

VASCULAR PLANT SURVEY OF THE FORMER LAKE TRACT AT
MIAMI WHITEWATER FOREST FINAL REPORT
(NOVEMBER 15, 1995)

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County Park District)

This vascular plant survey has encompassed the recently-
purchased Lake Tract at Miami Whitewater Forest (see map for
reference to sections). The property gets its name from the lake
family who sold the land to the Park District. The survey was
conducted between mid-March and mid-November, 1995. The
enclosed species list contains over 437 species in 91 plant families.
This survey has yielded the discovery of an unknown population of
the Federally-Endangered running buffalo clover (*Trifolium
stoloniferum*). Two different colonies of running buffalo clover
occur on an old dirt logging road in the woods in Section 2 (see the
map and the enclosed letters by John Klein and Marjorie Becus).

Many other interesting plant species are found on the property as
well, although none of them occur on the State's List of Rare Plants.
The powerline right-of-way provides an open habitat where species
such as white lettuce (*Prenanthes altissima*), Culver's root
(*Veronicastrum virginicum*), downy skullcap (*Scutellaria incana*), wild
narrow-leaved mountain mint (*Pycnanthemum tenuifolium*), wild
senna (*Cassia marilandica*), naked-flowered tick trefoil (*Desmodium
nudiflorum*), pointed-leaved tick trefoil (*D. glutinosum*), showy tick-
trefoil (*D. canescens*), whorled loosestrife (*Lysimachia quadrifolia*),
bergamot (*Monarda fistulosa*), early meadow rue (*Thalictrum
dioicum*) and foxglove beardstongue (*Penstemon digitalis*) can be
found. Some of the more notable species found in the forested areas
include persimmon (*Diospyros virginiana*), Syandra (*Synandra
hispidula*), golden seal (*Hydrastis canadensis*), black cohosh
(*Cimicifuga racemosa*), Southern wild comfrey (*Cynoglossum
virginianum*), stary campion (*Silene stellata*) and wild columbo
(*Swertia carolinensis*). Within the forest old logging roads provide
habitat for blue vervain (*Verbena hastata*), sensitive fern (*Onoclea
sensibilis*), and running buffalo clover (*Trifolium stoloniferum*).

A single *Cannabis sativa* plant was found on a logging road in
Section 2 not too far from the patches of running buffalo clover. A
rose pink (*Sabatia angulatis*) plant was found just outside of the park
boundary on a logging road in Section 2.

Logging activity has resulted in the removal of several large oaks from the property. Despite this, the Lake Tract still contains many large trees (see the enclosed list of measurements). Section 2 is especially nice. The major canopy trees occurring on the property are sugar maple, beech, various hickories and oaks, black cherry, white ash, blue ash, black walnut, American elm, red elm, hackberry and sassafras. The understory consists of spicebush, paw paw, flowering dogwood, redbud, maple-leaved viburnum and ironwood. Much of the woods bordering the former Lake Tract to the south and east of Section 2 is of high quality. This woods outside of the park boundary may contain undiscovered patches of running buffalo clover and ought to be purchased by the Park District or protected through some sort of conservation easement.

The land along the Great Miami River (Section 6) contains some large sycamore and cottonwood trees. The Miami Airport and the farmed bottom land offer a good location for a tallgrass prairie planting. The gravel bars and islands on the river contain some interesting vegetation and wildlife. Beavers are very active along this stretch of the river and freshwater mussels of various kinds are common. It would be a great asset to the human and wildlife communities if the Park District could purchase and protect more of the Great Miami River corridor.

The invasive exotic garlic mustard (*Alliaria officinalis*) is very common in certain sections of the wooded portion of the Lake Tract, including the hill facing Rt. 128 (Section 1), and Sections 2 and 4. It appears to be affecting the vigour of native wildflowers inhabiting these areas and should be controlled. Since the seedbank of this biennial is short-lived it could be essentially eradicated within a few years if the plants were pulled out or sprayed with herbicide before they set seeds. Amur honeysuckle (*Lonicera maackii*), Japanese honeysuckle (*L. japonica*) and tree-of-heaven (*Ailanthus altissima*) are invading along the edges of the road leading back to the Youth Camp. These invasive species are also abundant in Section 1 and along the logging roads in Sections 2 and 4. The Amur honeysuckle could be controlled by the proper application of the glyphosate-containing herbicide Roundup (Conover and Geiger, 1993).

A great variety of wildlife inhabits the Lake Tract area, including wild turkey, beaver, raccoons, deer and many species of birds, reptiles and amphibians. The amphibian surveys have discovered

the State Endangered cave salamander (*Eurycea lucifuga*) on the property. Larry Lake, whose father sold the land to the Park District, told me that stories have been passed down in his family for generations about the buffalo trails and buffalo wallows that used to exist on the property. This is interesting since running buffalo clover probably grew on those buffalo trails and it still exists on the property today. I must also mention that Section 2 of the Lake Tract harbors several types of interesting fungi. Perhaps someone could do a fungus survey on the property.

In conclusion, the Lake Tract is an excellent addition to Miami Whitewater Forest. Much of the land surrounding the Lake Tract is of high quality (especially the woods south and east of Section 2) and should be protected in some fashion, as should more of the undeveloped Miami River shoreline and floodplain. Efforts should be made to control exotic species such as garlic mustard and Amur honeysuckle. Since the Lake Tract contains the Federally-Endangered running buffalo clover and the State-Endangered cave salamander it might be best to maintain the property as a limited-access nature preserve.

LITERATURE CITED

Conover, D.G. and Geiger, D.R. 1993. Glyphosate controls Amur honeysuckle in native woodland restoration (Ohio). *Restoration and Management Notes* 11 (2): 168-169.

ACKNOWLEDGEMENTS

I would like to thank the Hamilton County Park District for supporting this project. I would also like to thank Carrie Pate, Don Brannon and my students for working with me on parts of this survey.

APPENDICES

MAP OF THE FORMER LAKE TRACT PROPERTY

CHECK-LIST OF VASCULAR PLANT SPECIES FOUND ON THE
FORMER LAKE TRACT

LARGER TREES FOUND ON THE FORMER LAKE TRACT

LETTERS FROM JOHN KLEIN AND MARJORIE BECUS
CONCERNING THE PATCHES OF RUNNING BUFFALO CLOVER
FOUND ON THE FORMER LAKE TRACT

1" = 2,000'
 (Addy's Road)

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 GEOLOGICAL SURVEY

84°45'

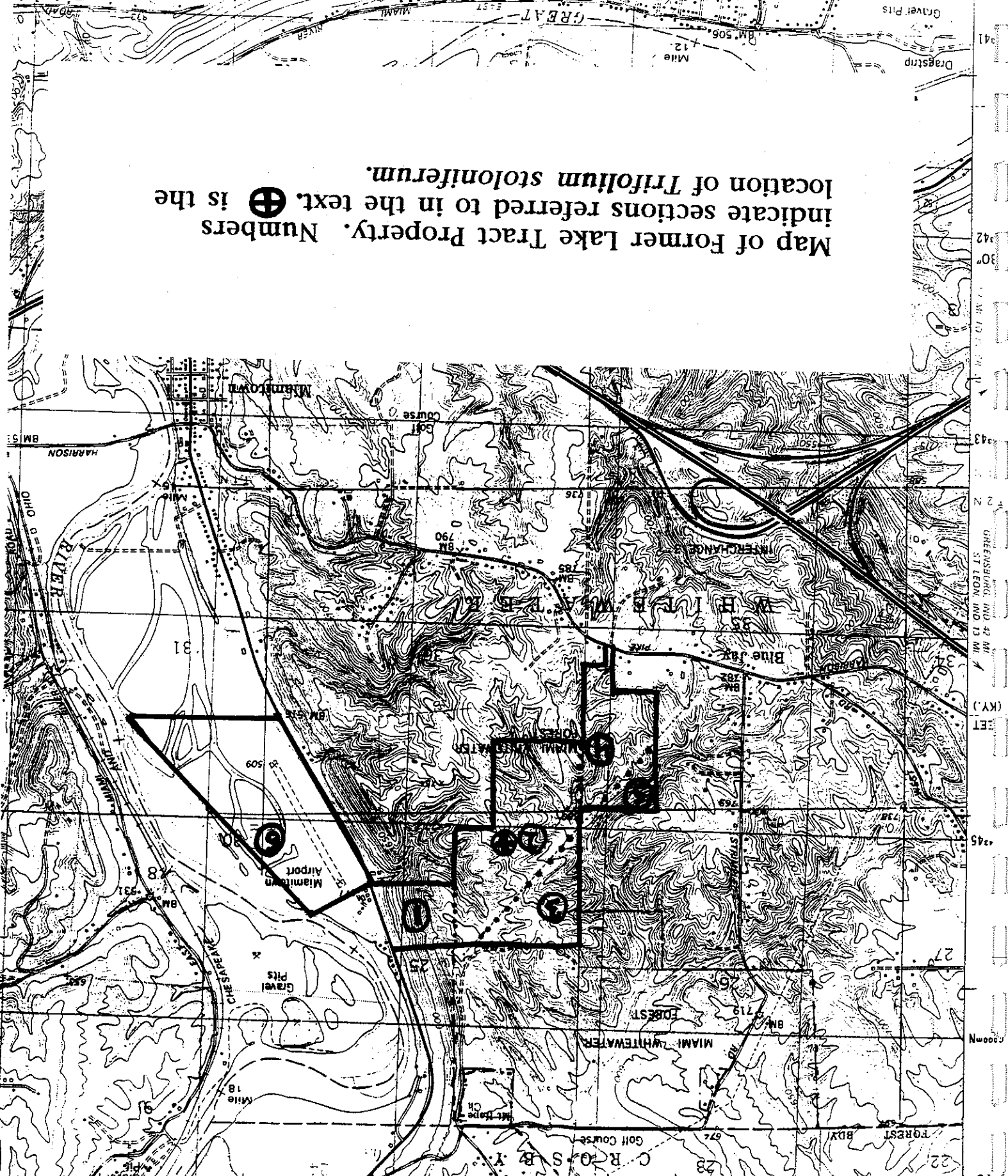
1:860,000 FEET (KY.)

96°00'00"E

99°7'

42°30' 98

98



Map of Former Lake Tract Property. Numbers indicate sections referred to in the text. ⊕ is the location of *Trifolium stoloniferum*.

CHECK-LIST OF VASCULAR PLANT SPECIES FOUND ON THE LAKE TRACT AT MIAMI
 WHITEWATER FOREST BASED ON OBSERVATIONS MADE DURING 1995 BY DENIS G. CONOVER

KEY:

* = Woody species; OL = On status list of Rare Native Ohio Vascular Plants
 (1994-1995); Relative abundance = loc < occ < fre < com; Primary habitat = for
 (forest); bot (bottom land); edg (old field and woodland borders); MR = species
 found along bank of the Great Miami River; scr (scrub forest); rav (ravine
 slopes); LR (dirt logging road in the forest).

Family/Scientific Name Common Name Earliest Relative Habitat
 Flowering abundance

Acanthaceae

Justicia americana Water willow Aug occ MR edg
 Ruellia strepens Smooth ruellia Jun occ edg

Aceraceae

*Acer negundo Box elder Apr occ bot
 *Acer nigrum Black maple Mar occ for
 *Acer rubrum Red maple Mar loc edg
 *Acer saccharinum Silver maple Mar occ bot
 *Acer saccharum Sugar maple Mar fre for

Amaranthaceae

Amaranthus hybridus Slender amaranth Aug occ bot
 Amaranthus spp. Amaranths Aug occ edg

Anacardiaceae

*Rhus glabra Smooth sumac Jun occ edg
 *Rhus radicans Poison ivy May fre edg

Annonaceae

*Asimina triloba Pawpaw Apr occ for

Apiaceae

Chaerophyllum procumbens Spreading chervil Apr occ bot
 Conium maculatum Poison hemlock May occ bot
 Cryptotaenia canadensis Honewort May occ bot
 Daucus carota Wild carrot Jun fre edg
 Eriogonja bulbosa Harbinger-of-spring Mar fre for
 Osmorhiza claytoni Hairy sweet cicely Apr occ for
 Osmorhiza longistylis Smooth sweet cicely Apr occ for
 Pastinaca sativa Wild parsnip May occ edg
 Santicula canadensis Short-styled snakeroot May occ for
 Santicula gregaria Clustered snakeroot May occ for

Apocynaceae

Apocynum cannabinum Indian hemp Jun occ edg

Araceae

for	May	Jack-in-the-pulpit	Arisaema atrovibens
<u>Aristolochiaceae</u>			
for	Apr	Wild ginger	Asarum canadense
<u>Asclepiadaceae</u>			
edg	Jul	Sand vine	Ampelamus albidus
bot	Jul	Swamp milkweed	Asclepias incarnata
edg	Jun	Common milkweed	Asclepias syriaca
edg	Aug	Butterfly-weed	Asclepias tuberosa
<u>Aspleniaceae</u>			
for	---	Ebony spleenwort	Asplenium platyneuron
for	Aug	Lady fern	Athyrium filix femina
for	Aug	Christmas fern	Polystichum acrostichoides
<u>Asteraceae</u>			
edg	May	Yarrow	Achillea millefolium
edg	Jul	Common ragweed	Ambrosia artemisiifolia
edg	Jul	Giant ragweed	Ambrosia trifida
MR	Sep	Sweet wormwood	Artemesia annua
for	Oct	Heart-leaved aster	Aster cordifolius
edg	Sep	Calico aster	Aster lateriflorus
edg	Sep	New England aster	Aster novae-angliae
for	Oct	Arrowleaf aster	Aster sagittifolius
edg	Aug	Aster	Aster simplex
bot	Aug	Small white aster	Aster vimineus
bot	Sep	Beggar ticks	Bidens frondosa
bot	Aug	Beggar ticks	Bidens viligata
edg	Aug	Modding thistle	Carduus nutans
edg	May	Short-fringed knapweed	Centaurea dubia
edg	May	Ox-eye daisy	Chrysanthemum leucanthemum
edg	May	Chicory	Cichorium intybus
edg	Jun	Canada thistle	Cirsium arvense
edg	Sep	Field thistle	Cirsium discolor
edg	Jul	Bull thistle	Cirsium vulgare
edg	Jul	Pilewort	Erechtites hieracifolia
edg	Aug	Daisy fleabane	Erigeron annuus
edg	May	Daisy fleabane	Erigeron canadensis
edg	Aug	Horseweed	Erigeron philadelphicus
edg	Apr	Philadelphia fleabane	Erigeron strigosus
edg	Jun	White top	Eupatorium maculatum
edg	Jul	Spotted Joe-pie-weed	Eupatorium purpureum
edg	Jul	Joe-pie-weed	Eupatorium rugosum
for	Jul	White snakeroot	Eupatorium serotinum
bot	Aug	Late-flowering thoroughwort	Eupatorium sessilifolium
bot	Aug	Boneset	Eupatorium sessilifolium
edg	Jul	Quickweed	Galinosa ciliata
edg	Jul	Catfoot	Gnaphalium obtusifolium
MR	Oct	Sneezeweed	Helianthus autumnale
edg	Aug	Small woodland sunflower	Helianthus microcephalus
edg	Aug	Jerusalem artichoke	Helianthus tuberosus
edg	Aug	King devil	Hieracium pratense
edg	Aug	Wild lettuce	Lactuca canadensis
			var. latifolia

edg	occ	Aug	Wild lettuce	Lactuca canadensis
edg	occ	Aug	Tall blue lettuce	Lactuca floridana var. obovata
edg	occ	Aug	Tall blue lettuce	Lactuca floridana var. floridana
edg	occ	Aug	Tall blue lettuce	Lactuca floridana var. villosa
edg	loc	Jul	Prickly lettuce	Lactuca scariola
edg	loc	Jun	Pine-apple weed	Matricaria matricarioides
edg	occ	Jun	Small-flowered	Polymnia canadensis
edg	loc	Sep	White lettuce	Prenanthes altissima
edg	loc	Jun	Black-eyed Susan	Rudbeckia hirta
edg	occ	Jun	Orange coneflower	Rudbeckia fulgida
edg	occ	Jul	Green-headed coneflr.	Rudbeckia laciniata
edg	occ	May	Golden ragwort	Senecio aureus
edg	occ	May	Butterweed	Senecio glabellus
edg	occ	May	Round-leaved ragwort	Senecio obovatus
edg	loc	Apr	Indian cup	Stiphium perfoliatum
edg	occ	Aug	Canada goldenrod	Solidago canadensis
edg	occ	Sep	Zigzag goldenrod	Solidago flexicaulis
edg	occ	Aug	Lance-leaved goldenrod	Solidago graminifolia
edg	occ	Aug	Gray goldenrod	Solidago nemoralis
edg	occ	Mar	Bandelion	Taraxacum officinale
edg	occ	Sep	Wingstem	Verbesina alternifolia
edg	occ	Jul	Tall ironweed	Vernonia altissima
edg	occ	Aug	Common cocklebur	Xanthium strumarium
edg	occ	Jun	Spotted Jewelweed	Impatiens capensis
edg	occ	Jun	Pale Jewelweed	Impatiens pallida
edg	occ	Apr	Japanese barberry	*Berberis thunbergii
edg	loc	---	Twin leaf	Jeffersonia diphylla
edg	occ	May	Mayapple	Podophyllum peltatum
edg	occ	Jul	Stickseed	Myosotis verna
edg	occ	May	Southern wild comfrey	Cynoglossum virginianum
edg	occ	May	var. virginianum	Hackelia virginiana
edg	occ	Jul	Spring forget-me-not	Myosotis verna
edg	occ	Mar	Garlic mustard	Alliaria officinalis
edg	occ	Apr	Smooth rock cress	Arabis laevigata
edg	occ	Apr	Rock cress	Arabis shortii
edg	occ	Apr	Winter cress	Barbarea vulgaris
edg	occ	Mar	Purple cress	Cardamine douglasii
edg	occ	Mar	Hairy bittercress	Cardamine hirsuta
edg	occ	Apr	Small-flowered bittercress	Cardamine parviflora
edg	occ	Apr	Pennsylvania bittercress	Cardamine pennsylvanica
edg	occ	Mar	Cut-leaved toothwort	Dentaria laciniata

Brassicaceae

Boraginaceae

Bignoniaceae

Berberidaceae

Balsaminaceae

Family	Species	Locality	Time	Notes
Corymbaceae	Braba verna	Whitlow grass	Mar	edg
	Iodanthus pinnatifidus	Purple rocket	May	bot
	Lepidium virginicum	Peppergrass	May	edg
	Rorippa sylvestris	Yellow cress	Aug	MR
Campanulaceae	Thlaspi arvense	Field penny-cress	May	edg
	Campanula americana	Tall bellflower	Jul	for
	Lobelia inflata	Indian tobacco	Jul	edg
	Lobelia siphilitica	Great lobelia	Aug	bot
Cannabaceae	Cannabis sativa	Hemp	---	LR
	Humulus lupulus	Common hop	Aug	MR
Caryophyllaceae	*Lonicera japonica	Japanese honeysuckle	May	edg
	*Lonicera maackii	Amur honeysuckle	Apr	for
	*Sambucus canadensis	Common elder	Jun	edg
	*Symphoricarpos orbiculatus	Coralberry	Aug	scr
	*Viburnum acerifolium	Maple-leaf viburnum	May	for
	*Viburnum prunifolium	Black haw	Apr	for
	Cerastium vulgatum	Mouse-eared chickweed	Apr	edg
	Dianthus armeria	Deptford pink	Jun	edg
	Lychnis alba	Evening lychnis	Jul	edg
	Paronchia canadensis	Forked chickweed	May	for
Celastraceae	Saponaria officinalis	Bouncing bet	Jun	edg
	Silene stellata	Starry campion	Jul	for
	Stellaria media	Common chickweed	Mar	bot
	Stellaria pubera	Star chickweed	Apr	for
	*Celastris sp.	Bittersweet	Jun	edg
	*Euonymus atropurpureus	Wahoo	Jun	for
	*Euonymus fortunei	Wintercreeper euonymus	---	for
	Chenopodium album	Lamb's quarters	Jun	edg
	Commelina communis	Asiatic dayflower	Jul	bot
	Tradescantia subaspera	Zigzag spiderwort	May	for
Convolvulaceae	Convolvulus sepium	Hedge bindweed	Jun	bot
	Ipomoea hederacea	Ivy-leaved morning gl.	Aug	edg
	Ipomoea lacunosa	Small white morning glory	Aug	edg
	Ipomoea pandurata	Man-of-the-earth	Jun	edg

Corylaceae
 *Cornus amomum
 Dogwood May occ for
 *Cornus drummondii
 Rough-leaved dogwood May occ for
 *Cornus florida
 Flowering dogwood Apr occ for
 *Cornus obliqua
 Silky dogwood May occ for
 *Cornus racemosa
 Gray dogwood May occ bot

Crassulaceae
 *Carpinus caroliniana
 Ironwood --- occ for
 *Ostrya virginiana
 Hop-hornbeam --- occ for

Cucurbitaceae
 Fenthorum sedoides
 Ditch stonecrop Jul occ bot
 Sedum ternatum
 Wild stonecrop Apr occ rav

Cupressaceae
 Echinocystis lobata
 Wild cucumber Sep loc edg
 Sicyos angulatus
 One-seeded bur Aug loc bot

Cuscutaceae
 *Juniperus virginiana
 Red cedar --- occ for

Cyperaceae
 Cuscuta cephalanthi
 Dodder Aug loc MR
 Cuscuta groenovii
 Dodder Aug occ bot

Cyperaceae
 Carex annectens
 Sedge Jun loc edg

Carex conjuncta
 Sedge Apr occ for
 Carex frankii
 Sedge May occ bot
 Carex laevivaginata
 Sedge May occ bot
 Carex lurida
 Sedge Jul occ bot
 Carex normalis
 Sedge May occ bot
 Carex rosea
 Sedge May occ for
 Carex shortiana
 Sedge May occ for
 Carex spp.
 Sedges May occ bot
 Carex spp.
 Sedges May occ bot
 Carex vulpinoidea
 Fox sedge Jun occ bot
 Cyperus esculentus
 Nut grass Jul occ edg
 Cyperus strigosus
 Umbrella sedge Jul occ isl
 Eleocharis obtusa
 Blunt spike rush Jun occ bot
 Scirpus atrovirens
 Small bullrush Jun occ bot
 Scirpus cyperinus
 Wool grass Aug loc bot
 Scirpus lineatus
 Bullrush Jun occ bot

Dioscoreaceae
 Dioscorea villosa
 Wild yam Jun occ for

Dipsacaceae

Dipsacus laciniatus Teasel Jul occ edg
 Dipsacus sylvestris Teasel Jun occ edg

Ebenaceae

*Diospyros virginiana Persimmon --- loc for

Elaeagnaceae

*Elaeagnus multiflora Cherry elaeagnus Apr occ edg

Equisetaceae

Equisetum arvense Field horsetail --- occ bot

Euphorbiaceae

Acalypha ostryifolia Three-seeded mercury Aug occ edg
 Acalypha rhomboidea Three-seeded mercury Aug occ edg
 var. virginica
 Euphorbia maculata Eyebane Jul occ edg

Fabaceae

Amphicarpa bracteata Hog peanut Aug occ bot
 Cassia marilandica Wild senna Aug loc edg
 *Cercis canadensis Redbud Apr occ for
 Coronilla varia Crown vetch Jun fre edg
 Desmodium canescens Showy tick-trefoil Jul loc for
 Desmodium glutinosum Pointed-leaved tick-trefoil Jul loc for
 Desmodium nudiflorum Naked-flowered tick-trefoil Jul loc for
 Desmodium paniculatum (var. dillenii) Panicked tick-trefoil Aug occ edg
 Desmodium paniculatum (var. paniculatum) Panicked tick-trefoil Jul occ edg
 *Gleditsia triacanthos Honey locust May occ scr
 *Gymnocladus dioica Kentucky coffee --- occ for
 Lespedeza cuneata Bush clover Aug occ edg
 Lespedeza striata Common bush clover Aug occ edg
 Medicago lupulina Black medick May occ edg
 Melilotus alba White sweet clover May occ edg
 Melilotus officinalis Yellow sweet clover May occ edg
 *Robinia pseudoacacia Black locust May occ scr
 Strophostyles umbellata Trailing wild bean Aug loc edg
 Trifolium agrarium Hop clover Jun occ edg
 Trifolium hybridum Alsation clover May occ edg
 Trifolium pratense Red clover May occ edg
 Trifolium procumbens Smaller hop clover May occ edg
 Trifolium repens White clover May occ edg
 Trifolium stoloniferum Running buffalo clover May loc LR

Fagaceae

*Fagus grandiflora Beech May fre for
 *Quercus alba White oak May occ for
 *Quercus borealis Red oak May fre for
 (var. maxima)
 *Quercus imbricaria Shingle oak --- occ scr
 *Quercus muehlenbergia Chinquapin oak May fre for

*Quercus shumardii
Shumard oak

occ
fre
for

Gentianaceae

Sabatia angularis
Rose pink
Aug
loc
LR
(just outside boundary)
for

Geraniaceae

Swertia carolinensis
Wild columbo
May
loc
for

Geranium maculatum
Wild geranium
Apr
occ
for

Hippocastanaceae

*Aesculus glabra
Ohio buckeye
Apr
occ
for

Hydrophyllaceae

Hydrophyllum appendiculatum
Appendaged waterleaf
May
occ
for

Hydrophyllum macrophyllum
Large-leaf waterleaf
May
occ
for

Phacelia purshii
Miami mist
Apr
occ
scr
for

Hypericaceae

Hypericum mutilum
Dwarf St. Johnswort
Aug
loc
bot

Iridaceae

Iris germanica
Cultivated iris
May
loc
edg
edg

Sisyrinchium angustifolium
Blue-eyed grass
May
occ
edg

Juglandaceae

*Carya cordiformis
Bitternut hickory
May
occ
for

*Carya glabra
Sweet pignut

occ
for

*Carya ovals
Sweet pignut

loc
for

*Carya ovata
Shagbark hickory
May
tre
for

*Carya tomentosa
Mockernut hickory

occ
for

*Juglans nigra
Black walnut
May
occ
for

Juncaceae

Juncus effusus
Rush
Jun
occ
bot

Juncus tenuis
Fath rush
May
occ
bot

Luzula multiflora
Fale wood rush
Apr
occ
for

Lamiaceae

Agastache nepetoides
Yellow giant hyssop
Aug
occ
edg

Blephilia hirsuta
Hairy wood mint
Jul
occ
edg

Collinsia canadensis
Horse-balm
Aug
occ
for

Glechoma hederacea
Ground Ivy
Mar
occ
edg

Lamium amplexicauli
Henbit
Mar
occ
edg

Lamium purpureum
Purple dead nettle
Mar
occ
edg

Lycopus rubellus
Bugleweed
Jul
occ
bot

Lycopus spp.
Bugleweed
Jul
occ
bot

Monarda fistulosa
Bergamot
Jul
loc
edg

Prunella vulgaris
Self-heal
Jul
occ
bot

edg	loc	Jul	Narrow-leaved mountain mint	<i>Pycnanthemum tenuifolium</i>
edg	loc	Jun	Downy skullcap	<i>Scutellaria incana</i>
edg	loc	Jun	Heart-leaved skullcap	<i>Scutellaria ovata</i>
edg	loc	Jul	Smooth hedge nettle	<i>Stachys tenuifolia</i>
edg	loc	Jul	Rough hedge nettle	<i>Stachys tenuifolia</i> (var. <i>hispidula</i>)
for	loc	---	Synandra	<i>Synandra hispidula</i>
edg	loc	Jul	American germander	<i>Teucrium canadense</i>
<u>Lauraceae</u>				
for	occ	Mar	Spice bush	* <i>Lindera benzoin</i>
for	occ	Apr	Sassafras	* <i>Sassafras albidum</i>
<u>Lemnaceae</u>				
bot	occ	---	Duckweed	<i>Lemna minor</i>
<u>Liliaceae</u>				
for	occ	Jun	Wild garlic	<i>Allium canadense</i>
edg	occ	Jun	Field garlic	<i>Allium vineale</i>
for	occ	May	Wild hyacinth	<i>Camassia scilloides</i>
for	occ	Apr	White trout-lily	<i>Erythronium albidum</i>
for	occ	May	Yellow trout-lily	<i>Erythronium americanum</i>
for	occ	Jun	Day-lily	<i>Hemerocallis fulva</i>
edg	occ	May	Star-of-Bethlehem	<i>Ornithogalum umbellatum</i>
for	occ	Jun	Solomon's seal	<i>Polygonatum biflorum</i>
for	occ	May	Solomon's seal	<i>Gmilia racemosa</i>
for	occ	May	False Solomon's seal	* <i>Gmilia hispida</i>
for	occ	---	Bristly greenbriar	* <i>Gmilia</i> spp.
for	occ	---	Greenbriars	<i>Trillium sessile</i>
for	occ	Apr	Sessile trillium	<i>Uvularia grandiflora</i>
for	occ	Apr	Large-flowered bellwort	
<u>Limnanthaceae</u>				
for	occ	Apr	False mermaid	<i>Floerka proserpinacoides</i>
<u>Lycopodiaceae</u>				
for	occ	---	Ground pine	<i>Lycopodium complanatum</i>
<u>Magnoliaceae</u>				
for	occ	---	Tulip tree	* <i>Liriodendron tulipifera</i>
<u>Malvaceae</u>				
bot	loc	Aug	Prickly mallow	<i>Sida spinosa</i>
<u>Mentispermaceae</u>				
for	occ	Jun	Moonsed	* <i>Mentispermum canadense</i>
<u>Moraceae</u>				
edg	loc	---	Osage orange	* <i>Maclura pomifera</i>
scr	occ	May	Red mulberry	* <i>Morus rubra</i>
<u>Mysaccaceae</u>				

				*Nyssa sylvatica
			Sourgum	for
<u>Oleaceae</u>				
			*Fraxinus americana	
			(var. americana)	
			*Fraxinus pennsylvanica	
			(var. subintegerrima)	
			*Fraxinus quadrangulata	
			*Ligustrum sp.	
			White ash	for
			Green ash	for
			Blue ash	for
			Privet	for
<u>Onagraceae</u>				
			Circaea quadrisulcata	
			Epilobium coloratum	
			Gaura biennis	
			Oenothera biennis	
			Evening primrose	edg
			Biennial gaura	loc
			Purple-leaved willow herb	bot
			Enchanter's nightshade	for
			Jun	occ
			Aug	occ
			Jul	occ
<u>Noctiaceae</u>				
			Noctua sensibillis	
<u>Ophthoglossaceae</u>				
			Botrychium dissectum	
			(var. dissectum)	
			Botrychium dissectum	
			(var. obliquum)	
			Botrychium virginianum	
			Virginia grape fern	for
			Common grape fern	for
			Cut-leaf grape fern	for
<u>Orbanchaceae</u>				
			Conopholis americana	
			Squawroot	for
			Apr	occ
<u>Oxalidaceae</u>				
			Oxalis europaea	
			Oxalis stricta	
			Yellow wood-sorrel	edg
			Jun	occ
			Yellow wood-sorrel	edg
			May	occ
			Violet wood-sorrel	for
			May	occ
<u>Papaveraceae</u>				
			Corydalis flavula	
			Dicentra cucullaria	
			Dutchman's breeches	for
			Apr	occ
			Yellow corydalis	for
			Mar	occ
			Bloodroot	for
			Mar	occ
			Wood poppy	for
			May	occ
<u>Phrymaceae</u>				
			Phryma leptostachya	
			Lopseed	for
			Jul	occ
<u>Phytolaccaceae</u>				
			Phytolacca americana	
			Pokeweed	edg
			Jul	occ
<u>Pinaceae</u>				
			*Pinus strobus	
			White pine	for
			---	loc

Plantaginaceae

Plantago lanceolata English plantain May occ edg
Plantago major Common plantain Jun occ edg

Plantanaceae

*Platanus occidentalis Sycamore --- occ bot

Poaceae

Agropyron repens Wheat grass Jun occ edg
Agrostis alba Red top May occ edg
Andropogon virginicus Broom sedge Aug occ edg
Avena sativa Oats Jun loc edg
Brachelytrum erectum Brachelytrum Jul loc edg
Bromus commutatus Smooth brome May occ edg
Bromus inermis Smooth brome May occ edg
Dactylus glomerata Orchard grass May occ edg
Dianthia spicata Poverty oat grass May loc edg
Digitaria sanguinalis Crabgrass Jul occ edg
Echinochloa crus-galli Barnyard grass Jun occ bot
Echinochloa muricata Barnyard grass Sep occ bot
Elymus villosus Wild rye Jun occ for
Elymus virginicus Wild rye Jun occ for
Eragrostis frankii Love grass Aug occ edg
Eragrostis spectabilis Purple love grass Sep occ edg
Festuca elatior Meadow fescue May occ edg
Festuca obtusa Modding fescue May occ edg
Festuca octiflora Six-weeks fescue May occ for
Glyceria striata Fowl manna grass Jun occ edg
Hystrix patula Bottle-brush grass Jun occ bot
Leersia oryzoides Rice cutgrass Jun occ for
Leersia virginica White grass Aug occ bot
Muhlenbergia frondosa Muhlenbergia Sep occ bot
Panicum agrostoides Panic grass Aug occ edg
Panicum boscii Panic grass May occ for
Panicum clandestinum Broad-leaved panic grass Aug occ bot
Panicum commutatum Panicum Jun occ edg
Panicum lanuginosum Woolly panic grass Jun occ edg
Panicum spp. Panic grasses --- occ edg
Paspalum pubiflorum Paspalum Aug occ edg
Paspalum pratenae Timothy Jun occ edg
Poa annua Annual bluegrass Apr occ edg
Poa palustris Bluegrass Jun occ edg
Poa pratensis Kentucky bluegrass Apr occ edg
Poa sylvestris Woodland bluegrass Mar occ for
Setaria glauca Yellow foxtail Jun occ edg
Setaria viridis Green foxtail Jun occ edg
Sorghum halapense Johnson grass Jun occ edg
Tridens flavus Purple-top Aug occ edg
Zea mays Corn Jul loc bot

Polemoniaceae

Phlox divaricata Common blue phlox Apr occ for
Phlox paniculata Garden phlox Sep occ MR
Polemonium reptans Greek valerian Apr loc for

Polygalaceae

Family	Species	Locality	Month	Notes	
Polygona	Polygala sanguinea	loc	Jul	Field milkwort	
	Polygala sanguinea	loc	Jul	Field milkwort	
Polygonaceae	Polygonum caespitosum	occ	Jun	Long-bristled smartweed	
	Polygonum convolvulus	occ	Aug	Black bindweed	
	Polygonum hydropiperoides	occ	Jun	Mild water pepper	
	Polygonum lapathifolium	occ	Jul	Nodding smartweed	
	Polygonum pensylvanicum	occ	Jul	Pinkweed	
	Polygonum persicaria	occ	Jul	Lady's thumb	
	Polygonum punctatum	occ	Jun	Water smartweed	
	Polygonum crispus	occ	Jul	Curled dock	
	Rumex obtusifolius	occ	May	Bitter dock	
	Rumex verticillatus	occ	Jun	Swamp dock	
	Tovara virginiana	occ	Jul	Jumpseed	
	Polypodiaceae	Asplenium platyneuron	occ	---	Ebony spleenwort
Athyrium filix-femina		occ	(Jul)	Lady fern	
Athyrium pycnocarpon		occ	---	Glade fern	
Cystopteris fragilis		occ	---	Fragile fern	
Dryopteris hexagonoptera		occ	---	Beech fern	
Dryopteris intermedia		loc	(Jul)	Shield fern	
Polystichum agrostichoides		occ	(Sep)	Christmas fern	
Portulacaceae		Claytonia virginica	fre	Mar	Spring beauty
		Lysimachia quadrifolia	loc	Jun	Whorled loosestrife
		Lysimachia quadrifolia	loc	Jun	Whorled loosestrife
Ranunculaceae		Anemone virginiana	occ	Jun	Thimbleweed
		Anemone thalictroides	occ	Mar	Rue anemone
	Cicimifuga racemosa	occ	---	Black cohosh	
	Delphinium tricornue	occ	Apr	Dwarf larkspur	
	Hydrastis canadensis	occ	---	Golden seal	
	Ranunculus abortivus	occ	Apr	Kidney-leaf buttercup	
	Ranunculus ficaria	occ	Mar	Lesser celandine	
	Ranunculus hispidus	occ	Apr	Hispid buttercup	
	Ranunculus recurvatus	loc	Apr	Hooked buttercup	
	Ranunculus sceleratus	occ	Apr	Cursed crowfoot	
	Thalictrum dioicum	loc	Apr	Early meadow rue	
	Rosaceae	Agrimonia gryposepala	occ	Jul	Agrimony
Agrimonia pubescens		occ	Aug	Agrimony	
*Crataegus phaenopyrum		loc	---	Washington thorn	
*Crataegus spp.		occ	Apr	Hawthorns	
Duchesnea indica		occ	May	Mock strawberry	
Geum canadense		occ	Jun	White avens	
Geum vernum		occ	Apr	Spring avens	
Potentilla simplex		occ	May	Common cinquefoil	
*Prunus munsoniana		loc	---	Wild plum	
Agrimonia gryposepala		occ	Jul	Agrimony	
Agrimonia pubescens		occ	Aug	Agrimony	
*Crataegus phaenopyrum		loc	---	Washington thorn	
*Crataegus spp.	occ	Apr	Hawthorns		
Duchesnea indica	occ	May	Mock strawberry		
Geum canadense	occ	Jun	White avens		
Geum vernum	occ	Apr	Spring avens		
Potentilla simplex	occ	May	Common cinquefoil		
*Prunus munsoniana	loc	---	Wild plum		

**Prunus serotina*
 Wild black cherry Apr occ
**Rosa multiflora*
 Multiflora rose May occ
**Rosa setigera*
 Prairie rose Jun occ
**Rubus allegheniensis*
 Blackberry May fre
**Rubus occidentalis*
 Black raspberry May occ
**Rubus spp.*
 Rubus --- occ

Rubiaceae

Galium aparine
 Common cleavers Apr occ
Galium circaezans
 White wild licorice May occ
Galium concinnum
 Shining bedstraw Jun occ

Salicaceae

**Populus deltoides*
 Cottonwood Apr occ
**Populus grandidentata*
 Poplar --- loc
**Salix interior*
 Sandbar willow May occ
**Salix nigra*
 Black willow May occ
**Salix rigida*
 Willow --- loc

Saxifragaceae

Heuchera americana
 Alum root --- loc
**Hydrangea arborescens*
 Wild hydrangea Jul occ
**Ribes cynosbati*
 Wild gooseberry --- occ

Scrophulariaceae

Gerardia virginica
 Downy false foxglove Aug loc
Gratiola neglecta
 Clammy hedge hyssop May occ
Mimulus alatus
 Sharp-winged monkeyflower Jul occ
Penstemon digitalis
 Foxglove beardstongue May occ
Scrophularia marilandica
 Figwort Jul occ
Verbascum blattaria
 Moth mullein Jun occ
Verbascum thapsus
 Common mullein Jun occ
Veronica agrestis
 Field speedwell May occ
Veronica persica
 Persian speedwell Mar occ
Veronicastrum virginicum
 Culiver's root Jul occ

Simaroubaceae

**Ailanthus altissima*
 Tree-of-heaven Jun occ

Solanaceae

Nicandra physalodes
 Apple-of-Fern Aug occ
Physalis heterophylla
 Clammy ground cherry Aug occ
Solanum carolinense
 Horse nettle Jun occ

Typhaceae

Typha latifolia
 Cat-tail Jun loc

Ulmaceae

**Celtis occidentalis*
 Hackberry May fre
**Ulmus americana*
 American elm Mar occ
**Ulmus rubra*
 Red elm Mar occ

<u>Urticaceae</u>		
Aug	occ	False nettle
Aug	occ	Clearweed
Jul	occ	Wood nettle
Jul	occ	Tall nettle
<u>Valerianaceae</u>		
Valerianella chenopodiifolia Corn salad		
Jun	occ	
edg		
<u>Verbenaceae</u>		
Phylla lanceolata		
Jul	occ	Fog-fruit
bot		
Verbena hastata		
Jun	occ	Blue vervain
edg		
Verbena urticifolia		
Jun	occ	White vervain
bot		
<u>Violaceae</u>		
Viola cucullata		
Apr	occ	Marsh blue violet
bot		
Viola papilionaceae		
Mar	fre	Common blue violet
for		
Viola pubescens		
Mar	occ	Common yellow violet
for		
Viola rafinesquii		
Apr	occ	Field pansy
for		
Viola sororia		
Apr	occ	Woolly blue violet
for		
Viola striata		
Mar	occ	Pale violet
for		
<u>Vitaceae</u>		
*Parthenocissus quinquefolia Virginia creeper		
Jun	occ	
for		
*Vitis aestivalis		
Jun	occ	Summer grape
edg		
var. aestivalis		

LARGER TREES FOUND ON THE LAKE TRACT AT MIAMI WHITEWATER FOREST BASED ON OBSERVATIONS MADE DURING 1995. NUMBERS ARE THE DIAMETER AT BREAST HEIGHT IN CENTIMETERS. NUMBERS IN PARENTHESES ARE THE SECTIONS WHERE THE TREES ARE LOCATED

Family/Scientific Name

Aceraceae

Acer negundo

Box elder

58 (2)

Acer saccharum

Sugar maple

94 (2), 86 (2), 84 (2), 79 (2), 79 (3), 76 (3), 76 (2), 76 (2), 76 (5), 66 (2), 59 (5)

Fabaceae

Gymnocladus dioica

Kentucky coffee

64 (2)

Robinia pseudoacacia

Black Locust

79 (2)

Fagaceae

Fagus grandiflora

Beech

97 (2), 86 (2), 84 (2), 79 (3), 76 (2), 69 (2), 64 (2), 61 (3), 59 (5), 59 (5), 48 (3)

Quercus alba

White oak

104 (3), 97 (3), 83 (5), 81 (5), 70 (5)

Quercus borealis
(var. *maxima*)

Red oak

102 (2) cut stump, 96 (4), 86 (3), 74 (4), 80 (4), 69 (2), 76 (2) cut stump, 74 (2) cut stump

Quercus muhlenbergia

Chinquapin oak

140 (2), 94 (2) cut stump, 87 (2)

Quercus velutina

Black oak

98 (4), 85 (4), 76 (4), 66 (just outside boundary of 2)

Juglandaceae

Carya cordiformis

Bitternut hickory

76 (2), 58 (2), 51 (2)

Carya glabra

Sweet pignut

79 (2)

Carya ovalis

Sweet pignut

56 (2)

Carya ovata

Shagbark hickory

74 (2), 71 (3), 69 (2), 69 (2), 66 (3), 65 (4), 58 (3), 52 (4), 52 (4)

Carya tomentosa

Mockernut hickory

76 (2), 76 (2), 65 (2), 64 (just outside boundary of 2), 61 (3), 56 (2), 60 (4), 55 (4)

Juglans nigra

Black walnut

66 (2), 64 (3), 61 (2), 54 (5)

		<u>Lauraceae</u>	Sassafras albidum	Sassafras	34 (2)
		<u>Magnoliaceae</u>	Liriodendron tulipifera	Tulip tree	60 (2), 59 (4)
		<u>Oleaceae</u>	Fraxinus americana (var. americana)	White ash	79 (4), 78 (2), 78 (2)
			Fraxinus quadrangulata	Blue ash	64 (2)
		<u>Platanaceae</u>	Platanus occidentalis	Sycamore	117 (6), 102 (6), 94 (6), 74 (2)
		<u>Rosaceae</u>	Prunus serotina	Wild black cherry	69 (2), 64 (3), 62 (4), 56 (2), 49 (2)
		<u>Salicaceae</u>	Populus deltoides	Cottonwood	66 (3), 76 (6), 76 (6)
		<u>Ulmaceae</u>	Celtis occidentalis	Hackberry	90 (2)

HAMILTON COUNTY PARK DISTRICT

10245 WINTON ROAD • CINCINNATI, OHIO 45231
PHONE (513) 521-PARK (7275) • FAX (513) 521-2606

May 15, 1995



Ms. Jennifer Windus

Ohio Department of Natural Resources

Division of Natural Areas and Preserves

1889 Fountain Square Court

Columbus, Ohio 43224

Dear Jennifer,

I am pleased to report that another population of Running Buffalo Clover has been discovered on Park District property! This time the discovery was made by Denis Conover, our contractual researcher, while conducting a plant survey on newly acquired land at Miami Whitewater Forest.

The plants are located along a dirt logging road on a ridge top overlooking the Great Miami River (see enclosed map). A detailed count has not yet been accomplished. There seems to be approximately 30 plants in the population which contains about 50 blooms. The plants look very healthy and are difficult to count because of the many stolons.

Either Denis or myself will show this new population to Marjorie Becus at our earliest convenience. If you would like any other information, please don't hesitate to call me at (513) 521-7275.

Sincerely,

HAMILTON COUNTY PARK DISTRICT

John Klein
Land Manager

JBK/jlh

cc: Mr. Jack Sutton, Planning Director, H.C.P.D.

Mr. Jim Mundy, Land Mgr. Asst., H.C.P.D.

Mr. Brian Goldick, Land Mgr. Tech., H.C.P.D.

Mr. Denis Conover, Contractual Researcher

Ms. Marjorie Becus, V.I.P. Researcher

In, May 15, 1995

, hickory and oaks.

ering stalks.

, 20 yards before

stalks.

ig stalks.

John,
 Here is a copy of
 what I gave Jennifer
 to add to her report.
 "Lake" seems to be
 the chosen name for this
 population.

What do you want
 to name the new SL
 population you found
 last fall?

I went to Mitchell,
 but found no clover.

There sure is a lot of
 clover on the Miami Trail!!

Monty

Running Buffalo Clover - LAKE POPULATION

Lake property, Miami Whitewater Forest,
Hamilton County, Ohio

Population found by Denis Conover, reported by John Klein, May 15, 1995

Two colonies in dirt road in old growth forest of maple, hickory and oaks.
(see John Klein's map for location)

On May 19, 1995:

First colony had 67 plants, lots of stolons and 84 flowering stalks.

Second colony, further to east along the same dirt road, 20 yards before
the park boundary sign, had 24 plants and 59 flowering stalks.

TOTAL for the population was 91 plants and 143 flowering stalks.

reported by Marjie Becus