

June 24, 1990

Illinois Endangered and Threatened Species Protection Board
524 South Second Street
Springfield, Illinois 62701-1787

Gentlemen:

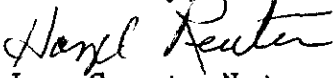
As a result of the Nongame Wildlife Conservation Checkoff funded project, "Wetland Inventory", conducted by the Lee County Natural Area Guardians, the following species are being reported:

a.) 1 Western Hognosed Snake (Heterodon nasicus) hatchling found in Amboy Township (T. 20 N. - R. 10 E.) Section 26, Lee County, Illinois on September 15, 1989

b.) Pinweed (Lechea intermedia) found in Amboy Township (T. 20 N. - R. 10 E.) Section 26, Lee County, Illinois on September 15, 1989

We are happy to be able to report these findings. We will attempt to continue to monitor this site.

Sincerely,



Lee County Natural Area Guardians
Hazel Reuter, member
319 South Mason
Amboy, IL 61310
Phone: 815/857-3623

WETLAND INVENTORY
IN
LEE COUNTY, ILLINOIS

CONDUCTED BY THE LEE CO. NATURAL AREA GUARDIANS
319 SOUTH MASON AMBOY, IL 61310
PHONE: 815/875-3623

HAZEL L. REUTER
&
DR. CASSANDRA S. RODGERS

SEPTEMBER 1989 - JUNE 1990

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ABSTRACT

Wetland inventories were conducted on three specific sites in the Green River Lowland section of Lee County, Illinois by the Lee County Natural Area Guardians (LeeNAG). Of particular interest were the sandy areas. The project was funded by the Illinois Nongame Wildlife Conservation Checkoff Program. The project was conducted to identify wetland species, both plant and animal. Looking for endangered and threatened species was the primary goal. The secondary goal was to study the impact of the drought on such areas and their inhabitants. The entire project was documented on film to enable the LeeNAG to show the diversity, uniqueness, and importance of wetlands to others.

INTRODUCTION

Lee County is the site of several minimally disturbed wet sand areas. Many typical, as well as unusual, species can be found on these sites. Presettlement Lee County was the site of two large swamps, totaling 50,000 acres. Most of those wetlands were destroyed in the late 1800's and early 1900's. The study of these three remnant areas revealed interesting patterns of survival.

METHODOLOGY

Upon receipt of confirmation of success in gaining an Illinois Nongame Wildlife Conservation Checkoff Grant plans were put in action to inventory three specific sites in the Green River Lowland section of the County.

The selection of the three sites was influenced by the discoveries made in the 1986 Illinois Mud Turtle Survey carried out by LeeNAG. All the areas were trapped at that time. Many interesting species were noted and warranted further investigation.

Access was gained from owners and operators to the three chosen sites. This was facilitated by the former contact with owners and operators during the turtle survey. It is important to maintain good relationships with owners and operators. Many times they have no idea what natural treasures their land supports. It provides an excellent opportunity to educate them about our natural heritage.

Files were prepared for each site. Visits were arranged. Many plant specimens were collected and pressed to aid in proper identification. The areas were photographed as were specific plants. Aerial maps were marked to delineate each area. Because of the interesting finding one site was enlarged. It proved to be a very rich site.

To compile the species lists many manuals were studied. The assistance of a botanist was needed for some identifications. To obtain the history, past and present, owners and neighbors were interviewed. This activity again presented an opportunity to educate persons about their own unrecognized resources.

Meanwhile the photographic records were being developed and worked into an educational tool. Plans include presentations of this program at every opportunity afforded. LeeNAG has many requests from civic and school groups for programs. The average citizen is just beginning to realize the value of wetlands.

At the completion of the project, if one can use the term completion, all the data were prepared for presentation to the Illinois Department of Conservation. All endangered and threatened species were reported to the Endangered and Threatened Species Protection Board to add to the Lee County inventory.

RESULTS

site (1) SANDY HILL SLOUGH (Aerial, Topo and Soil Maps #1)
(also referred to as the 5 Points Area)

OWNER: KIM SCHMIDT
8504 CONCORD DRIVE
WOODSTOCK, IL 60098
PHONE:

The Sandy Hill Slough area is located in May Township (T.19 N. - R.10 E.) Sections 10 and 11, Lee County, Illinois. The area is listed on the Illinois Natural Area Inventory. It is the site of the endangered Green-fruited Burreed (Sparganium chlorocarpum). A local naturalist has listed several other rare species including several orchid species and Sundew (Drosera intermedia).

Past history and uses of the site were researched and the following information was discovered.

The local Soil Conservation Service office in Amboy, Illinois had an old "Farm Conservation Plan" dated 1947. The site was then known as the Armstrong Club. As stated in the plan "the purpose of this plan is to achieve proper land use according to the capabilities of the land. The land of this farm consists of incoherent sands and marshes. This farm will be devoted to woodland and wildlife." It had 107 acres of woodland. "Field 1, will be devoted to permanent protected woodland. This whole area will be planted to trees, chiefly the pines, such as red pine, jack pine and white pine. Also clumps and borders of shrubs such as multiflora rose, honeysuckle, bittersweet, and grape will be planted in this field. This will require about 65,000 trees and about 16,000 shrubs. The planting of these trees and shrubs will get under way in the spring of 1947. All gooseberry and current vines within a distance of 900 feet of the white pine trees must be eradicated."

The plan continues, "Wildlife -- 50 acres.-- Fields 1 and 2 have a good cover of sloughgrass and will remain in such. Fields 5 and 6 will be limed and fertilized as needed and seeded to a mixture of sweet clover and brome grass to provide food and cover for wildlife. Fields 9 and 10 will be used for wildlife food patches such as wheat, corn, popcorn, soybeans, etc. Fields 4 and 7 will be converted to managed ponds for fish, water fowl and other forms of wildlife. Earthfills at the northwest corner of these fields will raise the water level of these areas. Field 8 will be devoted to a well managed marsh. It would be extremely difficult to control the water level of this area sufficiently to lower it in the spring and raise it in the fall. Hence, the cooperators will let the water seek its natural level and seed some of the adjacent areas in reed canary grass and plant the flooded area with cattail, bulrush, wild millet, sweet flag, etc. There is already plenty of smart weed and slough grass on this area. Furthermore, the cooperators may dynamite some ditches to increase water depth."

Presently the area is undergoing a land use change. The owner has built a race track for training horses. Some of the wetlands have been destroyed. The large ponded area, however, is still intact. It doesn't appear to have been impacted to much extent thus far. Runoff may be a problem in the future.

As shown on the aerial maps there are several wet areas involved on this tract. When visited in the fall of 1989 the smaller sites were dry, a direct result of the drought. On the spring visits the areas were ponded again.

Wildlife makes extensive use of this area. Canada geese (Branta canadensis) and Wood Duck (Aix sponsa) nest there. Of course the White-tailed Deer (Odocoileus virginianus) is present. The area is trapped during the season.

Another source of information we checked was a copy of "NATURAL AREA ACQUISITION PROPOSAL - SANDY HILL SLOUGH AREA". This was evidently prepared for the Illinois Nature Preserves Commission, it is dated January 2, 1971. Some excerpts are as follows: "is a low, poorly-drained tract of sand and peat soils the complex vegetational pattern formerly typical of this region is represented in this 80 acre tract to a surprising degree. Examples of scrub forest, prairie, marsh, and pothole habitats are all well preserved. Preservation of the several natural pothole depressions is especially desirable as they support an unusually diverse collection of aquatic and semi-aquatic plants"

site (1) SPECIES LIST

INVENTORIED OCT. 9, 1989
BY CASSANDRA RODGERS AND HAZEL REUTER

*non-native

<u>Helianthus grosseserratus</u>	sawtoothed sunflower
<u>Phalaris arundinacea</u>	reed canary grass
<u>Rubus flagellaris</u>	dewberry
<u>Pastinaca sativa*</u>	wild parsnip
<u>Thalictrum revolutum</u>	meadow rue
<u>Aster umbellatus</u>	flat-top aster
<u>Carex comosa</u>	sedge
<u>Bidens connata</u>	swamp beggar-ticks
<u>Onoclea sensibilis</u>	sensitive fern
<u>Urtica dioica</u>	nettle
<u>Iris shrevei</u>	blue flag
<u>Typha latifolia</u>	cattail
<u>Polygonum pennsylvanicum</u>	common smartweed
<u>Solidago nemoralis</u>	field goldenrod
<u>Lactuca canadensis</u>	wild lettuce
<u>Aster ericoides</u>	heath aster
<u>Epilobium ciliatum</u>	northern willow herb
<u>Mentha spp.</u>	mint
<u>Solanum spp. (some *)</u>	nightshade
<u>Verbena hastata</u>	blue vervain
<u>Daucus carota</u>	Queen Anne's lace or wild carrot

<u>Viola</u> spp.	violet
<u>Cyperus strigosus</u>	straw colored sedge
<u>Thelypteris palustris</u>	marsh fern
<u>Sphagnum</u> spp.	sphagnum
<u>Anemone cylindrica</u>	long-headed thimbleweed
<u>Cornus obliqua</u>	silky dogwood
<u>Solidago canadensis</u>	Canada goldenrod
<u>Rosa multiflora</u> *	multiflora rose
<u>Rubus occidentalis</u>	raspberry
<u>Eupatorium serotinum</u>	boneset
<u>Agalinis tenuifolia</u>	slender gerardia
<u>Polygonum sagittatum</u>	tear thumb
<u>Fragaria virginiana</u>	wild strawberry
<u>Botrychium dissectum</u> var. <u>obliquum</u>	rattlesnake fern
<u>Dryopteris carthusiana</u>	spinulose wood fern
<u>Panicum capillare</u>	witch grass
<u>Penthorum sedoides</u>	ditch stonecrop
<u>Alisma plantago aquatica</u> var. <u>parviflorum</u>	small flowered water plantain
<u>Lechea pulchella</u>	pinweed
<u>Polygonum scandens</u>	false buckwheat
<u>Juncus effusus</u>	soft rush
<u>Lycopus americanus</u>	water horehound
<u>Sonchus arvensis</u> *	sow thistle
<u>Ranunculus abortivus</u>	small-flowered crowfoot
<u>Ranunculus longirostre</u>	white water crowfoot
<u>Rumex orbiculatus</u>	water dock
<u>Hypericum gentianoides</u>	orange grass
<u>Aster firmus</u>	swamp aster
<u>Dulichium arundinacea</u>	three-way sedge
<u>Gallium asprellum</u>	bedstraw
<u>Prenanthes alba</u>	lion's foot
<u>Triadenum fraseri</u>	St. John's-wort
<u>Aristida purpuraceas</u>	arrow feather
<u>Leersia oryzoides</u>	rice cutgrass
<u>Calamagrostis canadensis</u>	blue-joint grass
<u>Bidens bipinnata</u>	Spanish needles

The following is the plant inventory compiled by James Long, local naturalist.

FLORA OF FIVE-POINTS AREA
A PARTIAL LIST - JAMES LONG

(Corrections made according to: Mohlenbroch, R. H. 1986. Guide to the vascular flora of Illinois, Revised and enlarged edition. SIU Press, Carbondale - by Dr. Cassandra Rodgers)

(original version in parentheses)

Very rare, <u>Lycopodium inundatum</u>	- (ground pine) or bog clubmoss
Very rare, <u>Lycopodium digitatum</u>	- ground pine (<u>flabelliforme</u>)
<u>Botrychium obliquum</u>	- grape fern

- Borychium virginianum - common grape fern or rattlesnake fern
- Osmunda regalis - royal fern
Osmunda cinnamomea - cinnamon fern
Osmunda claytoniana - interrupted fern
- Onoclea sensibilis - sensitive fern
Matteuccia struthiopteris - ostrich fern (Pteretis)
Rare, Dryopteris cristata - crested wood fern
Rare, Dryopteris carthusiana - spinulose wood fern
- Asplenium platyneuron - ebony spleenwort fern
Athyrium angustum - lady fern
Thelypteris palustris - marsh fern (Dryopteris thelypteris)
- Rare, Typha latifolia - cattail
Sparganium chlorocarpum - bur-reed
Potamogeton crispus - European pondweed or curly pondweed
- Potamogeton illinoensis - Illinois pondweed
Alisma plantago-aquatica - water plantain (subcordatum)
var. parviflorum
Sagittaria graminea - duck potato or narrow-leaved arrowleaf
Sagittaria latifolia - duck potato or common arrowleaf

I found nothing interesting in grasses.

SEDGES

- Cyperus rivularis - shining cyperus
Cyperus schweinitzii - sand cyperus
Cyperus filiculmis - slender cyperus
Cyperus acuminatus - cyperus
Cyperus erythrorhizos - red rooted cyperus
- Dulichium arundinaceum - three-way sedge
Bulbostylis capillaris
Scirpus micranthus - (Hemicypha micrantha)
Fimbristylis autumnalis
- Scirpus tabernaemontanii - soft-stem bulrush (validus)
Scirpus acutus - hard-stem bulrush
Scirpus fluviatilis - river bulrush
Scirpus atrovirens - bulrush
Scirpus pendulus - bulrush (lineatus)
Scirpus cyperinus - bulrush
- Rare, Scleria triglomerata - nut-rush
Rare, Carex rostrata - sedge
Carex lanuginosa - sedge
Carex vesicaria - sedge
Carex comosa - sedge

	<u>Carex vulpinoidea</u>	- sedge
	<u>Carex cristatella</u>	- sedge
Rare,	<u>Carex atherodes</u>	- sedge
Rare,	<u>Carex crawei</u>	- sedge
	<u>Peltandra virginica</u>	- arrow-arum
	<u>Lemna minor</u>	- duckweed
	<u>Wolffia columbiana</u>	- duck-meal or water meal
Rare,	<u>Xyris torta</u>	- twisted yellow-eyed-grass
	<u>Pontederia cordata</u>	- pickerelweed
Rare,	<u>Juncus greenii</u>	- rush
	<u>Smilacina stellata</u>	- small false Solomon's-seal
	<u>Maianthemum canadense</u>	- false lily-of-the-valley
	<u>Polygonatum commutatum</u>	- Solomon's seal
	<u>Smilax lasioneuron</u>	- carrion flower
	<u>Iris shrevei</u>	- wild blue iris
Rare,	<u>Platanthera lacera</u>	- fringed orchid (<u>Habenaria</u>)
Rare,	<u>Calopogon tuberosus</u>	- grass pink orchid (<u>pulchellus</u>)
Rare,	<u>Spiranthes cernua</u>	- nodding ladies tresses orchid
Rare,	<u>Liparis loeselii</u>	- lesser twayblade orchid
	<u>Populus deltoides</u>	- cottonwood
	<u>Populus grandidentata</u>	- big tooth aspen
	<u>Populus tremuloides</u>	- quaking aspen
	<u>Salix nigra</u>	- black willow
	<u>Salix exigua</u>	- sandbar willow (<u>interior</u>)
	<u>Salix sericea</u>	- silky willow
	<u>Salix discolor</u>	- pussy willow
	<u>Juglans nigra</u>	- black walnut
	<u>Corylus americana</u>	- hazelnut
	<u>Castanea dentata</u>	- planted chestnut
	<u>Quercus velutina</u>	- black oak
	<u>Quercus macrocarpa</u>	- burr oak
	<u>Morus rubra</u>	- mulberry
	<u>Bochmeria cylindrica</u>	- false nettle
	<u>Pilea pumila</u>	- clearweed
	<u>Rumex orbiculatus</u>	- water dock
	<u>Polygonum sagittatum</u>	- tear-thumb
	<u>Phytolacca americana</u>	- pokeweed
	<u>Caltha palustris</u>	- marsh-marigold
	<u>Ranunculus trichophyllus</u>	- white buttercup or white water crowfoot
	<u>Ranunculus flabellaris</u>	- water buttercup or yellow water crowfoot
	<u>Nelumbo lutea</u>	- American lotus
Rare,	<u>Nymphaea tuberosa</u>	- white waterlily
	<u>Ceratophyllum demersum</u>	- coontail
	<u>Berberis thunbergii</u>	- Japanese barberry (alien)
Rare,	<u>Drosera intermedia</u>	- sundew
	<u>Heuchera richardsonii</u>	- prairie alumroot
	<u>Saxifraga pensylvanica</u>	- swampbeet or swamp saxifrage
	<u>Spiraea alba</u>	- meadowsweet
	<u>Fragaria virginiana</u>	- wild strawberry
	<u>Potentilla recta</u>	- sulphur cinquefoil
	<u>Potentilla simplex</u>	- common cinquefoil
	<u>Agrimonia parviflora</u>	- swamp agrimony
	<u>Rubus hispidus</u>	- swampy dewberry

	<u>Rosa multiflora</u>	- multiflora rose
	<u>Rosa carolina</u>	- pasture rose
	<u>Rosa palustris</u>	- swamp rose
	<u>Aronia melanocarpa</u>	- black chokeberry
	<u>Prunus serotina</u>	* black cherry
	<u>Baptisia leucophaea</u>	- cream wild indigo
	<u>Amorpha canescens</u>	- lead plant
	<u>Tephrosia virginiana</u>	- goat's rue
	<u>Robinia pseudoacacia</u>	- black locust
	<u>Lespedeza capitata</u>	- round-headed bush clover
	<u>Geranium maculatum</u>	- geranium
	<u>Oxalis violacea</u>	- purple wood-sorrel
	<u>Oxalis stricta</u>	- yellow wood sorrel (<u>cymosa</u>)
	<u>Callitriche verna</u>	- common water starwort (<u>palustris</u>)
	<u>Celastrus scandens</u>	- bitter-sweet
	<u>Rhus glabra</u>	- smooth sumac
	<u>Rhus typhina</u>	- staghorn sumac
	<u>Toxicodendron radicans</u>	- poison ivy (<u>Rhus vernix</u>)
	<u>Acer saccharinum</u>	- silver maple
	<u>Rhamnus cathartica</u>	- common buckthorn
	<u>Vitis labrusca</u>	- cultivated grape or Fox grape
	<u>Parthenocissus quinquefolia</u>	- Virginia creeper
Rare,	<u>Hypericum canadense</u>	- Canada St. John's wort
Rare,	<u>Triadenum fraseri</u>	- marsh St. John's wort
	<u>Viola lanceolata</u>	- white violet or lance leaved violet
Rare,	<u>Viola macloskeyi</u>	- smooth white violet (<u>pollens</u>)
	<u>Elaeagnus umbellata</u>	- autumn olive
	<u>Rhexia virginica</u>	- meadow-beauty
	<u>Myriophyllum exalbescens</u>	- water milfoil
	<u>Proserpinaca palustris</u>	- mermaid-weed
	<u>Cornus racemosa</u>	- gray dogwood
	<u>Cornus obliqua</u>	- pale dogwood
	<u>Osmorhiza longistylis</u>	- sweet Cicely or anise-root
	<u>Cicuta maculata</u>	- water hemlock
	<u>Gentiana andrewsii</u>	- closed gentian
Rare,	<u>Bartonia virginica</u>	- yellow bartonia
	<u>Asclepias amplexicaulis</u>	- milkweed or sand milkweed
	<u>Asclepias hirtella</u>	- green milkweed or tall green milkweed
	<u>Asclepias syriaca</u>	- common milkweed
	<u>Solanum carolinense</u>	- horse nettle
	<u>Solanum dulcamara</u>	- deadly nitshade or bittersweet
	<u>Linaria canadensis</u>	- blue toadflax
	<u>Veronicastrum virginicum</u>	- Culver's root
	<u>Agalinis purpurea</u>	- gerardia or false foxglove (<u>Gerardia</u>)
	<u>Pedicularis canadensis</u>	- lousewort
	<u>Utricularia vulgaris</u>	- bladderwort (Common)
	<u>Cephalanthus occidentalis</u>	- buttonbush
	<u>Sambucus canadensis</u>	- elderberry
	<u>Viburnum lentago</u>	- nannyberry
	<u>Viburnum opulus</u>	- gilder rose or European highbush cranberry
	<u>Lonicera tatarica</u>	- honeysuckle (tartarian)

<u>Eupatorium serotinum</u>	- late boneset
<u>Liatris cylindracea</u>	- blazing star
<u>Parthenium integrifolium</u>	- wild quinine
<u>Helianthus grosseserratus</u>	- sunflower (sawtooth)
<u>Helianthus occidentalis</u>	- western sunflower
<u>Coreopsis palmata</u>	- coreopsis (prairie)
<u>Bidens cernua</u>	- beggar ticks of stickights nodding bur marigold
<u>Achillea millefolium</u>	- yarrow, common
<u>Cacalia plantaginea</u>	- Indian plantain (tuberosa)
<u>Tragopogon dubius</u>	- oyster plant or sand goat's -beard
<u>Cichorium intybus</u>	- chicory
<u>Hieracium longipilum</u>	- hawkweed (hairy)
<u>Hieracium scabrum</u>	- rough hawkweed
<u>Taraxacum officinale</u>	- dandelion (common)

12 ferns

4 orchids

21 rare plants

5 more should be
considered as rare
in this county.

signed: Jim Long

site (2) SPEARS-GUANCI WETLAND (Aerial, Topo and Soil Map #2)

OWNER: GERALD GUANCI (section 25, 26, 36)
1701 MORGAN ROAD
AMBOY, IL 61310
PHONE:

OWNER: MARVIN SPEARS (section 35)
1668 WINDING ROAD
AMBOY, IL 61310
PHONE: 815/849-5508

The Spears-Guanci Wetland area is located in Amboy Township (T. 20 N. - R.10 E.) Sections 25, 26, 35, 36, Lee County, Illinois. This has proved to be a very interesting site. The large prairie pothole situated at the juncture of the four sections was a beautiful area covered with white water lilies when visited in 1986. On our initial visit in the fall of 1989 there remained very little water and much green growth. We were able to walk on most of the area without getting our feet wet. On the spring 1990 visits the water lilies are blooming again.

In discussions with neighbors and operators we have gathered some information about past use. The present operator of the Guanci property, who has been there 20 years, stated that the area had been grazed in the past. It has not been for the last ten years. He could not recall it ever being burned. One wonders if grazing may have benefited this particular area. Perhaps it kept the woody species under control.

The area was hunted in the past, but not in recent years. Mr. Kessel, the operator, said not many ducks are seen anymore. When asked if Canada geese nested there he said none to his knowledge.

The area has many small wet areas, sand ridges, and small wet areas in sparse wooded sites. It is interesting to walk a short distance from a wet lush green area to a dry sand ridge populated with typical dry sand prairie species.

The present owner of the other portion of the site, Mr. Spears, has owned his property for 24 years. The area surveyed has never been farmed. To the best of his recollection 1988 and 1989 were the only years the area was dry. It was hunted extensively in the past, trapped also. Mr. Spears complained about the high deer population at the present time. He permits hunting each season. Nine were harvested in 1988 and seven in 1989.

site (2) SPECIES LIST

INVENTORIED SEPT. 15, 1989
by - Cassandra Rodgers, Hazel Reuter

GRAZED AREA WEST OF LAKE

* non-native

<u>Agalinis tenuifolia</u>	Slender gerardia or false foxglove
<u>Eupatorium purpureum</u>	Joe-Pye weed
<u>Helenium autumnale</u>	sneezeweed
<u>Lobelia siphilitica</u>	great blue lobelia
<u>Epilobium ciliatum</u>	northern willow herb
<u>Pedicularis canadensis</u>	lousewort
<u>Polygonum spp.</u>	smartweed
<u>Aster novae-angliae</u>	New England aster
<u>Aster pilosa</u>	frost aster
<u>Lycopus americanus</u>	water horehound
<u>Mimulus alatus</u>	winged monkeyflower
<u>Verbena stricta</u>	hoary vervain
<u>Vernonia gigantea</u>	ironweed
<u>Spartina pectinata</u>	cordgrass
<u>Cirsium arvense*</u>	Canada thistle
<u>Pycnanthemum virginianum</u>	mountain mint
<u>Rosa multiflora*</u>	multiflora rose
<u>Poa palustris</u>	bluegrass
<u>Juncus tenuis</u>	path rush
<u>Agrimonia parviflora</u>	swamp agrimony
<u>Calamagrostis canadensis</u>	bluejoint grass
<u>Carex vulpinoidea</u>	fox sedge
<u>Cyperus spp.</u>	sedge
<u>Euthamia graminifolia</u>	grass leaved goldenrod
<u>Polygala sanguinea</u>	purple milkwort
<u>Panicum spp.</u>	
<u>Rumex acetosella *</u>	sheep sorrel or sour dock
<u>Quercus macrocarpa</u>	bur oak
<u>Salix exigua</u>	sand bar willow
<u>Bidens connata</u>	swamp beggar ticks
<u>Echinochloa crus-galli*</u>	barnyard grass
<u>Amaranthus albus</u>	tumbleweed
<u>Bidens spp.</u>	beggar ticks
<u>Phyla lanceolata</u>	fog fruit
<u>Iris shrevei</u>	blue flag
<u>Prunella vulgaris*</u>	self-heal
<u>Eleocharis spp.</u>	spike rush
<u>Spiranthes magnicamporum</u>	ladies tresses orchid
<u>Gnaphalium obtusifolium</u>	cudweed
<u>Ambrosia artemisiifolia</u>	common ragweed
<u>Solidago nemoralis</u>	field goldenrod
<u>Paspalum spp.</u>	bead grass
<u>Cyperus spp.</u>	sedge
<u>Achillea millefolium*</u>	yarrow
<u>Penstemon pallidus</u>	pale beardstongue
<u>Hypericum gentianoides</u>	orange grass or pinweed
<u>Leptochloa spp.</u>	spangletop

<u>Aristida tuberculosa</u>	needle grass
<u>Mollugo verticillatus</u>	carpetweed
<u>Cacalia plantaginea</u>	prairie Indian plantain

POND EDGE, HILLSIDE

<u>Cephalanthus occidentalis</u>	buttonbush
<u>Vernonia gigantea</u>	tall ironweed
<u>Asclepias incarnata</u>	swamp milkweed
<u>Thelypteris palustris</u>	marsh fern
<u>Scripus tabernaemantani</u>	bulrush
<u>Typha latifolia</u>	cattail
<u>Juncus brachycarpus</u>	rush
<u>Aronia melanocarpa</u>	black chokeberry
<u>Baptisia lactea</u>	wild indigo
<u>Baptisia leucophaea</u>	prairie wild indigo
<u>Vaccinium angustifolium</u>	blueberry
<u>Helianthemum spp.</u>	frostweed
<u>Carex pensylvanica</u>	sedge
<u>Hieracium scabrum</u>	hairy hawkweed
<u>Euphorbia corollata</u>	flowering spurge
<u>Amorpha canescens</u>	leadplant
<u>Viola pedata</u>	birdsfoot violet
<u>Tephrosia virginiana</u>	goat's rue
<u>Danthonia spicata</u>	wild oat grass
<u>Scrophularia lanceolata</u>	early figwort
<u>Spiraea alba</u>	meadow sweet
<u>Zizania aquatica</u>	wild rice
<u>Polygonum pennsylvanicum</u>	common smartweed
<u>Schizachyrium scoparium</u>	little bluestem
<u>Lechea intermedia (Endangered)</u>	pinweed
<u>Xyris torta</u>	twisted yellow-eyed grass
<u>Polygonella articulata</u>	jointweed
<u>Juniperus virginiana</u>	red cedar
<u>Quercus velutina</u>	black oak
<u>Lespedeza capitata</u>	roundheaded bushclover
<u>Triadenum fraseri</u>	Fraser's St. John's-wort
<u>Osmunda regalis</u>	royal fern
<u>Dulichium arundinaceum</u>	three-way sedge
<u>Ludwigia alternifolia</u>	seed box
<u>Rubus hispidus</u>	trailing dewberry
<u>Polygala cruciata</u>	cross milkwort
<u>Smilacina stellata</u>	starry Solomon's seal
<u>Salix humilis</u>	prairie willow
<u>Andropogon gerardii</u>	big bluestem
<u>Sphagnum spp.</u>	sphagnum moss
<u>Maianthemum canadense</u>	Canada mayflower
<u>Sorghastrum nutans</u>	Indian grass
<u>Heterotheca camporum</u>	golden aster
<u>Asclepias verticillata</u>	horsetail milkweed
<u>Asclepias amplexicaulis</u>	blunt-leaved milkweed
<u>Oenothera rhombipetala</u>	sand primrose
<u>Equisetum arvense</u>	horsetail
<u>Cenchrus longispinus</u>	sandbur
<u>Asclepias hirtella</u>	tall green milkweed

<u>Plantago patagonica</u>	salt and pepper plant
<u>Lithospermum canescens</u>	hoary puccoon
<u>Lithospermum caroliniense</u>	hairy puccoon
<u>Pilea pumila</u>	clearweed
<u>Brickellia eupatorioides</u>	false boneset
<u>Sambucus canadensis</u>	elderberry
<u>Galium asprellum</u>	rough bedstraw
<u>Sagittaria latifolia</u>	common arrowleaf
<u>Polygonum amphibium</u>	water smartweed
<u>Nymphaea tuberosa</u>	water lily
<u>Scutellaria lateriflora</u>	mad-dog skullcap
<u>Leersia oryzoides</u>	rice cutgrass
<u>Gentiana andrewsii</u>	bottle gentian
<u>Triodanis perfoliata</u>	Venus' looking glass
<u>Polygala polygama</u>	sand milkwort
<u>Asclepias amplexicaulis</u>	sand milkweed

ANIMAL LIST

<u>Heterodon nasicus</u> (Threatened)	western hognose snake, hatchling
<u>Cnemidophorus sexlineatus</u>	six-lined racerunner
<u>Emydoidea blandingi</u>	Blanding's turtle
<u>Blarina bevicauda</u>	short-tailed shrew
<u>Sorex cinereus</u>	masked shrew
<u>Microtus pennsylvanicus</u>	meadow vole
<u>Porzana carolina</u>	sora
<u>Terrapene ornata</u>	box turtle

A number of songbirds were noted also.

site (3) ILLINOIS MUD TURTLE SITE (Aerial, Topo and Soil Map #3)

OWNER: GAYLE SWICKHEIMER
320 HILL TOP ROAD
TALENT, OREGON 97540

The Illinois Mud Turtle site is located in East Grove Township (T.1 N - R.9 E.) Section 15, Lee County, Illinois. Located adjacent to a little used public road, part of the old Peoria Galena Trail, the small wetland has had minimal disturbance. One male Illinois Mud Turtle (Kinosternum flavescens spooneri) was trapped at this site in 1986.

A sand ridge to the south supports a dry prairie with a number of typical dry sand species. This small area including the wetland, sand prairie, and small wooded area has not been cultivated for at least 60 years. The wetland was probably never cultivated. The present operator burned the area in 1987, 1988, and 1989. The area has benefited. It was pastured in the late 1930's and early '40's. As seen in the aerial maps, adjacent land is cropped.

site (3) SPECIES LIST

ILLINOIS MUD TURTLE SITE

INVENTORIED SEPT. 16, 1989

by - Cassandra Rodgers, Hazel Reuter

* non-native

<u>Spartina pectinata</u>	cordgrass
<u>Bidens</u> spp.	baggar ticks
<u>Phalaris arundinacea</u>	reed canary grass
<u>Polygonum hydropiper</u> *	smartweed
<u>Polygonum pensylvanicum</u>	common smartweed
<u>Echinochloa crus-galli</u> *	barnyard grass
<u>Typha latifolia</u>	cattail
<u>Alisma parviflorum</u>	water plantain
<u>Scirpus tabernaemontanii</u>	soft stem bulrush
<u>Leersia oryzoides</u>	rice cutgrass
<u>Eleocharis verrucosa</u>	spike rush
<u>Lycopus americanus</u>	water horehound
<u>Verbena hastata</u>	blue vervain
<u>Euthamia graminifolia</u>	grass leaved goldenrod
<u>Calamagrostis canadensis</u>	bluejoint grass
<u>Solidago speciosa</u>	showy goldenrod
<u>Andropogon gerardii</u>	big bluestem
<u>Rumex acetosella</u> *	sour dock
<u>Parthenium integrifolium</u>	wild quinine
<u>Hieracium scabrum</u>	hairy hawkweed
<u>Lespedeza capitata</u>	round headed bushclover
<u>Aster ericoides</u>	heath aster
<u>Aster pilosus</u>	frost aster
<u>Rosa carolina</u>	Carolina rose
<u>Panicum virgatum</u>	switchgrass
<u>Fragaria virginiana</u>	wild strawberry
<u>Euphorbia corollata</u>	flowering spurge
<u>Salix exigua</u>	sandbar willow
<u>Acer saccharinum</u>	silver maple
<u>Prunus serotina</u>	black cherry
<u>Schizachyrium scoparium</u>	little bluestem
<u>Prunus serotina</u>	black cherry
<u>Cyperus filiculmis</u>	sedge
<u>Amorpha canescens</u>	lead plant
<u>Tephrosia virginiana</u>	goat's rue
<u>Leptochloa acuminata</u>	salt meadow grass
<u>Coreopsis lanceolata</u>	lance-leaved coreopsis
<u>Artemisia campestris</u>	wormwood
<u>Helianthus occidentalis</u>	western sunflower
<u>Eryngium yuccifolium</u>	rattlesnake master
<u>Salix humilis</u>	prairie willow
<u>Coreopsis palmata</u>	prairie coreopsis
<u>Asclepias hirtella</u>	tall green milkweed
<u>Liatris pycnostachya</u>	gayfeather (prairie blazingstar)
<u>Liatris aspera</u>	rough blazingstar
<u>Carex bicknelli</u>	sedge
<u>Viola pedatifida</u>	prairie violet
<u>Carex umbellata</u>	sedge

<u>Thelypteris palustris</u>	marsh fern
<u>Solidago canadensis</u>	Canada goldenrod
<u>Iris shrevei</u>	blue flag
<u>Cornus stolonifera</u>	red osier dogwood

<u>Cephalanthus occidentalis</u>	buttonbush
<u>Rubus hispidus</u>	trailing dewberry
<u>Polygala sanguinea</u>	field milkwort
<u>Rubus allegheniensis</u>	common blackberry
<u>Rhus aromatica</u>	fragrant sumac
<u>Aristida oligantha</u>	three awn
<u>Opuntia humifusa</u>	prickly pear
<u>Plantago patagonica</u>	salt and pepper plant
<u>Paspalum spp.</u>	bead grass
<u>Eragrostis spectabilis</u>	tumble grass
<u>Sonchus arvensis*</u>	field sow thistle

SOIL TYPE

Situated in the Green River Lowland Section of the Grand Prairie division of Illinois the sites visited have a common soil. The soil is Orio, listed as a mucky sandy loam. The Soil Survey of Lee County Illinois contains the following description of the soil.

"4200-ORIO MUCKY SANDY LOAN, PONDED. This nearly level, very poorly drained soil is in depressions on outwash plains. It is ponded for prolonged periods. Individual areas are irregular in shape and range from 2 to 80 acres in size.

Typically, the surface layer is black, friable mucky sandy loam about 11 inches thick. The subsurface layer is about 8 inches of dark grayish brown, mottled, very friable sandy loam and loamy sand. The subsoil is about 22 inches thick. It is mottled. The upper part is dark gray, friable clay loam. The next part is very dark gray, friable loamy sand. The substratum to a depth of 60 inches is olive brown, loose sand. In some places the subsoil contains less clay. In other places it is thicker and contains more clay in the lower part. In a few places the substratum has thin layers of sandy clay loam or sandy loam.

Included with this soil in mapping are small areas of the somewhat poorly drained Hoopston soils. These soils contain more sand and less clay in the subsoil than the Orio soil. They are in the slightly higher landscape positions. They make up 2 to 5 percent of the unit.

Water and air moves through the upper part of the Orio soil at a moderately slow rate and through the substratum at a rapid rate. Surface runoff is very slow or ponded. A seasonal high water table is 0.5 foot above the surface to 1.0 foot below during most of the growing season. Available water capacity is high. Organic matter content is very high. The subsoil is medium acid to neutral. The shrink-swell potential and the potential for frost action are moderate."

Note on the soil maps that the entire large ponded area at site (1) is 4200. Another predominant soil at the sites is 779B and 779D Chelsea fine sand. Their description follows.

"778B - CHELSEA FINE SAND, 1 TO 7 PERCENT SLOPES. This gently sloping, excessively drained soil is on uplands. Individual areas are irregular in shape and range from 5 to 120 acres in size.

Typically, the surface layer is very dark grayish brown, very friable fine sand about 4 inches thick. The subsurface layer is fine sand about 32 inches thick. The upper part is dark yellowish brown and very friable. The lower part is yellowish brown and loose. The subsoil to a depth of 60 inches is yellowish brown, loose fine sand. It has thin bands of strong brown, very friable loamy sand. In some places it does not have these bands. In other places the bands are thicker. In a few places the subsoil contains coarser sand.

Included with this soil in mapping are small areas of the well drained Ayr sandy loam, the well drained Miami fine sandy loam, the somewhat poorly drained Morocco soils, and the poorly drained Orio soils. Ayr, Miami, and Orio soils contain more clay and less sand in the subsoil than Chelsea soil. Ayr and Miami soils are downslope from the Chelsea soil. Morocco soils are in the lower landscape positions. Orio soils are in depressions. Included soils make up 2 to 5 percent of the unit.

Water and air move through the Chelsea soil at a rapid rate. Surface runoff is slow in cultivated areas. Available water capacity is low. Organic matter content also is low. The subsoil is neutral."

"779D - CHELSEA FINE SAND, 7 TO 20 PERCENT SLOPES. This sloping to moderately steep, excessively drained soil is on upland dunes. Individual areas are long and narrow, crescent shaped, or irregular in shape and range from 5 to 200 acres in size.

Typically, the surface layer is very dark gray, very friable fine sand about 3 inches thick. The subsurface layer is loose fine sand about 37 inches thick. The upper part is dark brown. The next part is dark yellowish brown. The lower part is brownish yellow. The subsoil to a depth of 60 inches is brownish yellow, loose sand. It has thin bands of dark brown, very friable loamy sand. In some places it does not have these bands. In other places the bands are thick. In a few places the subsoil contains coarser sand.

.....The subsoil is strongly acid and medium acid."

DISCUSSION

DROUGHT IMPACT

It would appear that the drought had a minimal effect on the wetland sites. Both plant and animal species seem to have suffered little trauma. The water lilies are a good example. In the fall of 1989 the marsh area was dry but with the return of moisture they are again thriving. The Blanding's Turtle survey conducted by other LeeNAG members supports this theory also. Many specimens were trapped in this formerly dry marsh. Wetland species appear to be a hardy group!

CONCLUSION

Such a project of this has results that are far reaching but hard to define. Without a doubt it has had an impact on those carrying out the project. We have a much better appreciation of our land, wetlands in particular. We are also astounded about our lack of knowledge of our own area and its resources. Hopefully through the slide presentation prepared during the inventory we can share some of our findings and wonder with local students and citizens, to generate a deeper appreciation on those elusive resources we take for granted. An important job we have to do is to train the average citizen how to appreciate these fragile resources without destroying them.

RECOMMENDATIONS

Based on our survey, we are proposing the following recommendations:

- 1) A more detailed study of these wetlands be carried out by a professional plant taxonomist.
- 2) The "Spears-Guanci Wetland" (site 2) be listed as an Illinois Natural Area.
- 3) The "Sandy Hill Slough" (site 1) remain on the Illinois Natural Area Inventory.

In addition to these recommendations we learned, that to do a good job inventorying this type of site, we need much more time and expertise. We have just "skimmed the top" of the species present. Materials for amateurs to identify rare plants is difficult to find. Many more visits throughout a period of several years is needed to find all the treasures, plant and animal, on these sites. Given the habit of species response to climatic conditions, timing of visits, and other factors, important species could easily be missed. We have learned much about our special wetlands. At this point we wish we had confined our inventory to one site and done a more complete search on that specific site.

A change in timing of grants would assist in such projects as ours. With the late signing of contracts, in September, not much time is left in the growing season to inventory. The June 30 deadline cuts off all summer opportunities. We suggest a February contract signing date and December deadline for reports. These dates would afford an entire growing season for field study.

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ACKNOWLEDGMENTS

The Lee County Natural Area Guardians wish to acknowledge the excellent cooperation of the landowners and operators we worked with throughout this inventory. Without cooperative land users the project would have failed. We also thank them for preserving, knowingly or not, these special tracts of land. Thanks also to fellow LeeNAG member Randy Nyboer for technical advice.

Of course, we must thank the Illinois tax payers for their interest and concern for our state's nongame resources. And without the Illinois Department of Conservation selecting our project we would not have had this opportunity to increase our knowledge about Lee County and its great diversity. Projects like our inventory peaks our curiosity to learn more and more about the ecology of our area.

EXHIBITS

WETLAND INVENTORY
CONDUCTED BY THE LEE CO. NATURAL AREA GUARDIANS
FUNDED BY THE ILLINOIS NONGAME WILDLIFE CONSERVATION CHECKOFF PROGRAM

EXPENSES

COMMODITIES.....	\$118.24
TRAVEL.....	100.00
CONTRACTUAL.....	176.74
LABOR.....	<u>25.02</u>
TOTAL.....	\$420.00

Signed Dr. Cassandra S. Rodgers Date 6-26, 1990
(Dr. Cassandra Rodgers)

Signed Hazel L. Reuter Date 6-26, 1990
(Hazel L. Reuter)

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