 2002-growing season, totaling 10.9 miles (3.7%). Prairie was most commonly found on active railroad lines. Most of the

abandoned lines have been converted to agricultural purposes. None of the prairie remnants had prairie present on the far side of the tracks.

The majority of the prairie, 5 of 7 (71%) was class 3 (the lowest quality prairie). Only 2 of 7 (29%) percent were in class 2 (medium quality) category. No prairie remnants were considered to be in the class 1 (highest quality) category. Dry-mesic prairie and savanna were the only community encountered. Wet-mesic and wet prairie communities were absent. This is probably due to the intense effort to drain areas adjacent to roads and intensive tiling throughout southern Illinois. Areas that might have had vegetation characteristic to wet-mesic prairie were often dominated by Phragmites australis (common red reed). There are two genetic strains of this species, the non-native strain is found more commonly in southern Illinois. This species has been planted in southern Illinois for cover in mine reclamation projects. This strain is aggressive and forms monotypic stands that often displace desirable native vegetation along roadsides (pers. comm. Allen Plocher). Only 1 of 7 (14%) of remnants surveyed had signs protecting prairie or show signs of management and this was a nature preserve. None of the sites appeared to have been burned in recent history. A general observation made was that many of the areas that had signs protecting prairie areas contained the most degraded habitat of all the remnants. Although signs were present, many of these areas did not appear to be receiving active management, such as controlled burning or brush control.

Table 1. General Information on prairie remnants in joint Illinois Department of Transportation and Railroad rights-of-way in District 9 including: quality, communities, evidence of management or signage, railroad activity. The percentage in the quality class and natural communities may exceed 100%, because some sites had more than one quality class or natural community present.

Quality	# Sites (out of 7)	% of sites
Class 3	5	71%
Class 2	2	29%
Class 1	0	0%

Natural Communities

7	100%
1	14%
0	0%
0	0%
0	0%
	0

Signage or evidence of management (Burning)

No	6	86%
Yes	1	14%

Railroad Activity

Active	4	57%
Abandoned	2	29%
Other (no railroad present)	1	14%

Presence of prairie on RR R-O-W opposite tracks

No	7	100%
Yes	0	0%

Threats to Remnants

Roadside rights-of-way are affected by a multitude of human disturbance: mowing, salt, car emission, ditch maintenance, herbicide application from both the roadside and railways, and the installation of communication and utility lines. These disturbances keep the structure and composition of these remnants in a constant state of fluctuation. The remnants that were found during this survey all show some form of disturbance. Exotic species were considered a threat in all of the remnants inventoried (Table 2). Approximately 5 of 7 (71%) of the prairies were mowed to some extent; this does not include the five additional remnants that could not be surveyed because of continuous mowing. Woody invasion from both exotics and native species were considered a threat

in 4 of 7 (57%). Herbicide spraying threatened 1 of 7 (14%) of the prairie remnants. Digging might be a greater problem that indicated in this report; however, because of limited time spent at each site, evidence of digging would easily be overlooked.

Table 2. Type of threat and frequency among prairie remnants in IDOT District 9.

Threats	# Sites (out of 7)	% of sites
Exotics	7	100%
Mowing	5	71%
Woody invasion	4	57%
Spraying	1	14%

Exotics

If exotics were limited to the railroad ballast or roadside ditch they were not considered a threat. The cool season grass *Festuca pratensis* (meadow fescue) was the most common exotic incountered. This is expected because meadow fescue was planted in the majority of roadsides in Illinois. They often increase in prairie remnants that have not been burned for an extended period. They can also invade from adjoining pastures and hayfields. Meadow fescue appeared do be a greater threat overall to prairie remnants in the southern half of Illinois. *Elaeagnus umbellata* (autumn olive) was the most common exotic shrub found in remnants.

Table 3. List of exotics that were a threat to prairie remnants in IDOT District 9.

Scientific Name	Common Name	# Sites (out of 7) %	of Occurrence
Festuca pratensis	meadow fescue	4	57%
Elaeagnus umbellata	autumn olive	3	43%
Lonicera japonica	Japanese honeysuckle	3	43%
Bromus inermis	smooth brome grass	1	14%
Coronilla varia	crown vetch	1	14%
Dipsacus laciniatus	cut-leaved teasel	1	14%
Phalaris arundinacea	reed canary grass	1	14%
Sorghastrum halepense	Johnson grass	1	14%
Phragmites australis	common red reed	1	14%

Literature Cited

Bolin, K.E., N.J. Albrecht, and R.L. Jacobson 1988. Identification, preservation, and management of Minnesota roadside prairie communities. Transportation Research Record 1279. pp 79-85

Handel, W.C. 2002. Inventory of roadside prairies in Illinois Department of Transportation District 5. Technical report prepared for the Illinois Department of Transportation, Bureau of Design and Environment, Springfield. Center for Biodiversity Technical Report 2002(6), Illinois Natural History Survey, Champaign. 83 pp.

Handel, W.C. 2000. When to do little: Old and new techniques in community restoration and reconstruction. Pp. 30 –36, <u>in</u> T.E. Rice (ed.), Proceedings of the Fifth Central Illinois Prairie Conference. People and Prairies: Caring for Where We Live. Champaign, Illinois.

(U.S. Department of Transportation), Highway-Wildlife Relationships, Vol. 1. Report FHWA-RO-76-4. FHWA, 1975, 183 pp.

- (U.S. Department of Transportation) Highway-Wildlife Relationships, Vol. 2. Report FHWA-RO-76-5. FHWA, 1975, 417 pp.
- Iverson, L.R., R.L. Oliver, D.P. Tucker, P.G. Risser, C.D. Burnett, and R.G. Rayburn.1989. Forest resources of Illinois: an atlas and analysis of spatial and temporal trends.Illinois Natural History Survey Special Publication No. 11. vii + 181 pp. + map.
- Mohlenbrock, R. H. 1986. Guide to the vascular flora of Illinois. Revised and enlarged edition. Southern Illinois University Press, Carbondale. 507 pp.
- White, J. 1978. Illinois natural areas inventory technical report. Vol. 1: Survey methods and results. Illinois Natural Areas Inventory, Urbana. 426 pp.

Date: 8/27/2002 **Evaluator(s):** William C. Handel

Location: IL - 13 West of Pinckneyville, starting at Mildred Drive and extending 5.4 miles west.

County: Perry **GPS Data: Starting UTM** 16S 0289919 - 4217542

GPS Data Ending UTM 16S 0284283 - 4223074

Quality Class: 2 Natural Community Type(s): Dry-mesic savanna / prairie

(Quality Classes: 1=Grades A or B, 2 = C, 3=D)

Threats: Woody invasion, exotics, mowing

Scientific NameCommon NameBromus inermissmooth brome grass

Coronilla varia crown vetch
Elaeagnus umbellata autumn olive
Festuca pratensis meadow fescue

Lonicera japonica Japanese honeysuckle

Prairie Width: 19 m Signs or Evidence of Management: No

Dist. from Pavement: 3 m **Railroad Activity:** Active

Prairie Length: 5.4 miles **Prairie present on opposite side of track:** No

Significant or Exceptional Features: None

Comments: The best quality occurs from 4.4 miles west of Pinckneyville to the end for the remnant.

Scientific Name	Common Name	RAV
Andropogon gerardii	big bluestem	5
Apocynum cannabinum	dogbane	2
Asclepias syriaca	common milkweed	1
Asclepias tuberosa	butterflyweed	3
Aster patens	aster	1
Aster pilosus	hairy aster	2
Baptisia lactea	white wild indigo	2
Bromus inermis	smooth brome grass	3
Cassia fasciculata	partridge pea	3
Cirsium discolor	field thistle	2
Coronilla varia	crown vetch	3
Corylus americana	hazelnut	3
Desmanthus illinoensis	Illinois bundleflower	2
Desmodium marilandicum	small-leaved tick trefoil	1
Desmodium sessilifolium	sessile-leaved tick trefoil	2
Diospyros virginiana	persimmon	2
Elaeagnus umbellata	autumn olive	4
Elymus canadensis	Canada wild rye	2
Eragrostis spectabilis	purple love grass	1
Eryngium yuccifolium	rattlesnake master	2

Eupatorium altissimum	tall boneset	1
Euphorbia corollata	flowering spurge	5
Euthamia gymnospermoides	grassleaf goldenrod	2
Festuca pratensis	meadow fescue	4
Helianthus grosseserratus	sawtooth sunflower	1
Helianthus strumosus	pale-leaved sunflower	3
Juniperus virginiana	eastern red cedar	2
Lespedeza bicolor	bush lespedeza	1
Plant List for Site N#1 cont.		
Scientific Name	Common Name	RAV
Lespedeza capitata	bush clover	2
Lespedeza virginica	slender bush clover	2
Liatris pycnostachya	gayfeather	2
Lonicera japonica	Japanese honeysuckle	4
Monarda fistulosa	wild bergamot	2
Panicum virgatum	prairie switch grass	$\frac{1}{2}$
Parthenium integrifolium	American feverfew	$\frac{1}{2}$
Paspalum floridanum	giant beadgrass	3
Quercus imbricaria	shingle oak	3
Quercus macrocarpa	burr oak	
Quercus marilandica	blackjack oak	2 2
Rhus copallina	dwarf sumac	4
Rudbeckia hirta	black-eyed susan	1
Sassafras albidum	red sassafras	2
Silphium perfoliatum	cup plant	
Silphium terebinthinaceum	prairie dock	2 3
Solidago canadensis	Canada goldenrod	4
Solidago missouriensis	Missouri goldenrod	2
Solidago rigida	rigid goldenrod	3
Sorghastrum nutans	Indian grass	2
Spartina pectinata	prairie cord grass	2 2
Strophostyles helvola	wild bean	1
Tridens flavus	false red top	3
Tripscum dactyloides	gama grass	2
Ulmus americana	American elm	3
Verbesina helianthoides	yellow crownbeard	2 3 3
Vernonia missurica	Missouri ironweed	3
Veronicastrum virginicum	Culver's root	1
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Date: 8/27/2002 **Evaluator(s):** William C. Handel

Location: IL-4 Pronghorn Road N125 to Bobcat Road N100

County: Perry **GPS Data: Starting UTM** 16S 0273203 - 4206017

GPS Data Ending UTM 16S 0272431 - 4205708

Quality Class: 3 Natural Community Type(s): Dry-mesic prairie

(Quality Classes: 1=Grades A or B, 2 = C, 3=D)

Threats: exotics, mowing

Scientific NameCommon NameFestuca pratensismeadow fescue

Prairie Width: 19 m Signs or Evidence of Management: No

Dist. from Pavement: 3 m **Railroad Activity:** Abandoned

Prairie Length: 0.2 miles Prairie present on opposite side of track: No

Significant or Exceptional Features: None

Comments: degraded

Scientific Name	Common Name	RAV
Ambrosia artemisiifolia	ragweed	2
Andropogon gerardii	big bluestem	3
Andropogon virginicus	broom sedge	4
Asclepias incarnata	swamp milkweed	1
Cassia fasciculata	partridge pea	3
Desmodium sessilifolium	sessile-leaved tick trefoil	1
Eryngium yuccifolium	rattlesnake master	2
Festuca pratensis	meadow fescue	4
Hypericum perforatum	St. Johns-wort	2
Paspalum floridanum	giant bead grass	2
Rudbeckia hirta	black-eyed susan	2
Silphium integrifolium	rosinweed	2
Solidago canadensis	Canada goldenrod	3
Sporobolus asper	drop seed	3
Tridens flavus	false red top	3
Vernonia baldwinii	Baldwin's Ironweed	2

Date: 8/27/2002 **Evaluator(s):** William C. Handel

Location: IL-4 0.9 mile from Bobcat Road N100

County: Perry **GPS Data: Starting UTM** 16S 0273737 - 4205176

Ending UTM 16S 0274085 - 4204460

Quality Class: 3 Natural Community Type(s): Dry-mesic prairie

(Quality Classes: 1=Grades A or B, 2 = C, 3=D)

Threats: exotics, mowing

Scientific NameCommon NameFestuca pratensismeadow fescue

Prairie Width: 20 m Signs or Evidence of Management: No

Dist. from Pavement: 3 m **Railroad Activity:** Abandoned

Prairie Length: 0.5 miles **Prairie present on opposite side of track:** No

Significant or Exceptional Features: None

Comments: degraded

Scientific Name	Common Name	RAV
Andropogon gerardii	big bluestem	3
Aster pilosus	hairy aster	1
Cassia fasciculata	partridge pea	2
Elymus canadensis	Canada wild rye	3
Eragrostis spectabilis	purple love grass	1
Euphorbia corollata	flowering spurge	3
Festuca pratensis	meadow fescue	3
Helianthus strumosus	pale-leaved sunflower	3
Rhus glabra	smooth sumac	3
Silphium integrifolium	rosinweed	2
Solidago canadensis	Canada goldenrod	4
Tridens flavus	false red top	2

Date: 8/27/2002 **Evaluator(s):** William C. Handel

Location: IL-4 Spring Hill Rd.

County: Jackson **GPS Data: UTM** 16S 0276684 - 4205176

Quality Class: 3 Natural Community Type(s): Dry-mesic prairie

(Quality Classes: 1=Grades A or B, 2 = C, 3=D)

Threats: exotics

Scientific NameCommon NameDipsacus laciniatuscut-leaved teaselFestuca pratensismeadow fescue

Lonicera japonica Japanese honeysuckle

Prairie Width: 10 m Signs or Evidence of Management: No

Dist. from Pavement: 1 m **Railroad Activity:** NA

Prairie Length: 0.1 miles Prairie present on opposite side of track: No

Significant or Exceptional Features: None

Comments: Occurs between IL-4 and Spring Hill Rd Cemetery.

Scientific Name	Common Name	RAV
Andropogon gerardii	big bluestem	3
Campsis radicans	trumpet creeper	1
Cassia fasciculata	partridge pea	3
Dipsacus laciniatus	cut-leaved teasel	3
Euphorbia corollata	flowering spurge	2
Festuca pratensis	meadow fescue	3
Helianthus strumosus	pale-leaved sunflower	5
Lonicera japonica	Ĵapanese honeysuckle	3
Poa pratensis	Kentucky bluegrass	2
Rudbeckia hirta	black-eyed susan	2
Sorghastrum nutans	Indian grass	2
Vernonia missurica	Missouri ironweed	2

Date: 8/28/2002 **Evaluator(s):** William C. Handel

Location: US-51 north of Du Quoin; starts 0.8 miles south of IL-154 interchange

County: Jackson GPS Data: Starting UTM 16S 0303310 - 4216144

Ending UTM 16S 0303308 - 4214663

Quality Class: 2-3 Natural Community Type(s): Dry-mesic prairie

(Quality Classes: 1=Grades A or B, 2 = C, 3=D)

Threats: exotics, woody invasion, spraying, mowing Scientific Name Common Name Elaeagnus umbellata autumn olive

Prairie Width: 30 m Signs or Evidence of Management: No

Dist. from Pavement: 4 m **Railroad Activity:** Active

Prairie Length: 1.8 miles Prairie present on opposite side of track: No

Significant or Exceptional Features: good density of native grasses

Comments: The area was moved so identification of certain species was difficult.

Scientific Name	Common Name	RAV
Andropogon gerardii	big bluestem	4
Asclepias syriaca	common milkweed	2
Cassia fasciculata	partridge pea	3
Eupatorium altissimum	tall boneset	3
Euphorbia corollata	flowering spurge	4
Helianthus mollis	hairy sunflower	3
Liatris pycnostachya	gayfeather	1
Prenanthes aspera	rough white lettuce	2
Rhus glabra	smooth sumac	4
Solidago canadensis	Canada goldenrod	3
Sorghastrum nutans	Indian grass	2
Spartina pectinata	prairie cord grass	2
Ûlmus americana	American elm	2
Vernonia missurica	Missouri ironweed	2

Date: 8/28/2002 **Evaluator(s):** William C. Handel

Location: US-51 Elkville from Coal Road south to railroad overpass

County: Jackson GPS Data: Starting UTM 16S 0303465 - 4196784

Ending UTM 16S 0303805 - 4191948

Quality Class: 3 Natural Community Type(s): Dry-mesic prairie

(Quality Classes: 1=Grades A or B, 2 = C, 3=D)

Threats: exotics, woody invasion

Scientific NameCommon NameElaeagnus umbellataautumn olive

Lonicera japonica Japanese honeysuckle Phragmites australis common red reed

Prairie Width: 20-25 m **Signs or Evidence of Management:** Nature preserve

No mowing

IDOT

Dist. from Pavement: 6 m **Railroad Activity:** Active

Prairie Length: 3.35 miles Prairie present on opposite side of track: No

Significant or Exceptional Features: None

Comments: Highly degraded. This area contains one INAI natural area just south of Elkville and the southern most section is a designated Illinois Nature Preserve (Flaulkner & Franke Prairie). It does not appear that this site has had active management for several years. I personally worked on this prairie approximately 13 to 14 years ago. It was considered a high quality natural area at that time and several conservative prairie species were common throughout the remnant.

I failt List for Sitt 11#0		
Scientific Name	Common Name	RAV
Acer saccharinum	silver maple	2 local)
Andropogon gerardii	big bluestem	1
Apocynum sibiricum	Indian hemp	1
Asclepias hirtella	tall green milkweed	1
Baptisia lactea	white wild indigo	1
Elaeagnus umbellata	autumn olive	5
Eupatorium altissimum	tall boneset	2
Euphorbia corollata	flowering spurge	2
Gaura biennis	butterfly-weed	2
Helianthus mollis	hairy sunflower	1
Lonicera japonica	Japanese honeysuckle	5
Paspalum floridanum	giant bead grass	2
Phragmites australis	common red reed	4(local)
Prunus serotina	wild black cherry	2
Quercus imbricaria	shingle oak	2
Quercus palustris	pin oak	2(local)

Rhus copallina	dwarf sumac	2
Rhus glabra	smooth sumac	3
Silphium integrifolium	rosinweed	2
Silphium laciniatum	compass plant	2

Date: 8/28/2002 **Evaluator(s):** William C. Handel

Location: US-51 North of Carbondale from Archer Lane to De Soto

County: Jackson GPS Data: Starting UTM 16S 0304103 - 4185329

Ending UTM 16S 0303979 - 4187029

Quality Class: 3 Natural Community Type(s): Dry-mesic prairie

(Quality Classes: 1=Grades A or B, 2 = C, 3=D)

Threats: woody invasion, mowing, and exotics

Scientific NameCommon NamePhragmites australiscommon red reedSorghum halepenseJohnson grass

Prairie Width: 30 m **Signs or Evidence of Management:** No

Dist. from Pavement: 5 m **Railroad Activity:** Active

Prairie Length: 1.5 miles **Prairie present on opposite side of track:** No

Significant or Exceptional Features: None

Comments: Most of the prairie has been mowed recently. This prairie was higher quality 12 years ago.

Scientific Name	Common Name	RAV
Andropogon gerardii	big bluestem	3
Euphorbia corollata	flowering spurge	2
Helianthus divaricatus	woodland sunflower	3
Lonicera japonica	Japanese honeysuckle	2
Paspalum floridanum	giant bead grass	3
Silphium integrifolium	rosinweed	2
Solidago canadensis	Canada goldenrod	3
Sorghum halepense	Johnson grass	3
Sorghastrum nutans	Indian grass	3
Veronicastrum virginicum	Culver's root	1

Mowed Areas

1. Perry County

IL 13 south of Pinckneyville

Very disturbed with few prairie species

2. Franklin County

IL 14 between Buckner and West City

There was prairie vegetation just west of Buckner extending for approximately 2 miles

3. Franklin County

IL 37 south of West City

This area had spring prairie vegetation but was mowed during the fall survey

4. Franklin County

IL 148 south of Zeigler

This are has a savanna remnant on the east side of the road. Most of the vegetation was mowed during the fall.

5. Alexander County

IL 127 north of Tamms

This prairie was reported to have interesting vegetation, but the area was ditched, graded, and mowed during the 2002 growing season