

The Herbaceous Vascular Plants of Blackacre Preserve
A Preliminary List

December 3, 2010

Submitted to:

Kentucky State Nature Preserves Commission

Submitted by:

William E. Thomas
Herbarium
Indiana University Southeast

Photo: Spiked Crested Coralroot by Richard Lyons

Scope

The aim of this survey was to compile a rough list of herbaceous vascular plant species on the below described tract and was conducted from July 11, 2010 through the end of the growing season. In addition any extensive populations of invasive alien species were noted.

Locale Description

The Blackacre Preserve website states that the property consists of 170 acres in eastern Jefferson County Kentucky. It is the authors understanding that some additional acreage (size?) was appended to the southern border of the original 170 acre tract. The property is located at 3200 Tucker Station Rd. The tract is bordered on all sides by housing and urban areas; a railroad track runs along the north border. The terrain is of mostly gentle slopes with some wooded areas and open fields formerly used for pasture or crops. There are several ponds on the property; a limestone glade area constitutes the northeast corner of the tract. A small creek flows east to west across the tract north of the center. There are numerous foot trails, some designated and some rogue. An old section of Mann's Lick road runs northward about midway in the tract.

Map #1 from the Blackacre Preserve website provides a general layout of this tract. Map #2 is a topographic map with a NAD83 UTM 16 grid superimposed and the foot trails plotted in various colors.

Methods

The survey was accomplished by conducting random forays into the area; the routes chosen to best accommodate species that were expected to be in flower. A total of 17 visits were made to the area by the author between July 11 and December 3, 2010. The author was accompanied by Mr. Richard Lyons, a volunteer Master Naturalist for the Indiana DNR on several visits.

Some collections of plants were made to provide a voucher and determine the species if in doubt. All plants collected reside in the Indiana University Southeast Herbarium (JEF) and carry the author's collection numbers. All plant collections associated with this survey are summarized in table 2. All locations of collected species and major invasive sites were recorded with a handheld GPS.

The open pastures and fields south of the creek [shown in map #1 as Pasture 1 to 3 and Front field] were paid little attention during the survey as they were apparently not in a native or ordinary fallow state but rather more likely planted with a seed mixture of some sort. Some of the plants observed in these areas are listed however. The survey focus was mainly on the glade area, woods and creek channel in the north half of the property.

This survey was conducted under KSNPC permit # BLAC 071610. Nomenclature herein follows the USDA Plants Database. All GPS data provided in this report refer to the NAD83 UTM16 datum and are in units of meters.

Results

No federally listed or state listed species were observed on the tract.

Due to the late start of this survey most of the spring and early summer species are absent from the data. Approximately 240 herbaceous species were observed and identified across the preserve generally. Table 1 provides a summary of these plants with notes on their habitat. Table 2 is a listing of all plants collected from the tract.

This year proved to be a bumper crop season for *Hexalectris spicata* (Spiked Crested Coralroot) in the Kentuckiana area. Twenty or more of these lovely orchids were found in several places across this tract, mainly in the woods near the glade and southeast of the 'waterfall' area.

The *Spiranthes cernua* (Nodding Lady's Tresses) listed in the section below was scattered across the glade area and found nowhere else on the tract. This particular type of *S. cernua* morphologically resembles the state threatened *S. magnicamporum* (Great Plains Lady's Tresses) in having no basal leaves and being quite odiferous. The two species are notoriously difficult to separate and so a collected specimen (WET 3727) was sent to Dr. Charles Sheviak of the New York State Museum, an expert on *S. magnicamporum*. Dr. Sheviak concluded that the plant was a 'prairie form' of *S. cernua*.

The *Eleocharis* listed in the section below was found in the north central edge of the glade area mainly with a small patch in the 'Sunset' field (Pasture 2) as well. The specimen (WET 3583) was mailed to Dr. Paul Rothrock of Taylor University for confirmation of species.

A late visit on December 3 by the author and Richard Lyons to search open rocky scrapes in the glade areas for *Leavenworthia sp.* winter rosettes was not fruitful, none were found. The species is found on similar habitat at other nearby glade areas.

The tract has several invasive species problems, details are given in the Invasive section below.

Species of interest

Although no Kentucky state listed species were found on the property many species that are locally rare, some in fact state listed in Indiana were observed. Most all of these plants were confined to the limestone glade areas and are generally considered glade indicative.

The species of note on the tract were:

Scientific Name	Common Name
<i>Hexalectris spicata</i>	Spiked Crested Coralroot
<i>Eleocharis bifida</i>	Glades Spikerush (Unconfirmed identification)
<i>Tragia cordata</i>	Heartleaf noseburn
<i>Galactia volubilis</i>	Downy Milkpea
<i>Hypericum dolabrifforme</i>	Straggling St. Johnswort
<i>Asclepias viridis</i>	Green Antelopehorn
<i>Asclepias viridiflora</i>	Green Comet Milkweed
<i>Asclepias verticillata</i>	Whorled Milkweed
<i>Manfreda virginica</i>	False Aloe
<i>Lobelia spicata</i>	Palespike Lobelia
<i>Thalictrum revolutum</i>	Waxyleaf Meadow-rue
<i>Scutellaria parvula</i> var. <i>australis</i>	Small Skullcap
<i>Spiranthes cernua</i>	Nodding Lady's Tresses
<i>Sorghastrum nutans</i>	Indian Grass
<i>Schizachyrium scoparium</i>	Little Bluestem Grass
<i>Andropogon gerardii</i>	Big Bluestem Grass

Invasive species

The invasive species noted were:

Elaeagnus umbellata Thunb. [Autumn Olive]
Euonymus fortunei (Turcz.) Hand. [Climbing Euonymus, Wintercreeper]
Lonicera japonica L. [Japanese Honeysuckle]
Lonicera maackii (Rupr.) Herder [Amur Honeysuckle]
Microstegium vimineum (Trin.) A. Camus [Japanese Stiltgrass]
Rosa multiflora Thunb. [Multiflora Rose]
Setaria pumila (Poir.) Roemer & J.A. Schultes [Yellow Foxtail Grass]

Two major invasive problems were noted. First is the large number of Amur Honeysuckle (shrub) scattered across the tract, particularly heavy along the old Mann's Lick road. These shrubs are also abundant along the start of the Waterfall Trail as well as on the glade area in all the 'tree islands'. Second but not least is the rather extensive spread of Climbing Euonymus throughout most of the wooded areas of the tract, particularly heavy in the woods south of the main entry road along the 'Tyler's Trace' trail.

Japanese Stiltgrass was observed to be heavy in the west central area of the tract, particularly along and north of the creek. A particularly large patch was located at GPS 628055 mE 4228735 mN.

Japanese honeysuckle was scattered across the tract but distributed about normally for this area.

A few Autumn Olive trees were scattered in the clearings, particularly numerous in the area south of the Dragonfly Pond.

Foxtail grasses were scattered across the tract with Yellow Foxtail becoming somewhat common on the glade area.

Multiflowered Rose was occasional across the wooded areas of the tract, not abundantly though.

Acknowledgements

The author would like to thank the Kentucky State Nature Preserves Commission for the opportunity to do this survey and for issuing a plant collection permit. I also wish to thank and commend my associates at Indiana University Southeast for their expertise and encouragement especially Richard Lyons and Susan Reigler for contributing their observations.

The author can be reached at: thomas77@ius.edu

References

Blackacre Preserve web site URL:

<http://www.jefferson.k12.ky.us/departments/environmentaled/undrstndblackacre/uboverview.html>

Gleason, H. A. & A. Cronquist. 1991 Manual of the Vascular Plants of Northeastern United States and Adjacent Canada. 2nd ed. New York Botanic Gardens. Bronx, NY.

Jones, Ronald L. 2005 Plant Life of Kentucky. University Press of Kentucky, Lexington KY.

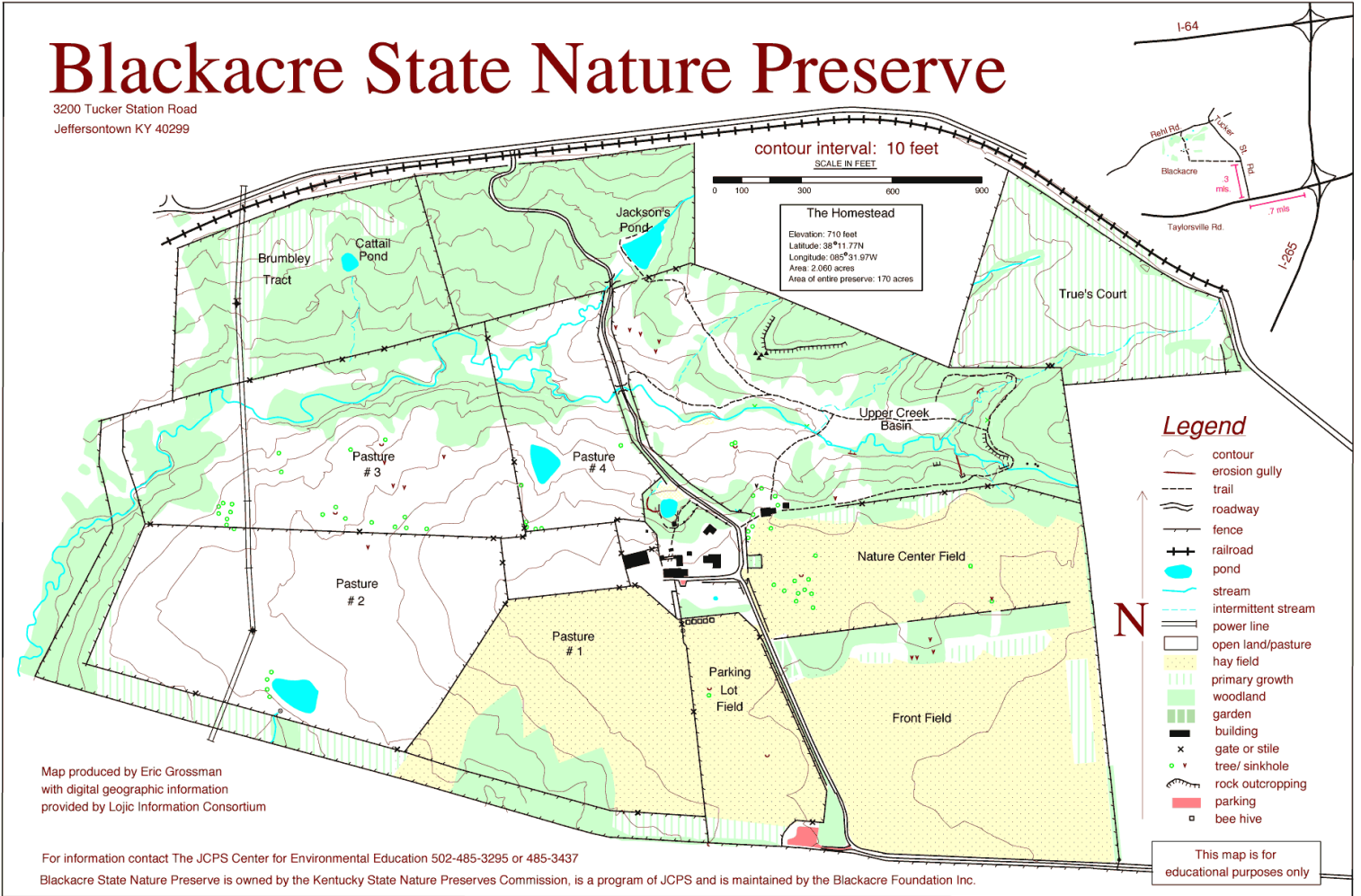
Yatskievych, Kay. 2000. Field Guide to Indiana Wildflowers. Indiana University Press, Bloomington, IN.

USDA, NRCS. 2010. The PLANTS Database (<http://plants.usda.gov>, 8 October 2010). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

MAP #1

Blackacre State Nature Preserve

3200 Tucker Station Road
Jeffersontown KY 40299



Map produced by Eric Grossman
with digital geographic information
provided by Lojic Information Consortium

For information contact The JCPS Center for Environmental Education 502-485-3295 or 485-3437
Blackacre State Nature Preserve is owned by the Kentucky State Nature Preserves Commission, is a program of JCPS and is maintained by the Blackacre Foundation Inc.

This map is for
educational purposes only

MAP #2

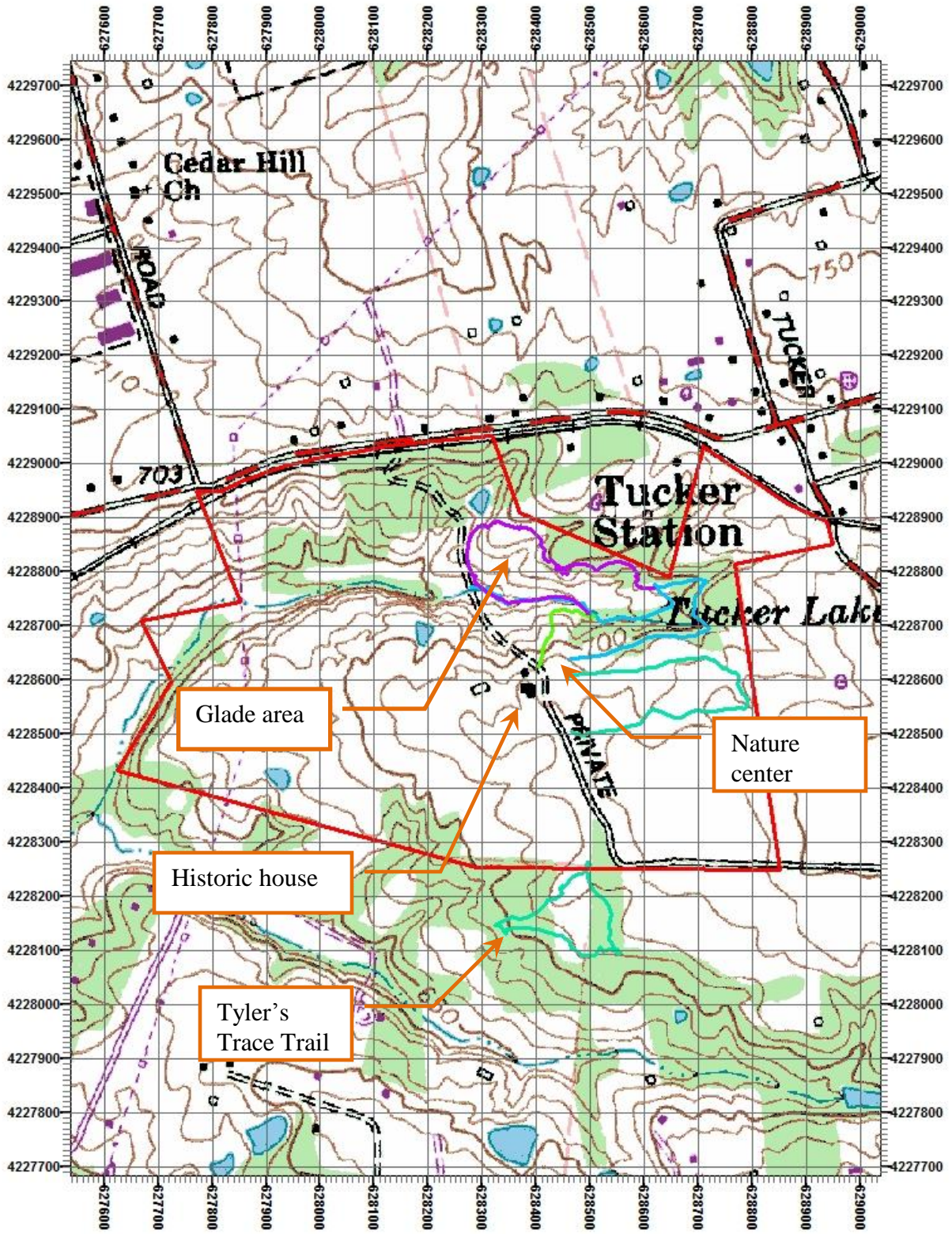


Table 1

List of Herbaceous Species Observed Blackacre Preserve

Note: This data can be supplied in spreadsheet format if requested; this will allow sorting in any desired manner.

Family	Species Name	Habitat/Notes
Euphorbiaceae	<i>Acalypha rhomboidea</i> (Raf.) Cooperr.	Woods, roadsides
Asteraceae	<i>Achillea millefolium</i> L.	open fields
Rosaceae	<i>Agrimonia pubescens</i> Wallr.	woods
Rosaceae	<i>Agrimonia</i> spp.	
Alismataceae	<i>Alisma subcordatum</i> Raf.	Ocassional along creek
Asteraceae	<i>Ambrosia artemisiifolia</i> L.	
Asteraceae	<i>Ambrosia trifida</i> L.	
Asclepiadaceae	<i>Ampelamus albidus</i> (Nutt.) Britt.	
Fabaceae	<i>Amphicarpa bracteata</i> (L.) Fern.	woods
Poaceae	<i>Andropogon gerardii</i> Vitm.	Glade area
Ranunculaceae	<i>Anemone virginiana</i> L.	
Apocynaceae	<i>Apocynum cannabinum</i> L.	woods, clearings
Brassicaceae	<i>Arabis canadensis</i> L.	
Asteraceae	<i>Arctium minus</i> (Hill) Bernh.	roadside
Araceae	<i>Arisaema dracontium</i> (L.) Schott	woods
Araceae	<i>Arisaema triphyllum</i> (L.) Schott	woods
Aristolochiaceae	<i>Aristolochia serpentaria</i> L.	woods
Asteraceae	<i>Artemisia annua</i> L.	
Asclepiadaceae	<i>Asclepias incarnata</i> L.	glade area
Asclepiadaceae	<i>Asclepias syriaca</i> L.	scattered woods, clearings
Asclepiadaceae	<i>Asclepias tuberosa</i> L.	scattered open areas
Asclepiadaceae	<i>Asclepias verticillata</i> L.	Glade area
Asclepiadaceae	<i>Asclepias viridiflora</i> Raf.	Glade area
Asclepiadaceae	<i>Asclepias viridis</i> Walt.	NE corner Dragonfly, disturbed area
Liliaceae	<i>Asparagus officinalis</i> L.	few on glade
Aspleniaceae	<i>Asplenium platyneuron</i> (L.) Oakes ex D.C.Eaton	woods, unusually scarce
Asteraceae	<i>Aster</i> spp.	Several spp. Small whites
Berberidaceae	<i>Berberis thunbergii</i> DC	glade, few at N tip
Asteraceae	<i>Bidens bipinnata</i> L.	
Asteraceae	<i>Bidens cernua</i> L.	
Asteraceae	<i>Bidens frondosa</i> L.	
Lamiaceae	<i>Blephilia ciliata</i> (L.) Benth.	Glade area
Ophioglossaceae	<i>Botrychium virginianum</i> (L.) Sw.	
Asteraceae	<i>Brickellia eupatorioides</i> (L.) Shinners	glade areas
Convolvulaceae	<i>Calystegia sepium</i> (L.) R. Br.	
Liliaceae	<i>Camassia scilloides</i> (Raf.) Cory	north woods
Campanulaceae	<i>Campanula americana</i> L.	woods
Bignoniaceae	<i>Campsis radicans</i> L.	woods
Asteraceae	<i>Carduus nutans</i> L.	ocassional weedy thistle
Cyperaceae	<i>Carex frankii</i> Kunth.	
Cyperaceae	<i>Carex hirsutella</i> Mackensie	creekside on glade

Cyperaceae	Carex spp.	
Caesalpiniaceae	Cassia fasciculata Michx.	Glade area
Euphorbiaceae	Chamaesyce nutans (Lag.) Small	glade, open areas
Chenopodiaceae	Chenopodium album L.	
Chenopodiaceae	Chenopodium ambrosioides L.	
Asteraceae	Chrysanthemum leucanthemum L.	
Asteraceae	Cichorium intybus L.	
Onagraceae	Circaea lutetiana (L.) Aschers. & Magnus	
Asteraceae	Cirsium arvense (L.) Scop.	
Asteraceae	Cirsium discolor (Muhl. ex Willd.) Spreng.	
Commelinaceae	Commelina communis L.	weedy roadsides
Commelinaceae	Commelina diffusa Burm. f.	near vegetable garden
Convolvulaceae	Convolvulus arvensis L.	
Asteraceae	Conyza canadensis (L.) Cronquist	
Asteraceae	Coreopsis lanceolata L.	
Euphorbiaceae	Croton monanthogynus Michx.	glades
Apiaceae	Cryptotaenia canadensis (L.) DC.	woods
Lythraceae	Cuphea petiolata L.	glades
Asclepiadaceae	Cynanchum laeve (Michx.) Pers.	Woods, clearing, weedy vine
Boraginaceae	Cynoglossum virginianum L.	
Cyperaceae	Cyperus echinatus (L.) Wood	
Cyperaceae	Cyperus strigosus L.	
Poaceae	Dactylis glomerata L.	
Apiaceae	Daucus carota L.	common everywhere
Mimosaceae	Desmanthus illinoensis (Michx.) MacMill. ex B.L. Rob.	
Fabaceae	Desmodium pauciflorum (Nutt.) DC.	Woods, west central
Fabaceae	Desmodium spp.	
Caryophyllaceae	Dianthus armeria L.	scattered in open areas, glade
Poaceae	Digitaria sp.	Weedy grass
Dioscoreaceae	Dioscorea quaternata (Walt.) J.F. Gmel.	woods
Dipsacaceae	Dipsacus sylvestris Huds.	
Rosaceae	Duchesnea indica Andr.	Grassy areas
Asteraceae	Eclipta alba (L.) Hassk.	
Elaeagnaceae	Elaeagnus umbellata Thunb.	
Cyperaceae	Eleocharis bifida S.G. Smith (E. compressa?)	Glade area N end and sunset field
Asteraceae	Elephantopus carolinianus Willd.	Woods, common
Poaceae	Eleusine indica (L.) Gaertn	
Poaceae	Elymus hystrix L.	woods and roadways
Poaceae	Elymus villosus Muhl.	woods
Poaceae	Elymus virginicus L.	
Asteraceae	Erigeron annuus (L.) Pers.	
Asteraceae	Erigeron strigosus Muhl. ex Willd.	
Celastraceae	Euonymus fortunei (Turcz.) Hand.	Invasive, woods
Asteraceae	Eupatorium altissimum L.	glade
Asteraceae	Eupatorium coelestinum L.	clearings, woods, glade
Asteraceae	Eupatorium perfoliatum L.	along creek on glade
Asteraceae	Eupatorium purpureum L.	woods
Asteraceae	Eupatorium rugosum Houtt.	Woods, clearings
Euphorbiaceae	Euphorbia corollata L.	Glade areas
Euphorbiaceae	Euphorbia dentata Michx.	Glade areas
Asteraceae	Euthamia graminifolia (L.) Nutt. ex Cass.	Glade areas
Moraceae	Fatoua villosa (Thunb.) Nakai	Around nature center and garden area
Fabaceae	Galactia volubilis (L.) Britton	Glade area, small vine
Asteraceae	Galinsoga quadriradiata Cav.	roadside
Rubiaceae	Galium pilosum Aiton	Glade areas

Rubiaceae	<i>Galium</i> spp.	Several sp. In woods
Rosaceae	<i>Geum canadense</i> Jacq.	woods
Lamiaceae	<i>Glechoma hederacea</i> L.	weedy clearings, roadside
Boraginaceae	<i>Hackelia virginiana</i> L.	woods, weedy
Lamiaceae	<i>Hedeoma pulegioides</i> (L.) Pers.	woods
Asteraceae	<i>Helenium autumnale</i> L.	heavy along creek W of main road
Asteraceae	<i>Helianthus divaricatus</i> L.	woods and roadside
Asteraceae	<i>Helianthus hirsutus</i> Raf.	North tip of glade and into nearby woods
Asteraceae	<i>Heliopsis helianthoides</i> (L.) Sweet	
Orchidaceae	<i>Hexalectris spicata</i> (Walter) Barnhart	Woods adjacent to glades
Clusiaceae	<i>Hypericum dolabriforme</i> Vent.	Abundant on glade and some clearings
Clusiaceae	<i>Hypericum hypericoides</i> (L.) Crantz	woods, clearings
Clusiaceae	<i>Hypericum mutilum</i> L.	Moist pond margins
Clusiaceae	<i>Hypericum punctatum</i> Lam.	Woods, clearings
Balsaminaceae	<i>Impatiens capensis</i> Meerb.	Common moist areas, creekside
Convolvulaceae	<i>Ipomoea hederacea</i> (L.) Jacq.	roadside
Convolvulaceae	<i>Ipomoea pandurata</i> (L.) G. Mey.	Glade area north end
Lamiaceae	<i>Isanthus brachiatus</i> (L.) BSP	Glade areas
Juncaceae	<i>Juncus biflorus</i> Ell.	
Juncaceae	<i>Juncus marginatus</i> Rostk.	Creek within glade
Juncaceae	<i>Juncus tenuis</i> Willd.	
Fabaceae	<i>Kummerowia stipulacea</i> (Maxim.) Makino	trails and open areas, fields
Fabaceae	<i>Kummerowia striata</i> (Thunb.) Schindl.	trails and open areas, fields
Asteraceae	<i>Lactuca canadensis</i> L.	
Asteraceae	<i>Lactuca serriola</i> L.	
Poaceae	<i>Leersia oryzoides</i> (L.) Sw.	along creek
Poaceae	<i>Leersia virginica</i> Willd.	Woods and creekside
Brassicaceae	<i>Lepidium virginicum</i> L.	
Fabaceae	<i>Lespedeza cuneata</i> (Dum. Cours.) G. Don	open field far NE corner
Fabaceae	<i>Lespedeza procumbens</i> Michx.	Edge of glade
Fabaceae	<i>Lespedeza repens</i> (L.) W.P.C. Barton	edge of glade
Scrophulariaceae	<i>Leucospora multifida</i> (Michx.) Nutt.	Glade area
Linaceae	<i>Linum</i> sp.	open field far NE corner, only flax found??
Boraginaceae	<i>Lithospermum canescens</i> (Michx.) Lehm.	Glade area
Campanulaceae	<i>Lobelia inflata</i> L.	woods mainly
Campanulaceae	<i>Lobelia siphilitica</i> L.	occasional woods and creekside
Campanulaceae	<i>Lobelia spicata</i> Lam.	Glade areas
Caprifoliaceae	<i>Lonicera japonica</i> L.	invasive, woods open areas
Caprifoliaceae	<i>Lonicera maackii</i> (Rupr.) Herder	invasive about everywhere
Onagraceae	<i>Ludwigia palustris</i> (L.) Elliot	along creek on glade
Onagraceae	<i>Ludwigia peploides</i> (Kunth) P.H. Raven	sunset pond
Primulaceae	<i>Lysimachia nummularia</i> L.	moist areas along trail, creekside
Lythraceae	<i>Lythrum alatum</i> Pursh	glade area N end
Agavaceae	<i>Manfreda virginica</i> (L.) Salisb. ex Rose	glade area
Asclepiadaceae	<i>Matelea gonocarpos</i> (Walt.) Shinnery	Woods, found in flower
Asclepiadaceae	<i>Matelea</i> sp.	On glade, never flowered, likely <i>M. obliqua</i>
Fabaceae	<i>Medicago lupulina</i> L.	roadway
Fabaceae	<i>Melilotus alba</i> Desr.	Weedy roadside etc.
Fabaceae	<i>Melilotus officinalis</i> (L.) Desr.	Weedy roadside etc.
Menispermaceae	<i>Menispermum canadense</i> L.	
Poaceae	<i>Microstegium vimineum</i> (Trin.) A. Camus	scattered roads, woods
Scrophulariaceae	<i>Mimulus alatus</i> Aiton	
Lamiaceae	<i>Monarda fistulosa</i> L.	open areas, some woods
Poaceae	<i>Muhlenbergia sobolifera</i> (Muhl.) Trin.	Woods near glade
Poaceae	<i>Muhlenbergia tenuiflora</i> (Willd.) B.S.P.	waterfall area

Najadaceae	<i>Najas flexilis</i> (Willd.) Rostk. & Schmidt	Jackson pond
Brassicaceae	<i>Nasturtium officinale</i> R. Br.	Creek
Oxalidaceae	<i>Oxalis stricta</i> L.	
Poaceae	<i>Panicum anceps</i> Michx.	
Poaceae	<i>Panicum flexile</i> (Gatt.) Scribn.	
Poaceae	<i>Panicum virgatum</i> L.	
Vitaceae	<i>Parthenocissus quinquefolia</i> (L.) Planchon	woods
Poaceae	<i>Paspalum</i> sp.	
Passifloraceae	<i>Passiflora lutea</i> L.	Woods, some on glade
Scrophulariaceae	<i>Penstemon</i> sp.	
Saxifragaceae	<i>Penthorum sedoides</i> L.	
Poaceae	<i>Phleum pratense</i> L.	open fields
Viscaceae	<i>Phoradendron leucarpum</i> (Raf.) Reveal & M.C. Johnst.	Treetops, scattered
Phrymaceae	<i>Phryma leptostachya</i> L.	
Verbenaceae	<i>Phyla lanceolata</i> (Michx.) Greene	
Solanaceae	<i>Physalis</i> sp.	
Phytolaccaceae	<i>Phytolacca americana</i> L.	clearings, roadsides
Urticaceae	<i>Pilea pumila</i> (L.) A. Gray	
Plantaginaceae	<i>Plantago lanceolata</i> L.	
Plantaginaceae	<i>Plantago rugelii</i> Decne.	
Berberidaceae	<i>Podophyllum peltatum</i> L.	
Polygalaceae	<i>Polygala senega</i> L.	abundant north end main road and woods
Polygalaceae	<i>Polygala verticillata</i> L.	few on glade
Liliaceae	<i>Polygonatum biflorum</i> (Walt.) Elliott	woods
Polygonaceae	<i>Polygonum cespitosum</i> Blume	weedy all over
Polygonaceae	<i>Polygonum persicaria</i> L.	sunset pond area
Polygonaceae	<i>Polygonum punctatum</i> Ell.	Sunset pond area
Polygonaceae	<i>Polygonum virginianum</i> L.	woods
Asteraceae	<i>Polymnia uvedalia</i> (L.) L.	woods along creek west central
Aspleniaceae	<i>Polystichum acrostichoides</i> (Michx.) Schott	woods, unusually scarce
Portulacaceae	<i>Portulaca oleracea</i> L.	scrape area E of homestead
Lamiaceae	<i>Prunella vulgaris</i> L.	
Lamiaceae	<i>Pycnanthemum pycnanthemoides</i> (Leavenn.) Fernald	north woods
Lamiaceae	<i>Pycnanthemum tenuifolium</i> Schrad.	Glade and woods
Asteraceae	<i>Ratibida pinnata</i> (Vent.) Barnh.	
Rosaceae	<i>Rosa multiflora</i> Thunb.	Woods, invasive
Rosaceae	<i>Rubus occidentalis</i> L.	
Asteraceae	<i>Rudbeckia fulgida</i> Aiton	
Asteraceae	<i>Rudbeckia hirta</i> L.	
Asteraceae	<i>Rudbeckia triloba</i> L.	woods, and north end road
Acanthaceae	<i>Ruellia caroliniensis</i> (J.F.Gmel.) Steud.	Woods
Acanthaceae	<i>Ruellia humilis</i> Nutt.	Glade area, some open areas
Acanthaceae	<i>Ruellia strepens</i> L. f. <i>cleistantha</i> (Gray) McCoy	Woods along creek
Polygonaceae	<i>Rumex crispus</i> L.	
Polygonaceae	<i>Rumex obtusifolius</i> L.	
Gentianaceae	<i>Sabatia angularis</i> (L.) Pursh	Glade area
Lamiaceae	<i>Salvia lyrata</i> L.	woods, open areas
Primulaceae	<i>Samolus parviflorus</i> Raf.	Damp area on trails
Apiaceae	<i>Sanicula odorata</i> (Raf.) Pryer & Philippe	
Poaceae	<i>Schizachyrium scoparium</i> (Michx.) Nash	glade area
Cyperaceae	<i>Scirpus georgianus</i> Harper	
Cyperaceae	<i>Scirpus pendulus</i> Muhl.	
Scrophulariaceae	<i>Scrophularia marilandica</i> L.	woods along creek, west central
Lamiaceae	<i>Scutellaria parvula</i> Michx. var. <i>australis</i> Fasset	Glade area
Lamiaceae	<i>Scutellaria incana</i> Biehler	woods

Caesalpinaceae	<i>Senna marilandica</i> (L.) Link	glade area
Poaceae	<i>Setaria pumila</i> (Poir.)Roem.&Schult.	
Poaceae	<i>Setaria viridis</i> Beauv.	
Malvaceae	<i>Sida spinosa</i> L.	
Asteraceae	<i>Silphium perfoliatum</i> L.	along creek, some in woods
Asteraceae	<i>Silphium trifoliatum</i> L.	Glade areas
Liliaceae	<i>Smilacina racemosa</i> L.	
Liliaceae	<i>Smilax bona-nox</i> L.	
Solanaceae	<i>Solanum carolinense</i> L.	weedy, clearings, woods
Solanaceae	<i>Solanum ptycanthum</i> Dunal ex A. DC.	
Asteraceae	<i>Solidago</i> spp.	
Poaceae	<i>Sorghastrum nutans</i> (L.) Nash.	Glade area
Poaceae	<i>Sorghum halepense</i> L.	weedy grass, fields, roadside
Orchidaceae	<i>Spiranthes lacera</i> (Raf.) Raf. var. <i>gracilis</i> (Bigelow) Luer	Glade and clearings by dragonfly pond
Orchidaceae	<i>Spiranthes cernua</i> (L.) Rich.	Glade area
Poaceae	<i>Sporobolus vaginiflorus</i> Torr.	Glade area
Fabaceae	<i>Strophostyles umbellata</i> (Muhl. ex Willd.) Britton	Glade areas
Asteraceae	<i>Symphyotrichum shortii</i> (Lindl.) G.L. Nesom	Woods aster
Asteraceae	<i>Taraxacum officinale</i> Weber.	
Lamiaceae	<i>Teucrium canadense</i> L.	
Ranunculaceae	<i>Thalictrum dioicum</i> L.	Rocky woods
Ranunculaceae	<i>Thalictrum revolutum</i> DC.	Glade areas
Anacardiaceae	<i>Toxicodendron radicans</i> (L.) Kuntze	
Euphorbiaceae	<i>Tragia cordata</i> Michx.	Glade areas
Asteraceae	<i>Tragopogon</i> sp.	Too late to determine species
Poaceae	<i>Tridens flavus</i> (L.) A.S. Hitchc.	
Fabaceae	<i>Trifolium pratense</i> L.	
Fabaceae	<i>Trifolium repens</i> L.	
Typhaceae	<i>Typha latifolia</i> L.	Pond areas
Scrophulariaceae	<i>Verbascum blattaria</i> L.	
Scrophulariaceae	<i>Verbascum thapsus</i> L.	
Verbenaceae	<i>Verbena simplex</i> Lehm.	Open areas, glade
Verbenaceae	<i>Verbena urticifolia</i> L.	
Asteraceae	<i>Verbesina alternifolia</i> (L.) Britt ex Kearney	
Asteraceae	<i>Verbesina virginica</i> L.	
Asteraceae	<i>Vernonia gigantea</i> (Walter) Trel. subsp. <i>gigantea</i>	
Asteraceae	<i>Xanthium strumarium</i> L.	

Table 2**Plants collected from Blackacre Preserve****NOTES:**

1. All plants collected reside in the Indiana University Southeast Herbarium (JEF) and carry the author's collection number.
2. All GPS positions refer to Datum NAD83 UTM16 and are in units of meters.

Date	Number	Species	Habitat	GPS Data	
				Northing	Easting
07/12/10	3568	Scutellaria australis	open glade area	4228742	628491
07/18/10	3580	Ruellia humilis	open field	4228584	628054
07/18/10	3581	Eleocharis bifida	open field	4228422	628130
07/18/10	3582	Lythrum alatum	seep, glade area	4228809	628413
07/18/10	3583	Eleocharis bifida	seep, glade area	4228809	628413
07/21/10	3589	Physalis sp.	edge of road	4228274	628543
07/21/10	3590	Linum sp.	open field	4228851	628687
07/21/10	3591	Panicum anceps	open field	4228851	628687
07/21/10	3592	Muhlenbergia tenuiflora	woods	4228739	628691
07/21/10	3593	Tragia cordata	open glade	4228769	628370
07/21/10	3594	Pycnanthemum pycnanthemoides	woods near glade	4228798	628450
07/21/10	3595	Carex hirsutella	glade area		
07/22/10	3596	Carex frankii	glade area	4228760	628277
07/22/10	3597	Hypericum dolabriforme	glade areas	4228743	628484
07/22/10	3598	Thalictrum revolutum	glade	4228743	628484
07/22/10	3599	Euonymus fortunei	woods near park lot		
07/25/10	3600	Hexalectris spicata	woods near glade	4228986	628246
07/25/10	3601	Najas flexilis	jackson pond	4228908	628286
07/25/10	3602	Galactia volubilis	glade area	4228876	628370
07/25/10	3603	Asclepias verticillata	glade area	4228876	628370
07/25/10	3604	Asclepias viridis	glade area	4228703	628173
08/12/10	3651	Spiranthes lacera var. gracilis	open fields	4228693	628138
08/12/10	3652	Fatoua villosa	weedy areas	4228627	628430
08/12/10	3653	Strophostyles umbellata	glade	4228765	628469
08/22/10	3676	Brickellia eupatorioides	open glade	4228803	628344
08/22/10	3677	Paspalum sp.	open glade	4228757	628340
09/02/10	3686	Muhlenbergia sobolifera	woods near glade	4228813	628416
09/02/10	3687	Solidago sp.	glade	4228781	628461
09/02/10	3688	Berberis thunbergii	glade	4228775	628442
09/19/10	3711	Setaria ?	edge of pond	4228697	628181
09/19/10	3712	Panicum flexile	woods Near glade	4228781	628426
10/05/10	3727	Spiranthes cernua	limestone glade	4228869	628361
10/05/10	3728	Solidago graminifolia	limestone glade	4228815	628398
10/05/10	3729	Sporobolus vaginiflorus	limestone glade	4228743	628494
10/10/10	3735	Aster shortii	woods	4228750	628694