

ILLINOIS
NATURAL
HISTORY
SURVEY

MEMORANDUM



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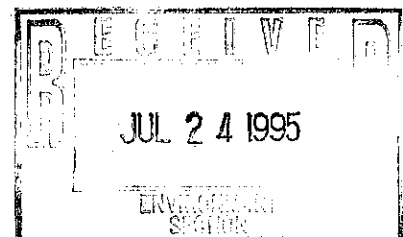
DATE: 18 July 1995

SUBJECT: Initial findings/ significant features
U.S. Route 41/IL Route 137
Excess Parcel
Lake County
P-91-030-90

This memorandum is submitted in response to a verbal request from Rich Nowack of IDOT to Chris Phillips, on approximately 11 July, 1995 for a summary of significant biological findings in the Excess Parcel/IDOT wetland mitigation site.

Botanical Resources
Summary

Botanical survey work was requested for this project area during the spring of 1995. As of this date, field work has been conducted on 7 June, 13-14 June, 22 June, and 5-6 July. Numerous noteworthy features are present in the survey area. A total of two endangered and one threatened plant species have been observed within the project area. An additional endangered plant species occurs a mere few meters outside the study area boundaries. Also, a colony of a *Lathyrus* species possessing some characteristics of *L. ochroleucus* (a threatened species in Illinois) is present. This material is in a plant press and will be studied more closely later. In addition, much of the south half of the study area, approximately 80 acres, contains high quality marsh, sedge meadow, and prairie. These features will be summarized below.



Threatened and Endangered Plant Species

Agropyron trachycaulum var. *unilaterale* (Endangered) - Bearded wheat grass is known from three Illinois counties (Herkert 1991), including a known population in Lake County at Gavin Bog and Prairie Nature Preserve (Taft and Solecki 1990). This grass is scattered throughout the prairie and sedge meadow complex in the south quarter of the study area.

Oenothera perennis (Endangered) - A localized colony of 32 plants of sun drops was seen near the east border of the study area in the south quarter unit. All plants occur in a prairie opening within a shrub-dominated matrix. Paul Tessene indicates he saw this species locally in the north second quarter unit (second quarter from IL 137). I did not see this species in that area.

Veronica scutellata (Threatened) - Marsh speedwell was found as a single individual in a marsh within the third quarter unit from the north.

Ranunculus cymbalaria (Endangered) - Seaside crowfoot was found by Paul Tessene at the edge of a parking lot for Abbott Labs on the west side of the study unit. This diminutive species is present as a small colony about 2 m² in size. This disturbed location may not be sustainable. Suitable habitat appears to exist for this species within the study area. It would be interesting to attempt a translocation of a portion of this vulnerable colony.

Lathyrus ochroleucus (Threatened) - Material that possesses some characteristics of this species and may be of hybrid origin is present at the margin of a shrub-thicket and sedge meadow. This would be an unusually moist situation for this species; however, several other savanna species like *L. ochroleucus* occur in the study area in wetter than usual habitats (see community discussion below). A total of 32 plants within a 15 meter border area were observed. A comparative study presumably will yield a certain and correct determination for this material.

Carex atherodes (delisted) - This sedge is present in the study area as three small colonies. Two colonies occur in a marsh, a third is in the shade of a spreading cottonwood.

In addition to the above species, habitat is present for *Platanthera leucophaea* (Federally threatened, State Endangered). The prairie white-fringed orchid is present on Abbott Labs property to the west and on Wrigley property to the north, and in a cat-tail marsh alongside IL 43 to the north. The intricate wetland/prairie/shrub complex, particularly in the south quarter unit appears to be ideal for this species. Habitat is also present for *Cypripedium candidum* (Endangered) in the same vicinity but I did not see any plants. Management of the entire study unit with prescribed fire would have numerous benefits and may result in the appearance of threatened and endangered plant species not observed so far during this survey.

Natural Quality Assessment

The south half of this study area presents an opportunity to protect an outstanding complex of habitats including marsh, sedge meadow, wet prairie, wet-mesic prairie, mesic prairie, and dry-mesic prairie. These communities, particularly the wetland habitats, merge insensibly with each other producing a marvelously rich and beautiful complex. The preservation opportunities are perhaps unequaled in the present-day landscape of Lake County. With the application of fire management, natural-area quality remnants will emerge from this complex. Currently, shrubs including gray dogwood and common buckthorn are prominent and form dense thickets. Prairie and savanna species are persisting beneath these thickets in low density; however, there is every

reason to believe this complex is quite salvageable. Currently, much of the south quarter of the study area that is not shrubland is Grade B and C+ in quality. The north half is most degraded, but is dominated by native species including numerous prairie species. Prescribed fire in that area would undoubtedly result in marked improvements in natural quality.

Additional field work is planned for late summer.

Herpetological Resources

Fieldwork was conducted on 5-6 July, 1995 during which time the entire parcel was walked, all species of reptile and amphibian were noted as well as suitable habitat for state listed species known to occur in the region. No state listed amphibians or reptiles were seen during this initial visit. However, suitable habitat exists for several state listed species.

The occurrence of extensive sedge meadows that grade into mesic native grassland with widely spaced trees and shrubs provide ideal habitat for the massasauga, *Sistrurus catenatus* (Endangered). An extant population is known from the Ryerson Conservation Area, approximately 16 km (10 Miles) SSW of the Excess Parcel.

In conclusion, the area's unique combination of wetlands and mesic native grasslands makes this area suitable for a wide variety of amphibians and reptiles, including state listed species.

Additional field work is planned for the fall and next spring.

Ornithological Resources

The site was visited by Dave Enstrom on 30 June, 1994. He walked the entire plot, conducting 10 minute point counts, and 15 minute play-back censuses for secretive marsh nesting species (e.g. Pied-billed Grebe, Common Moorhen, King Rail, Virginia Rail, Sora Rail, American Coot, American Bittern, Least Bittern). During the census no State or Federal Endangered or Threatened species were encountered. However, there is ample wetland habitat that is suitable for marsh nesting birds; including the threatened Common Moorhen, and the endangered Pied-billed Grebe, King Rail, Virginia Rail, Least Bittern, and Yellow-headed Blackbird. It is also possible that one or more of the more secretive of these species (e.g. the Common Moorhen, Pied-billed Grebe, King Rail, Virginia Rail, or Least Bittern) are breeding in the area, but were missed by the census.

Additional field work is planned for the fall and next spring.

Aquatic Resources

No outstanding aquatic resources were discovered during a single site visit by Chris Taylor in June, 1995.

Additional fieldwork is planned for the fall.

Mammalian Resources

No information is available at this time. Field work is scheduled for this fall.

Literature Cited

Herkert, J.R. editor. 1991. Endangered and Threatened Species of Illinois: Status and Distribution, Volume 1 - Plants. Illinois Endangered Species Protection Board, Springfield, Illinois. 158 pp.

Taft, J.B. and M.K. Solecki. 1990. Vascular flora of the wetland and prairie communities of Gavin Bog and Prairie Nature Preserve, Lake County, Illinois. *Rhodora* 92:142-165.