VICKSBURG NMP FIELD FORMS

NATURESERVE VEGETATON CLASSIFICATION

Carl Nordman and Al Schotz. 2004. NatureServe Vegetaion Classification of Vicksburg National Military Park Original Field Sheets.

VICK.1

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V3 State: AL (MS) TN Location org: NPS

Provisional community name Liriodendron tulipifera - Liquidambar Styraciflua

Classified community name Liriodendron tulipifera - Quercus Spp. forest
Classifyer CWN *Date* 9/8/2004 *NVC ELCODE* 7220

Survey date: 9/2/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Sweetgum of ~25 cm dbh with tag # 30. Center of 20 x ~~30~~ 40m plot is at a bearing of 140 degrees and 4 m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

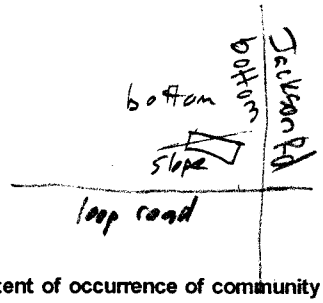
On North Loop Rd. East side stop just south of bridge over modern Jackson Rd. Plot is to west as trail goes down the hill. Careful of trifoliate orange which has large spines!

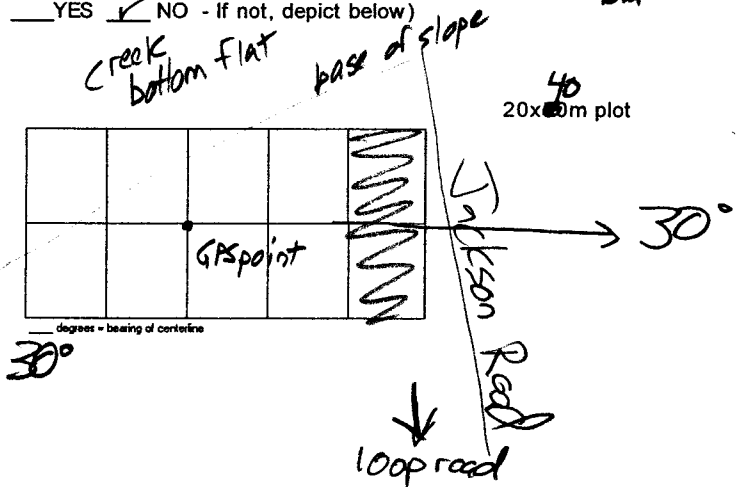
Time taken to walk to plot: 5 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x ~~30~~ 40m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓NO - If not, depict below)

PLOT LOCATION (Below show general plot location)





Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 95-98 Description of pictures (N,E,S & W from GPS point at middle of plot) : _____

Select one: ~~UTM~~ OR Lat/long (If lat/long, then values are 32,36251° N -090,84081° W WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) NAD 83 OR NAD27 ~~UTM Zone: 15 16~~

GPS Unit ID 3 GPS file name V3 _____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? Coordinate accuracy 11 ~~m~~ ft DOP 2.9 # sats 3

VICK.1

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V3 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 18 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
✓ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 300 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	✓ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
✓ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC (MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

Part of plot is bottoms, SW corner,

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Shrub layer dominated by trifoliate orange, site may have been cleared in the past, Jackson Rd. has a fair amount of traffic (a thru road).

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained ✓ Moderately well drained __ Somewhat poorly drained
__ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____ % Bedrock	85 % Litter, duff	____ % Other _____
____ % Large rocks (cobbles, boulders >10cm)	3 % Wood (> 1 cm)	
____ % Small rocks (gravel, 0.2-10 cm)	____ % Water	
____ % Sand (0.1-2 mm)	12 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:
Ponicirus trifoliata - Trifoliate orange

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.1

County: Warren Park: NATR (VICK) Plot Code: V3 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	70%	Liriodendron tulipifera – 40%, Liquidambar sty - 30%	.5-1m	10%
Understory T3	15-20m	40%	Liriodendron tulipifera – 10%, Liquidambar sty - 10%	1-2m	20%
Tall shrub S1	2-5m	90%	Ligustrum sinense – 40%, Parcirus latifolia - 40%	2-5m	30%
Short shrub S2	.5-1m	20%	Ligustrum sinense - 5%	5-10m	40%
Herbaceous	–	20%	Arundinaria gigantea – 10%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana	–	30%	Toxicodendron radicans - 20%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1**: Emergent | **T2**: Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	7	5							7	Liritul		
	7	5	4						67	Liqu sty		
		4							4	Sass alb		
			5	3					5	Ulmu rub		
			7	4					7	Ligu sin		
			7	3					7	Parc tri		
							4		4	Part qui		
			4	2					4	Hydr arb		
			4						4	Moru rub		
		4							4	Acer bar		
							6		6	Toxi rad		
			4	2					4	Quer mue		
							2		2	Viti rot		
					2				2	Aris dra		
			3	2					3	Cary cor		
					2				2	Amph bra		
							2		2	Bign cap		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.1

County: Warren Park: NATR (VICK) Plot Code: V3 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
					2				2	Oxyd arb		
					2				2	Elep car		
					1				1	Leer vir		
					2				2	Acer coc = CONOCOE		
			2	2					3	Liqu sty		
				2					2	Celt lae		
					3				3	Smal uve		
					1				1	Case che		
				1					1	Jugl nig		
			2						2	Cerc can		
		4		2					4	Acer neg		
					1				1	Reri fra		
					2				2	Polygonum virginianum		
							2		2	Toni jap		
					5				5	Arun gig		
					2				2	Cryp can		
					1				1	Rubu rel		
					2				2	Aspl pla		
				2					2	Oxyd arb		
					2				2	Phyto ame		
					2				2	Fupa ser		
		3							3	Juni vir		
					2				2	Aris ser		
					2				2	Pile pur		
					1				1	Aste lat		
							2		2	Smil tam		
					2				2	Oplis set		
					2				2	Cyrt for 1	Cyrtomium	fortunei
					2				2	Matelea sp.		
				2					2	Quer nig		
					2				2	Botr vir		
				1					1	Poun ser		
				1					1	Case oxy		
				2					2	Samb can		
							2		2	Bere sca		

Use bottom of this sheet or additional pages for other species in 1 ha plot

			3						3	Corn dru		
					2				2	Rubu tri		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

VICK.2

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V3A State: AL (MS) TN Location org: NPS

Provisional community name Liriodendron tulipifera - Liquidambar styraciflua

Classified community name Liriodendron tulipifera - Quercus spp. Forest

Classifyer CWN *Date* 9/2/2004 *NVC ELCODE* 7220

Survey date: 9/2/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Quercus muhlenbergii 39 cm dbh with tag # 31. Center of 20 x 50m plot is at a bearing of 310 degrees and 4.5 m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

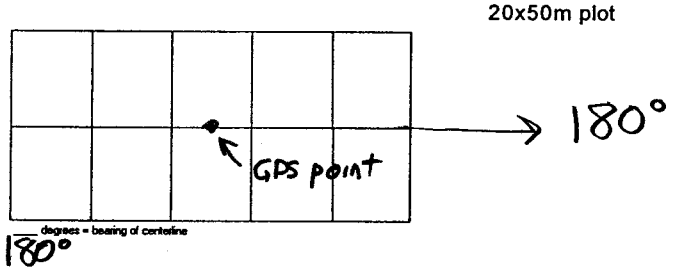
North Loop Road, East side just N. of Bridge over Jackson Rd. Park just before road turns to west Plot is on West facing slope just west of road, a little to south of parked car. Notice prominence of giant cane

Time taken to walk to plot: 5 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 99-102 Description of pictures (N,E,S & W from GPS point at middle of plot) : _____

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.36386° N -090.84075° W WGS 84

GPS Techniques/Equipment: (Garmin III+) ~~Garmin V~~ Datum(pick one) ~~NAD 83 OR NAD27~~ UTM Zone: ~~15 16~~

GPS Unit ID 3 GPS file name V3A____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? 339 Coordinate accuracy 9 m / ft DOP 2.8 # sats 4

VICK. 2

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V3A State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 28 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
✓ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 270 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	✓ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
✓ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC : (MESIC))
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Steep slope between loop road (upslope) and ravine (down slope). Trifoliate orange is competing with giant cane ~~for~~ in understory.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	93 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	2 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	5 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	✓ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:

VICK, 2

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren **Park:** NATR (VICK) **Plot Code:** V3A **State:** AL (MS) TN **Location org:** NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	90%	Liquidambar styraciflua-40%, Liriodendron tul-40%	.5-1m	10%
Understory T3	15-20m	60%	Liquidambar styraciflua-20%, Quercus muehlenbergii-20%	1-2m	20%
Tall shrub S1	2-5m	40%	Pyracantha coccinea-30%	2-5m	30%
Short shrub S2	.5-1m	20%	Ilex opaca-5%, Tilia americana-5%	5-10m	40%
Herbaceous	–	70%	Arundinaria gigantea-70%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana	–	30%	Toxicodendron radicans-20%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

T1: Emergent | T2: Tree Canopy | T3 Subcanopy | S1 Tall Shrub (>1m; to 5m) | S2 Short Shrub (< 1m) | H Herbaceous | N Nonvascular | V Vines (lianas) | E Epiphytes

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discard ?
	7	6		3					7	Liqu sty		
	7	4		1					7	Liri tul		
	5	6	3	2					6	Quer mue		
			3	2					3	Carp car		
					8				8	Arun gig		
			7	4					7	Pyra tol		
							3		3	Smil tam		
				3			6		6	Toxi rad		
							4		4	Luni jap		
		4		2					4	Quer nig		
							5		5	Berc sca		
					2				2	Aspl pla		
					2				2	Cyno vir		
					2				2	Iris dra		
					1				1	Aster sp.		
							3		3	Bign cap		
			5	3					5	Ligu sin		

Cover cls	
1	trace
2	0.1-1%
3	1-2%
4	2-5%
5	5-10%
6	10-25%
7	25-50%
8	50-75%
9	75-95%
10	>95%

VICK.2

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren **Park:** NATR (VICK) **Plot Code:** V3A **State:** AL (MS) TN **Location org:** NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
			3	1					3	Acer bar		
			3	2					3	Lind ben		
		3	3	2					4	Celt lae		
					1				1	Asim tri		
				2					2	Cary ill		
					1				1	Pass lut		
		4	6	4					6	Tili ame var. car		
					2				2	Sani can		
			4	3					4	Corn dru		
		4	3	2					4	Acer neg		
				2					2	Samb can		
				1					1	Side lyc		
					2				2	Botr vir		
				1					1	Robi pse		
				1					1	Prun ser		
			3	3					4	Vibu ruf		
					2				2	Cyst pro		
			4	2					4	Pan ear		
			3						3	Hydr que		
			2						2	Ostr vir		
					2				2	Matelea sp.		
					1				1	Care oxy		
					2				2	Thel kun		
					2				2	Viol wal		
					2				2	Aris tri		
			3						3	Cary cor		
							2		2	Smil rot		
				2					2	Ulmu ala		
		4	2						4	Moru rub		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.3

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V4 State: AL (MS) TN Location org: NPS

Provisional community name Quercus pagoda - Quercus nigra Forest

Classified community name

Classifyer CWN *Date* *NVC ELCODE* 4109

Survey date: 9/3/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Basswood of ~9 cm dbh with tag # 38. Center of 20 x 50m plot is at a bearing of 260 degrees and 3 m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

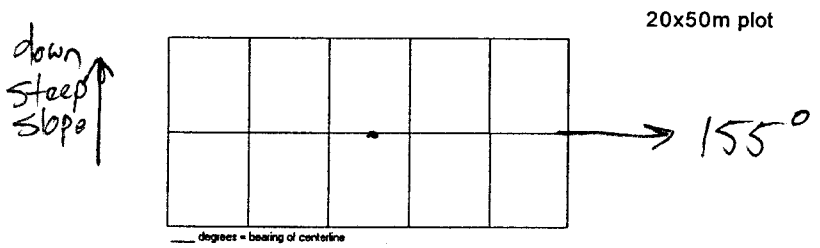
On east side of N. loop Road (west part) south of Modern Jackson Rd.
Stop at Granite gray ~~no~~ black monument "Mississippi Company C 1st Light Artillery Capt. W T Ratliff Forrdy's Division" From here go at 100° over ridge and ½ way down other side to tagtree.

Time taken to walk to plot: 5 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

ridge Bahia grass

PIC # 132 - 135 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** _____

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.36002 N -090.84476 W WGS 84

GPS Techniques/Equipment: (Garmin III+) ~~Garmin V~~ Datum(pick one) ~~NAD 83 OR NAD27~~ ~~UTM Zone: 15~~ 16

GPS Unit ID 3 GPS file name V4_____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? 140 Coordinate accuracy 10 m / ft DOP 2.6 # sats 3

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.3

County: Warren **Park:** NATR (VICK) **Plot Code:** V4 **State:** AL (MS) TN **Location org:** NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 37 ° ___ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
✓ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 65 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
✓ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion

__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
✓ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC (MESIC))
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

Steep slope water must run off fast. Leaf cover of soil important to prevent erosion.

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Steep slope has ~~some~~ Lonicera japonica ground cover,

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
✓ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	85 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	2 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	13 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

__ logging	__ fire	__ Hydrologic
✓ erosion	__ trails/roads	__ Agriculture
__ grazing/browsing	__ wind/ice damage	__ Old Growth
__ pine bark beetle	✓ exotic plants	__ Fire Suppression
__ dogwood anthr	__ ORV	

Disturbance and animal use comments:

VICK.3

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V4 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	90%	Quercus pagoda - 20%, Quercus nigra - 30%, Carya illinoensis - 30%	.5-1m	10%
Understory T3	15-20m	30%	Vaccinium - total =	1-2m	20%
Tall shrub S1	2-5m	70%	Ulmus rubra - 20%, Tilia americana var. car. - 10%, Celtis laevigata - 10%, Cornus drummondii - 10%	2-5m	30%
Short shrub S2	.5-1m	60%	Toxicodendron radicans - 40%	5-10m	40%
Herbaceous	–	20%	herb layer relatively sparse; total = 20%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana	–	40%	Lonicera japonica - 20%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	7								7	Quer pag		
	7	4	3	3					7	Quer nig		
	5	4		3					5	Liqu sty		
			6	3					6	Ulmu rub		
		4	4						5	Acer neg		
										Celt lae		
					2				2	Cyst for	Cyrtomium fortunei	
			3	2					3	Liqu sty		
				2					2	Litse ben		
		4	4	2					5	Quer mic		
			3	2					3	Pun car		
				7			5		7	Toxi rad		
							2		2	Cocc car		
					2				2	Eupa ser		
					2				2	Oxal pla		
			3	1					3	Fran car		
		4	3	3					5	Ulmu ala		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK.3

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V4 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
			2						2	Robi pse		
		4	5	2					6	Tili ame var. car		
			2	2					3	Pan ser		
					2				2	Lact Alo		
					1				1	Pass lut		
				2					2	Asim tri		
			3	2					3	Cary cor		
					1				1	Phyt ame		
			3						3	Ponc tri		
							5		5	Part qui		
			5	4					6	Celt lae		
			2	1					2	Mecu rub		
			3						3	Cerc can		
			5	2					5	Corn dru		
					3				3	Arun gig		
			3	1					3	Side rhy		
					2				2	Opli set		
				1					1	Elyn ame		
					1				1	Cyst pro		
	7		2	2					7	Cary ill		
				2					2	Nand dom		
							1		1	Smil bon		
					2				2	Sani can		
							3		3	Ampe arb		
					2				2	Card cha		
							6		6	Toni jap		
			3							Toni vir		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.4

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V5 State: AL (MS) TN Location org: NPS

Provisional community name Liriodendron tulipifera – Liquidambar styraciflua

Classified community name: Liriodendron tulipifera – Quercus spp. Forest
Classifyer CWN *Date* 9/8/2004 *NVC ELCODE* 7220

Survey date: 9/1/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Black cherry of 35 cm dbh with tag # 26. Center of 20 x 50m plot is at a bearing of 330° degrees and 3 m from tree.

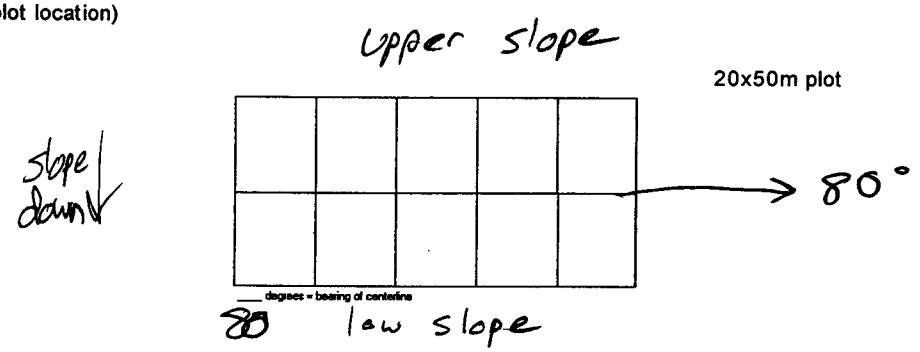
Directions to tag tree (including any notes on best access route, and mile marker): North Loop Rd. past Minnesota Monument and big S-turn with cedars. start at Blue sign "US Union Trench Quinby's – JE Smith's Division" on west side of road. From blue sign ~200 m west at 280° to plot center.

Time taken to walk to plot: 15 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

creek bottom

PIC # 73-76 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** Camera readjusted to fine image quality (had been standard).

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.35285° N –090.84575° W WGS 84

GPS Techniques/Equipment: (Garmin III+) ~~Garmin V~~ **Datum(pick one)** NAD 83 OR ~~NAD27~~ **UTM Zone:** ~~15~~ ~~16~~

GPS Unit ID 3 **GPS file name** V5 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E **Y** _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? 256 **Coordinate accuracy** 11 m / ft **DOP** 2.5 **# sats** 4

VICK.4

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V5 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 36 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
✓ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 155 ° (N=0 °)

__ Flat		✓ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
✓ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

~~Hilly~~ steep slope with some big trees and exotic plants May have been cleared during civil war. Gullies where soil has eroded are present (one at plot center). Chinese Privet is most abondant shrub.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____ % Bedrock	80 % Litter, duff	____ % Other _____
____ % Large rocks (cobbles, boulders >10cm)	5 % Wood (> 1 cm)	
____ % Small rocks (gravel, 0.2-10 cm)	____ % Water	
____ % Sand (0.1-2 mm)	15 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
_ dogwood anthr	_ ORV	

Disturbance and animal use comments:
Ligustrum sinense
Lonicera japonica
Pteris multifida
Magnolia looking shrub with serrate leaves

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.4

County: Warren **Park:** NATR (VICK) **Plot Code:** V5 **State:** AL (MS) TN **Location org:** NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	80%	Liriodendron tulipifera-20%, Quercus nigra-10% Liquidambar styraciflua-20%	.5-1m	10%
Understory T3	15-20m	50%	Acer negundo-20%, Liriodendron tulipifera-10%	1-2m	20%
Tall shrub S1	2-5m	70%	Ligustrum sinense-60%	2-5m	30%
Short shrub S2	.5-1m	30%	Ligustrum sinense-10%	5-10m	40%
Herbaceous	–	20%	Athyrium filix-femina-5%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana	–	20%	Lonicera japonica-10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	6	5							6	Liri tul		
	5		3	3					6	Quer nig		
			4	2					4	Ulmu rub		
		6	5	1					6	Acer neg		
			8	5					8	Ligu sin		
							2		2	Celt car		
							3		3	Viti rot		
				4					4	Lind ben		
					2				2	Opli set		
					2				2	Chrysan		
					2				2	Aspl pla		
					2				2	Aris dra		
					2				2	Poly acr		
					2				2	Aris tri		
					2				2	Pass lut		
							5		5	Loni jap		
							4		4	Part qui		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK.4

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V5 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
					2				2	Carex oxy		
							3		3	Bign cap		
		4	3						4	Ost vir		
					2				2	Pter mul		
					2				2	Dich bos		
		4							4	Acer bar		
					2				2	Fris ser		
			2						2	Corn drv		
	4								4	Pinu tae		
	4		3	2					4	Prun ser		
					4				4	Athy fil		
							2		2	Smil tam		
		4	3	3					4	Mor rub		
					2				2	Clem vir		
					2				2	Euon acu		
					2				2	Viol tri		
			3	2					3	Prun car		
	4		4						5	Quer mic		
					2				2	Sani can		
			2	2					3	Euon ame		
			2	1					2	Nand dom		
			2						2	Fagu car		
					1				1	Cyrt for Cyrtomium	fortunei	
	6		4						6	Ligu sty		
				2					2	Sambu can		
					1				1	Phyto ame		
			2						2	Tili ame var. car		

Cover classes

1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.5

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR ~~VICK~~ Plot Code: V5B State: AL (MS) TN Location org: NPS

Provisional community name Platanus occidentalis – Liquidambar styraciflua temp flooded

Classified community name: Platanus occidentalis – Liquidambar styraciflua – (Ulmus americana) / (Crataegus viridis) Forest
Classifyer CWN *Date* 9/8/2004 *NVC ELCODE* 7335

Survey date: 9/1/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Box elder of 19 cm dbh with tag # 27. Center of 20 x 50m plot is at a bearing of 200 degrees and 1.0 m from tree. Tag is on east side of tree.

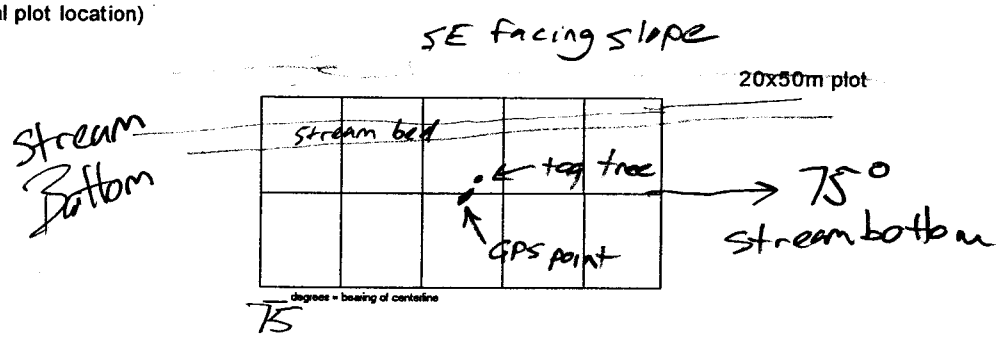
Directions to tag tree (including any notes on best access route, and mile marker): North Loop road past Minnesota Monument and big S turn with large cedars. Start at blue sign "VS Union trench Quinby's – JE Smith's Division" on west side of Road. From Blue sign about 100 m at 285° to plot center

Time taken to walk to plot: 10 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 77-80 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** _____

Select one: ~~UTM~~ OR Lat/long (If lat/long, then values are 32.35279° N – 090.84515° W WGS 84

GPS Techniques/Equipment: Garmin III+ ~~Garmin V~~ Datum(pick one) ~~NAD 83~~ OR NAD27 UTM Zone: ~~15~~ ~~16~~

GPS Unit ID 3 GPS file name V5B (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? ✓ Coordinate accuracy 12 m / ft DOP 3.2 # sats 4

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.5

County: Warren Park: NATR VICK Plot Code: VSB State: AL MS TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope ____ ° ____ %

__ Flat	0 °	0 %
✓ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect ____ ° (N=0 °)

__ Flat		__ SE	113-157 °
✓ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion

_ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
__ Midslope ✓ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System

_ *Upland* ✓ *Palustrine*
_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat
__ Alluvial terrace
__ Bald
__ Bank
__ Bar
__ Bench
✓ Bottomlands
__ Cliff
__ Cove
__ Depression
__ Draw
__ Exogenous dome
__ Floodplain
__ Gap
__ Gorge
__ Hillslope bedrock outcrop
__ Midslope
__ Nose slope
__ Ridge
__ Ridgetop bedrock outcrop
__ Saddle
__ Seep
__ Toe slope
__ Slope
__ Streambed
__ Streamhead
__ Periglacial boulderfield
__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)

__ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded ✓ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

Temp flooded

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Colluvial soil from erosion
also much Chinese Privet

Soil Texture:

__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:

__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
__ Well drained ✓ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock
____% Large rocks (cobbles, boulders >10cm)
____% Small rocks (gravel, 0.2-10 cm)
____% Sand (0.1-2 mm)
50 % Litter, duff
____% Wood (> 1 cm)
____% Water
30 % Bare soil
____% Other _____

Leaf type:

✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
Mixed

Leaf phenology (dominant stratum)

__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class

✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging _ fire ✓ Hydrologic
✓ erosion _ trails/roads _ Agriculture
_ grazing/browsing _ wind/ice damage _ Old Growth
_ pine bark beetle ✓ exotic plants _ Fire Suppression
dogwood anthr ORV

Disturbance and animal use comments:

VICK.5

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V5B State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	60%	Platanus occidentalis-30%, Liquidambar styraciflua-30%	.5-1m	10%
Understory T3	15-20m	30%	Liquidambar styraciflua-10%, Juglans nigra-10%	1-2m	20%
Tall shrub S1	2-5m	90%	Ligustrum sinense-80%	2-5m	30%
Short shrub S2	.5-1m	20%	Ligustrum sinense-10%	5-10m	40%
Herbaceous	—	10%	Athyrium filix-femina-5%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana	—	20%	Toxicodendron radicans-10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	7	3							7	Plat occ		
	7	5	4						7	Liqu sty		
		5							5	Jugl nig		
		4	5	2					6	Acer neg		
			4	5					4	Ligu sin		
				2					2	Asim tri		
				3			5		5	Toxi rad		
			2	1					2	Side lyc		
		4							4	Ulmu ame		
				2					2	Quer nig		
							2		2	Loni jap		
					3				3	Arun gig		
							2		2	Part qui		
					4				4	Athy fil		
					2				2	Leer vir		
					2				2	Boeh cyl		
				2					2	Sani can		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.5

County: Wasser Park: NATR (VICK) Plot Code: VSB State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
							2		2	Smil tam		
					1				1	Aris dra		
					2				2	Opli set		
					2				2	Cyst pro		
				2					2	Lind ben		
					2				2	Mateu sp.		
					2				2	Poly acr		
				2					2	Samb can		
			4						4	Panc tri		
					1				1	Aspl pla		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.6

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V7 State: AL (MS) TN Location org: NPS

Provisional community name Platanus occidentalis / Acer negundo

Classified community name Platanus occidentalis – Liquidambar styraciflua – (Ulmus americana) / (Crataegus viridus) Forest
Classifyer CWN *Date* 9/8/2009 *NVC ELCODE* 7335

Survey date: 9/1/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Ulmus rubra of 48 cm dbh with tag # 22. Center of 20 x 50m plot is at a bearing of 0° degrees and 4 m from tree. Tag on N. side of tag tree.

Directions to tag tree (including any notes on best access route, and mile marker):

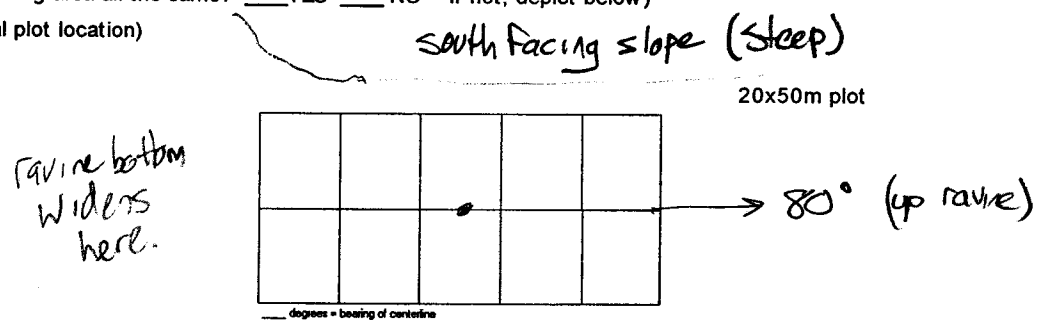
On north loop road Park when first in sight of Minnesota Monument (like Washington Monument) Obelisk. go west into woods from hill and down into bottom. Bottom of ravine

Time taken to walk to plot: 8 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:
< 1HA 1-10 HA 10-100HA > 100HA

North facing slope (steep)

PIC # 53-56 Description of pictures (N,E,S & W from GPS point at middle of plot) : _____

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.34845° N -090.84686° W
WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V **Datum(pick one)** ~~NAD 83 OR NAD27~~ UTM Zone: ~~15 16~~

GPS Unit ID _____ **GPS file name** V7_____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? 105 **Coordinate accuracy** 11 m / ft **DOP** 2.7 **# sats** 4

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.6

County: Warren Park: NATR (VICK) Plot Code: V7 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 4 ° ___ %			**Measured Aspect** 260° (N=0 °)			**Topographic Postion**	
__ Flat	0 °	0 %	__ Flat	__ SE	113-157 °	_ Interfluve (Ridge/summit/crest)	__ Toeslope
✓ Gentle	0-5 °	1-9%	__ Variable	__ S	158-202 °	__ High Slope (upper/convex slope)	
__ Moderate	6-14 °	10-25%	__ N 338-22 °	__ SW	203-247 °	__ Midslope	✓ Low level (terrace)
__ Somewhat steep	15-25 °	26-49%	__ NE 23-67 °	✓ W	248-292 °	__ Lowslope (lower/footslope)	__ Channel bed
__ Steep	27-45 °	50-100%	__ E 68-112 °	__ NW	293-337		
__ Very steep	45-69 °	101-275%				*Cowardin System*	
__ Abrupt	70-100 °	276-300				_ *Upland*	✓ *Palustrine*
__ ovrhng/shltrd	>100 °	>300%				_ *Estuarine*	_ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	✓ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)

__ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)

__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded ✓ Temporarily Flooded (e.g. floodplains)

__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: Gentle sheet flow likely after heavy rainfall, based on slope. Some ponding is likely. Colluvium at base of slope; soils classified as loess, thus highly susceptible to erosion.

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Cleared during Civil War; allowed to revegetate. Based on young age of timber, site may have been open 50-60 years ago.

Soil Texture:

__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:

__ Rapidly drained ✓ Moderately well drained __ Somewhat poorly drained
__ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

___% Bedrock	70% Litter, duff	___% Other _____
___% Large rocks (cobbles, boulders >10cm)	10% Wood (> 1 cm)	
___% Small rocks (gravel, 0.2-10 cm)	___% Water	
___% Sand (0.1-2 mm)	20% Bare soil	

Leaf type:

✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
Mixed

Leaf phenology (dominant stratum)

__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class

✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
✓ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:

Severe infestation of Chinese privet. Abnormal levels of colluvium deposited - an artifact of past land use practices.

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK-6

County: Warren Park: NATR (VICK) Plot Code: V7 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	50%	Platanus occidentalis - 20%, Ulmus rubra - 10%, Quercus nigra - 10%, Liquidambar styraciflua - 10%	.5-1m	10%
Understory T3	15-20m	60%	Acer negundo - 40%	1-2m	20%
Tall shrub S1	2-5m	80%	Ligustrum sinense - 70%	2-5m	30%
Short shrub S2	.5-1m	20%	Ligustrum sinense - 10%	5-10m	40%
Herbaceous	–	10%	Arundinaria gigantea - 5%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana	–	10%	Vitis cinerea - 5%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	6	4							6	Plat occ		
	5		2	2					5	Quer nig		
		7	4	3					7	Acer neg		
			8	5					8	ligu sin		
							2		2	Pari qui		
					2				2	Athy fil		
				2					2	Euon ame		
	5	5	3						6	Ulmu rub		
					2				2	Cyst pro		
					2				2	Polygonum virginianum		
					2				2	Leer vir		
					2				2	Boeh cyl		
					2				2	Cryp can		
					1				1	Verb occ		
					2				2	Geum can		
				2					2	Lind ben		
					2				2	Opli set		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.6

County: Warren Park: NATR (VICK) Plot Code: V7 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
					2				2	Eupa ser		
					2				2	Cade dig		
					2				2	Aris tri		
							1		1	Bign cap		
					1				1	Sadi car		
	5	5							6	Liqu sty		
		4		2					4	Celt lae		
							3		3	Berc sca		
					2				2	Viol aff		
					3				3	Arun gig		
							3		3	Cocc dif		
					1				1	Lact flo		
					1				1	Phyt ame		
				1					1	Sidelyc		
							4		4	Viti cin		
		4							4	Moru rub		
				1					1	Samb can		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.7

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V7A State: AL (MS) TN Location org: NPS

Provisional community name Carya glabra – Ulmus rubra – Celtis laevigata

Classified community name Quercus pagoda – Quercus nigra Forest
Classifyer CWN *Date* 5/18/2005 NVC ELCODE CEGL004109

Survey date: 9/1/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Acer rubrum of 20 cm dbh with tag # 23. Center of 20 x 50m plot is at a bearing of 310° degrees and 2.0 m from tree. Tag is on N. side of tree

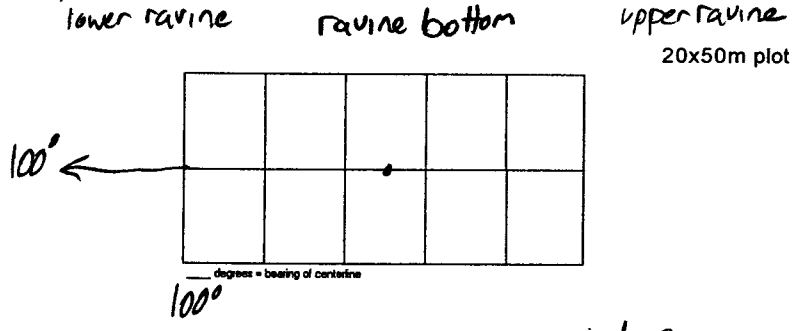
Directions to tag tree (including any notes on best access route, and mile marker): On north loop road, park south of Minnesota Monument (when first in sight of it). Plot is on south facing slope across creek to west. Use GPS.

Time taken to walk to plot: 20 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:
< 1HA 1-10 HA 10-100HA > 100HA

PIC # 57-60 Description of pictures (N,E,S & W from GPS point at middle of plot) :_____

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.34798 N -090.84830 W

GPS Techniques/Equipment: (Garmin III+) Garmin V **Datum(pick one)** ~~NAD 83 OR NAD27~~ WGS 84 **UTM Zone:** ~~15 16~~

GPS Unit ID 3 **GPS file name** V7A (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E **Y** _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? **Coordinate accuracy** 9 m / ft **DOP** 2.3 **# sats** 5

VICK.7

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren **Park:** NATR (VICK) **Plot Code:** V7A **State:** AL (MS) TN **Location org:** NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 27 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
✓ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 180 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		✓ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
✓ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	Nose slope	Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC : (MESIC))
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

This ravine has evidence of considerable erosion. Soil has collected in the ravine bottom (colluvial). There are many deep gullies along the slope which make the aspect variable at a small scale. Slope is also variable

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____ % Bedrock	88 % Litter, duff	____ % Other _____
____ % Large rocks (cobbles, boulders >10cm)	2 % Wood (> 1 cm)	
____ % Small rocks (gravel, 0.2-10 cm)	____ % Water	
____ % Sand (0.1-2 mm)	10 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

✓ logging	_ fire	_ Hydrologic
✓ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
_ dogwood anthr	ORV	

Disturbance and animal use comments:
Lonicera japonica
& Ligustrum sinense

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.7

County: Wasson Park: NATR (VICK) Plot Code: V7A State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	80%	Carya glabra - 20%, Ulmus rubra - 20%, Celtis laevigata - 20%	.5-1m	10%
Understory T3	15-20m	50%	Ulmus rubra - 40%, Liquidambar styraciflua - 10%, Celtis laevigata - 10%	1-2m	20%
Tall shrub S1	2-5m	70%	Ligustrum sinense - 40%	2-5m	30%
Short shrub S2	.5-1m	40%	Toxicodendron radicans - 20%	5-10m	40%
Herbaceous	–	20%	Herb layer rather sparse; total = 20%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana		40%	Vitis cinerea - 20%, Lonicera japonica - 10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	5			2					5	Quer pag		
	5			2					5	Quer nig		
	6		5	3					6	Cary gla		
	6	5	3	2					6	Ulmu rubra		
		5	2	3					5	Ligu sty		
		3							3	Corn flo		
							3		3	Viti rot		
							5		5	Loni jap		
				5			4		6	Toxi rad		
			7	4					7	Ligu sin		
					2				2	Rubu usg		
			4						4	Ilex dec		
			3	3					3	Prun car		
					2				2	Sani can		
							6		6	Viti cin		
	6	5	5						6	Celt lae		
					2				2	Poly acr		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.7

County: Warren Park: NATR (VICK) Plot Code: V7A State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
					2				2	Cyst pro		
							2		2	Smil rot		
	5	5	2	2					6	Psun ser		
			4	3					4	Cesc can		
			1				2		2	Smil fam		
			1						1	Caryill		
					2				2	Asplpla		
			4	2					3 4	Fran car		
			4	2					4	Ulmu ala		
			3	1					3	Side lyc		
							4		4	Bign cap		
					2				2	Gelm can		
							2		2	Smil gla		
					2				2	Aste lat		
			4	3					4	Cary cor		
					1				1	Lact flo		
					2				2	Case dig		
		4							4	Acer rub		
			3	2					3	Corn drv		
					2				2	Desm per		
							2		2	Cela scu		
					2				2	Opli set		
					2				2	Carex sp.		
			3						3	Hicu jap		
				1					1	Fagu gra		
				2					2	Nand dom		
					1				1	Clem vir		
		5							5	Mocu rub		
				2					2	Call ame		
					2				2	Desm can		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK-8

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V7B State: AL (MS) TN Location org: NPS

Provisional community name Solidago canadensis

Classified community name Lolium (arundinaceum, pratense) Herbaceous Vegetation
Classifyer CWN *Date* 9/14/2004 *NVC ELCODE* 4048

Survey date: 9/1/2004 **Surveyors initials:** AS & CWN

Tagged tree is a No tag tree of ____ cm dbh with tag #_____. Center of ~~20 x 50m~~ plot is at a bearing of ____ degrees and ____ m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

Park South of Minnesota Monument (when first in sight of it). Go West across creek and up again to clearing on ridge. Use GPS to find.

Time taken to walk to plot: 25 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the ~~20 x 50m~~ plot.)

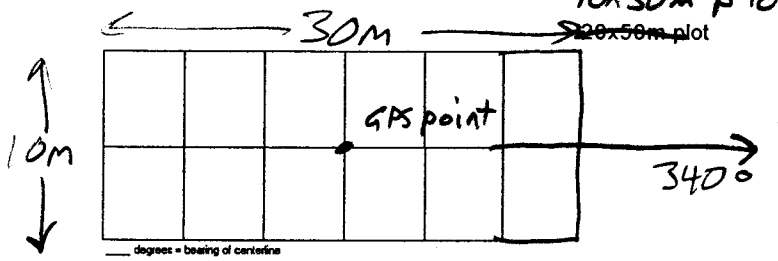
Plot representativeness -Is the surrounding area all the same? ___YES ✓ NO - If not, depict below)

10x30m

PLOT LOCATION (Below show general plot location)

wooded slope

10x30m plot



340°

wooded slope

Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 61-64 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** _____

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.34844° N -090.84877° W

WGS 84

GPS Techniques/Equipment: (Garmin III+) ~~Garmin V~~ **Datum(pick one)** NAD 83 OR ~~NAD27~~ **UTM Zone:** ~~15 16~~

GPS Unit ID 3 **GPS file name** V7B (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E **Y** _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? **Coordinate accuracy** 8 m / ft **DOP** 2.2 **# sats** 5

VICK.8

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V 7B State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope ____ ° ____ %

__ Flat	0 °	0 %
✓ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 170 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		✓ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
✓ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* _ *Palustrine*
_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	✓ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC - DRY - MESIC: MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Cleared — probably mowed twice a year
forms a narrow cleared ridge.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	80 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	____% Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	20 % Bare soil	

Leaf type:
__ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
✓ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
__ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
✓ Herb - Perennial

Physiognomic Class
__ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
✓ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	_ exotic plants	_ Fire Suppression
_ dogwood anthr	ORV	

Disturbance and animal use comments:
fire ants
mowing

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.8

County: Warren Park: NATR (VICK) Plot Code: V7B State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2				.5-1m	10%
Understory T3				1-2m	20%
Tall shrub S1				2-5m	30%
Short shrub S2				5-10m	40%
Herbaceous	—	100%	Solidago canadensis - 80%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana	—	40%	Ampelopsis arborea - 20%, Toxicodendron radicans - 10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
							6		6	Ampe arb		
					5				5	Pass lac		
							5		5	Toxi rad		
							4		4	Lonj jap		
					8					Soli can		
				2					2	Cary ill		
					5				5	Ptep car		
				1					1	Ulmu ala		
					2				2	Aste pil		
					3				3	Cave che		
					2				2	Trid fla		
					2				2	Andr vir		
				2					2	Quer nig		
					5				5	Pasp not		
					3				3	Fest aru		
					2				2	Vern gig		
			1	1					2	Robi pse		
				1					1	Quer lyr		
										Community Survey Page 3		
				1					1	Desm per		
				1					1	Sola car		

Cover cls	
1	trace
2	0.1-1%
3	1-2%
4	2-5%
5	5-10%
6	10-25%
7	25-50%
8	50-75%
9	75-95%
10	>95%

Cype g/o - herb - 1 (cover)

VICK-9

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V7C State: AL (MS) TN Location org: NPS

Provisional community name

Classified community name Paspalum notatum herbaceous vegetation

Classifyer CWN *Date* 9/1/2004 *NVC ELCODE* 4700

Survey date: 9/1/2004 **Surveyors initials:** CWN & AS

Tagged tree is a No tag tree of ____ cm dbh with tag #_____. Center of 20 x 50m plot is at a bearing of ____ degrees and ____ m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

North loop road. Park where Minnesota Monument first comes into sight (to NE) and go SW to grassy hilltop between cannon and small monuments.

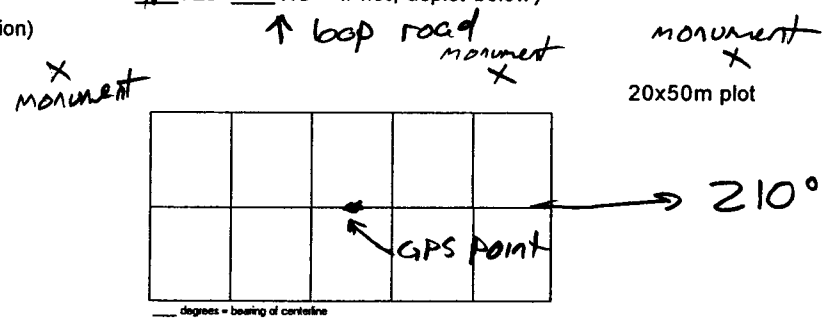
Center of plot is 25 m S (180°) from cannon "US 17th Battery Ohio Light ~~Infantry~~ Artillery".

Time taken to walk to plot: 2 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? (Y) YES ___ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA (10-100HA) > 100HA

PIC # 65-68 Description of pictures (N,E,S & W from GPS point at middle of plot) :_____

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.34819 N 090.84563 W

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) ~~NAD 83 OR NAD27~~ WGS 84 UTM Zone: 15 16

GPS Unit ID 3 GPS file name V7C (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? ____ Coordinate accuracy 7 m / ft DOP 1.7 # sats 6

VICK-9

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V7C State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope ____ ° ____ %

__ Flat	0 °	0 %
✓ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 225 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	✓ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
✓ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	✓ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	Nose slope	Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC (DRY) : MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Mowed Bahia grass lawn

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____ % Bedrock	90 % Litter, duff	____ % Other _____
____ % Large rocks (cobbles, boulders >10cm)	____ % Wood (> 1 cm)	
____ % Small rocks (gravel, 0.2-10 cm)	____ % Water	
____ % Sand (0.1-2 mm)	10 % Bare soil	

Leaf type:
__ Broad-leaved
__ Needle-leaved
__ Microphyllous
✓ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
__ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
✓ Herb - Perennial

Physiognomic Class
__ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
✓ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:
Bahia grass lawn

VICK.9

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V7C State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2				.5-1m	10%
Understory T3				1-2m	20%
Tall shrub S1				2-5m	30%
Short shrub S2				5-10m	40%
Herbaceous		100%	Paspalum notatum	10-15m	50%
Non-vascular				15-20m	60%
Vine/liana				20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

T1: Emergent | T2: Tree Canopy | T3 Subcanopy | S1 Tall Shrub (> 1m; to 5m) | S2 Short Shrub (< 1m) | H Herbaceous | N Nonvascular | V Vines (lianas) | E Epiphytes

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
					10				10	Pasp not		
					2				2	Kyllinga sp		
					2				2	Dich car Dichondra carolinensis		
					1				1	Carex cha		
					2				2	Digi isc		
					2				2	Pasp pra		
					2				2	Bow inc		
					1				1	Sporobolus sp.		
					1				1	Oxal dil		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK.10

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V8 State: AL (MS) TN Location org: NPS

Provisional community name Quercus nigra - Ulmus rubra - Quercus shumardii

Classified community name Quercus pagoda - Quercus nigra Forest

Classifyer CWN *Date* _____ *NVC ELCODE* CEGL004109

Survey date: 9/1/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Ulmus americana of 13 cm dbh with tag # 24. Center of 20 x 50m plot is at a bearing of 80° degrees and 2.0 m from tree. tag is on east side of tree.

Directions to tag tree (including any notes on best access route, and mile marker): North Loop, Union Ave. past Minnesota Monument and just past big S-turn with cedars.

From blue sign "VS Union Trench Quin by's - JE Smith's Division"

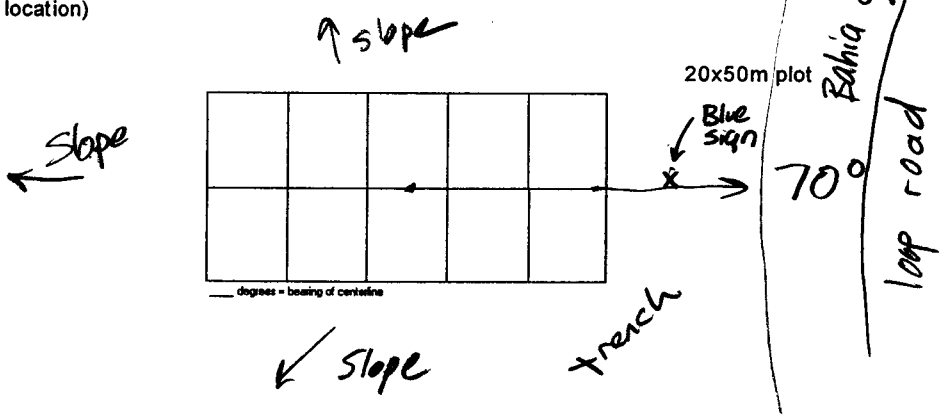
Center of plot is 45 m at 270°

Time taken to walk to plot: 5 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.

Plot representativeness -Is the surrounding area all the same? ___YES ✓NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 69-72 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** _____

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.35260° N -090844440° W WGS 84

GPS Techniques/Equipment: (Garmin III+) ~~Garmin V~~ **Datum(pick one)** NAD 83 OR NAD27 **UTM Zone:** ~~15 16~~

GPS Unit ID 3 **GPS file name** V8 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ **m E Y** _____ **m N Elevation** _____ **m / ft**

Averaging performed (at least 120 observations)? 206 **Coordinate accuracy** _____ **m / ft DOP** _____ **# sats**

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.10

County: Warren Park: NATR (VICK) Plot Code: V8 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 8 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
✓ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 250 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	✓ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
✓ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	✓ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC : (MESIC))
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

perhaps cleared during civil war. This site has very large trees (Pagoda oak, Shumard oak, water oak). Also a very large Syderoxylon lycioides (13 cm dbh).

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

~~Ground cover~~

____% ~~Bedrock~~
____% Large rocks (cobbles, boulders >10cm)
____% Small rocks (gravel, 0.2-10 cm)
____% Sand (0.1-2 mm)
____% Litter, duff
2 % Wood (> 1 cm)
____% Water
____% Bare soil
____% Other _____

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
_ dogwood anthr	_ ORV	

Disturbance and animal use comments:
Lonicera japonica is dominant low shrub along ground.

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V8 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	50%	Quercus nigra - 20%, Sassafras albidum - 10%, Ulmus rubra - 10%, Quercus shumardii - 10%	.5-1m	10%
Understory T3	15-20m	20%	Carya cordiformis - 10%, Prunus serotina - 10%	1-2m	20%
Tall shrub S1	2-5m	50%	Carya cordiformis - 20%, Ulmus rubra - 10%	2-5m	30%
Short shrub S2	.5-1m	60%	Toxicodendron radicans - 40%	5-10m	40%
Herbaceous	–	10%	herb layer sparse; total = 10%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana		40%	Lonicera japonica - 20%, Vitis cinerea - 10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	6			3					6	Quer nig		
	5								5	Quer sha		
		5	6						6	Cary cor		
	5		5	3					6	Ulmu rub		
		5		2					5	Prun ser		
			2						2	Frax ame		
							2		2	Smil tam		
				7			3		7	Toxi rad		
							6		6	Loni jap		
				2					2	Cerc can		
				2					2	Lind ben		
					1				1	Aris dra		
		4	4	2					5	Ulmu ala		
			2	1					2	Nand dom		
							3		3	Viti rot		
							5		5	Viti cin		
					1				1	Desm per		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.10

County: Warren Park: NATR (VICK) Plot Code: V8 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
			3	2					3	Celtlae		
							2		2	Smil gla		
							3		3	Part qui		
			3						3	Ligu jap		
			4	2					4	Sideyd		
							3		3	Bign cap		
		4							4	Ulmu ame		
				2					2	Fran car		
				2					2	Asim tri		
					2				2	Botr dis		
				1					1	Euon ame		
					1				1	Sani can		
					2				2	Arun gig		
					3				3	Poly acu		
					1				1	Cyno vir		
			4						4	Ostr vir		
			2						2	Ligu sin		
				1					1	Rubs vir		
	5			2					5	Sass alb		
							2		2	Becl sca		
					2				2	Pass lut		
		3							3	Quer mue		
					1				1	Dich bos		
							2		2	Smil rot		
					1				1	Scle ol		
			3	1					3	Corn flo		
			V	V					1	Call ame		
			4						4	Carp car		
					2				2	Care oxy		
	0								0	Quer pag		
	5								5	Ligu sty		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK. 11

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V11 State: AL (MS) TN Location org: NPS

Provisional community name Liquidambar styraciflua – Carya illinoiensis – Quercus nigra Forest

Classified community name

Classifyer _____ *Date* _____ *NVC ELCODE* CEGL004122

Survey date: 8/31/2004 **Surveyors initials:** AS, CWN & Kurt Foote

Tagged tree is a Quercus nigra of 51 cm dbh with tag # 15. Center of 20 x 50m plot is at a bearing of 45 degrees and 4.5 m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

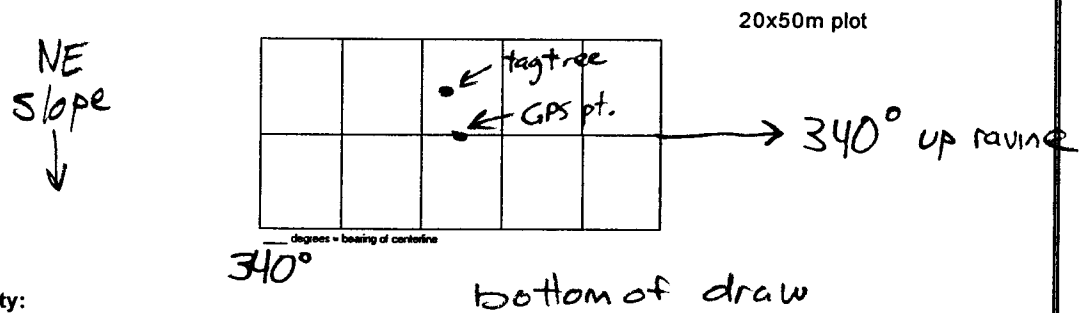
Confederate part of South loop road. After 1st big clearing go into woods south of road at "US Carr's Approach On the line of Carr's left Approach" sign. Go due South.

Time taken to walk to plot: 5 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 11–14 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** _____

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.34082 N -090.85561 W WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V **Datum(pick one)** __NAD 83_OR_NAD27__ **UTM Zone:** ~~15 16~~

GPS Unit ID _____ **GPS file name** V11_____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? **Coordinate accuracy** m / ft **DOP** **# sats**

VICK.11

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V11 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 14 ° ___ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
✓ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 55 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
✓ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
✓ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	Nose slope	Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC : (MESIC))
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Steep and erodable, there is colluvial soil in the bottom below this slope. Historically was open during Civil War battle, Terry Winschel (NPS).

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	57 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	3 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	40 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
✓ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:
Lonicera japonica

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.11

County: Warren Park: NATR (VICK) Plot Code: V11 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	90%	Liquidambar styraci flua - 50%	.5-1m	10%
Understory T3	15-20m	60%	Morus rubra - 20%	1-2m	20%
Tall shrub S1	2-5m	50%	Ligustrum sinense - 20%	2-5m	30%
Short shrub S2	.5-1m	40%	—	5-10m	40%
Herbaceous	—	20%	Arundinaria gigantea - 5%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana	—	80%	Lonicera japonica - 70%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	7	5	5						8	Ligu sty		
			4	3					4	Cerc can		
							8		8	Lon. jap		
	6		5	4					6	Car. ill		
				4			6		6	Toxi rad		
			6	4					6	Ligu sin		
			4	3					4	Aser neg		
				3					3	Euon atr		
			2	2					3	Prun ser		
					2				2	Aspl pla		
							2		2	Smil gla		
			2	3					3	Lind ben		
	5	5		3					6	Quer nig		
					2				2	Opli set		
		5	4						5	Acer bar		
		6	3	2					6	Morv rub		
	5								5	Quer pag		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK.11

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V11 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
					3				3	Rubu fla		
			4						4	Ulmu ame		
			4	2					4	Fagu car		
				2					2	Celt lae		
				2					2	Dios vir		
							5		5	Viti rot		
		4	3						4	Hici ful		
							2		2	Pari qui		
			2						2	Corn dru		
				2					2	Samb can		
					1				1	Matelea sp		
			4	3					4	Ulmu ala		
				1					1	Sassa alb		
				4					4	Nand dom		
				3					3	Quer mic		
					2				2	Boeh cyl		
					4				4	Arun gig		
							2		2	Berc sca		
							2		2	Bign cap		
					2				2	Rubu arg		
					1				1	Carex sp		
					2				2	Oeum can		
					2				2	Athy fel		
					2				2	Aris ser		
				1					1	Asim tri		
					2				2	Eupa rug		
				2					2	Prun caro		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK-12

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: VIIA State: AL (MS) TN Location org: NPS

Provisional community name Quercus pagoda - Quercus nigra Forest

Classified community name Quercus pagoda - Quercus nigra Forest
Classifyer _____ *Date* _____ *NVC ELCODE* CEGL004109

Survey date: 8/31/2004 **Surveyors initials:** AS, CWN & Kurt Foote

Tagged tree is a Water oak of ~52 cm dbh with tag # 16. Center of 20 x 50m plot is at a bearing of 330 degrees and 2.5 m from tree.

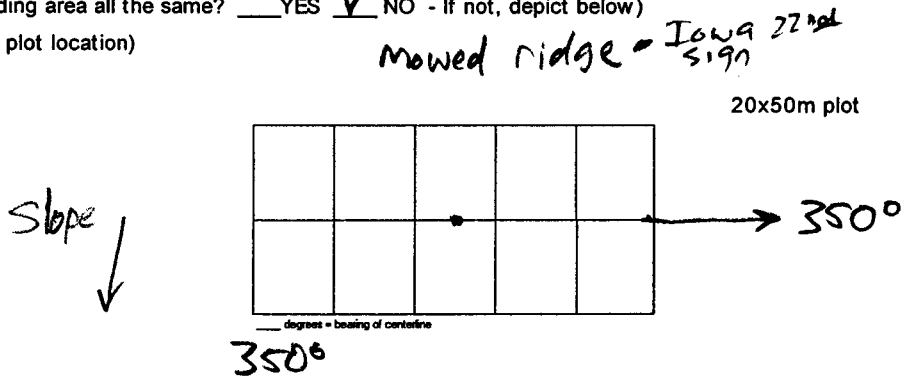
Directions to tag tree (including any notes on best access route, and mile marker): Confederate South loop Rd. South of 1st parking area on right (Texas). From "US Carrs Approach" sign on high mowed area go South along opening into weeds along ridge. From "Iowa 22d Infantry 2nd Brg. 14th DIV. 13th CORPS Advanced Sharpshooters line June 19 - July 4 1863" sign about 40m at 145° SE to tag tree

Time taken to walk to plot: 5 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 15-18 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** _____

17 (5 - includes Kurt Foote)

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.34101 N - 090.85604 W WGS 84

GPS Techniques/Equipment: (Garmin III) Garmin V **Datum(pick one)** ~~NAD 83 OR NAD27~~ **UTM Zone:** 15 16

GPS Unit ID 3 **GPS file name** VIIA (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E **Y** _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? 246 **Coordinate accuracy** 3.6 m / ft **DOP** _____ **# sats** 6

VICK.12

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: VIIA State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 9 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
✓ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 90 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
✓ E	68-112 °	__ NW	293-337

Topographic Postion

__ Interfluve (Ridge/summit/crest) __ Toeslope
✓ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System

__ Upland __ Palustrine
__ Estuarine __ Lacustrine __ Riverine

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)

✓ Not a wetland (Upland: XERIC : DRY - MESIC (MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded *__ Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Was cleared during civil war (NPS – Terry Winschel)

Soil Texture:

__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:

__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained *__ Very poorly drained*

Ground cover

____ % Bedrock	87 % Litter, duff	____ % Other _____
____ % Large rocks (cobbles, boulders >10cm)	3 % Wood (> 1 cm)	
____ % Small rocks (gravel, 0.2-10 cm)	____ % Water	
____ % Sand (0.1-2 mm)	10 % Bare soil	

Leaf type:

✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
Mixed

Leaf phenology (dominant stratum)

__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class

✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
✓ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:

Lonicera japonica

County: Wasson Park: NATR (VICK) Plot Code: VIIA State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	80%	Quercus pagoda-40%, Quercus nigra-30% liquidambar styraciflua-20%	.5-1m	10%
Understory T3	15-20m	30%	Liriodendron tulipifera-10%, Liquidambar-10%	1-2m	20%
Tall shrub S1	2-5m	50%	Ligustrum sinense-20%, Cercis canadensis-10%	2-5m	30%
Short shrub S2	.5-1m	30%	Frangula caroliniana-5%, Cercis canadensis-5%	5-10m	40%
Herbaceous	–	30%	Arundinaria gigantea-20%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana	–	30%	Lonicera japonica-20%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	7		3						7	Quer pag		
	7		3	3					67	Quer nig		
		5							5	Liri tul		
			5	4					6	Fran car		
		4	3						4	Ulmu ala		
			6	3					6	Ligu sin		
		4	6	4					6	Cerc can		
				3					3	Cary ill		
							2		2	Part qui		
			5	3					5	Ulmu ame		
	6	5		3					6	Ligu sty		
							6		6	Loni jap		
					6				6	Arun gig		
			3	2					3	Dios vir		
							2		2	Bign cap		
				1					1	Fash tri		
				1					1	Morus rub		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK.12

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V1A State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
							4		4	Viti rot		
		4	3						4	Quer mic		
					2				2	Geum can		
				2					2	Nand dom		
					2				2	Phyto ame		
				1					1	Albi jul		
			4	2					4	Acer rub		
		4	2	2					4	Prun ser		
					2				2	Eupa rug		
				2					2	Frax ame		
					2				2	Aspl pla		
			2						2	Prun car		
			3	1					3	Celt lae		
					2				2	Opli set		
					1				1	Erec hir		
							2		2	Cocc car		
					2				2	Rubu arg		
			3						3	Corn flo		
			3	2					3	Acer bar		
					2				2	Desm per		
				1					1	Tuga nig		
			2						2	Cord dro		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.13

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V12 State: AL (MS) TN Location org: NPS

Provisional community name Quercus pagoda - Quercus nigra Forest

Classified community name

Classifyer CWN *Date* _____ *NVC ELCODE* CEGL004109

Survey date: 9/1/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Sweetgum of 27 cm dbh with tag # 28. Center of 20 x 50m plot is at a bearing of 190 degrees and 5 m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

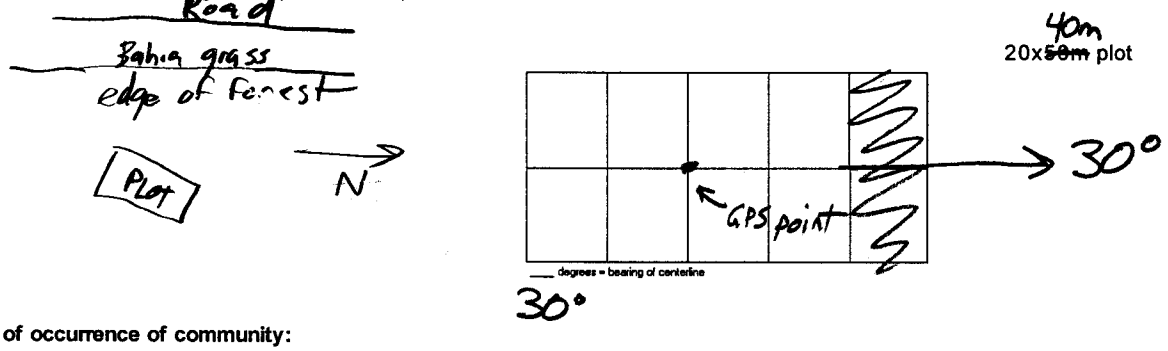
On North Loop road, past Michigan Monument. Park where grassy area narrows go east into woods about 50 m to plot.

Time taken to walk to plot: 3 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x ~~50~~ 40m plot.)

Plot representativeness -Is the surrounding area all the same? ✓ YES ___ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 85-88 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** _____

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.35537° N -090.83990° W WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V **Datum(pick one)** ~~NAD 83 OR NAD27~~ **UTM** ~~Zone: 15 16~~

GPS Unit ID 3 **GPS file name** V12 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? 175 Coordinate accuracy 8 m / ft DOP 2.5 # sats 5

County: Warren **Park:** NATR (VICK) **Plot Code:** V12 **State:** AL (MS) TN **Location org:** NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope ____ ° ____ %		**Measured Aspect** ____ ° (N=0 °)		**Topographic Postion**
__ Flat	0 ° 0 %	__ Flat	__ SE 113-157 °	✓ Interfluve (Ridge/summit/crest) __ Toeslope
✓ Gentle	0-5 ° 1-9%	✓ Variable	__ S 158-202 °	__ High Slope (upper/convex slope)
__ Moderate	6-14 ° 10-25%	__ N 338-22 °	__ SW 203-247 °	__ Midslope __ Low level (terrace)
__ Somewhat steep	15-25 ° 26-49%	__ NE 23-67 °	__ W 248-292 °	__ Lowslope (lower/footslope) __ Channel bed
__ Steep	27-45 ° 50-100%	__ E 68-112 °	__ NW 293-337	
__ Very steep	45-69 ° 101-275%			*Cowardin System*
__ Abrupt	70-100 ° 276-300			✓ *Upland* __ *Palustrine*
__ ovrhng/shltrd	>100 ° >300%			__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)		
__ Alluvial flat	__ Cove	✓ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)

✓ Not a wetland (Upland: XERIC : ~~DRY~~ - MESIC : MESIC)

__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)

__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

Hydrology may be altered due to domination by the evergreen Chinese privet. The lack of leaf litter on the ground may lead to faster run off and erosion.

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Dominated by Chinese privet (tall shrub) ~80% cover. Tree canopy is open. There is less leaf litter on the ground due to privet domination, and more soil erosion.

Soil Texture:				**Drainage:**		
__ Sand	__ Peat	✓ Silt loam	__ Muck	__ Rapidly drained	__ Moderately well drained	__ Somewhat poorly drained
__ Sandy loam	__ Loam	__ Clay loam	__ Clay	✓ Well drained	__ Poorly drained	__ *Very poorly drained*

Ground cover

____% Bedrock	60% Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	____% Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	40% Bare soil	

Leaf type:	**Leaf phenology** (dominant stratum)	**Physiognomic Class**
✓ Broad-leaved	__ Evergreen	✓ Forest (closed tree canopy)
__ Needle-leaved	✓ Cold-deciduous	__ Woodland (open tree canopy)
__ Microphyllous	__ Drought-deciduous	__ Shrubland
__ Graminoid	__ Mixed evergreen-cold-deciduous	__ Dwarf Shrubland
__ Broad-leaved herbaceous	__ Mixed evergreen drought deciduous	__ Herbaceous (less than 25% woody layers)
__ Pteridophyte	__ Herb - Annual	__ Nonvascular
__ Extremely xeromorphic	__ Herb - Perennial	__ Sparse Vegetation
__ Mixed		

Natural and Anthropogenic Disturbance			*Disturbance and animal use comments:*
_ logging	_ fire	_ Hydrologic	~~40~~ chinese privet ~80% cover.
_ erosion	_ trails/roads	_ Agriculture	
_ grazing/browsing	✓ wind/ice damage	_ Old Growth	
_ pine bark beetle	✓ exotic plants	_ Fire Suppression	
dogwood anthr	ORV		

VICK.13

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V12 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	70%	Quercus pagoda - 50%, Liquidambar styraciflua - 20%	.5-1m	10%
Understory T3	15-20m	20%	Celtis laevigata - 5%, Morus rubra - 5% Carpinus caroliniana - 5%, Acer negundo - 5%	1-2m	20%
Tall shrub S1	2-5m	90%	Ligustrum sinense - 80%	2-5m	30%
Short shrub S2	.5-1m	20%	Ligustrum sinense - 10%	5-10m	40%
Herbaceous	–	10%	herb layer sparse; total = 10%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana	–	40%	Toxicodendron radicans - 30%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
		4							4	Celt lae		
		4	3						4	Morus rub		
		4		1					4	Cerc can		
			9	5					9	Ligu sin		
			3						3	Nonvasc dom		
							4		4	Toni jap		
			4	3					4	Pan Lan		
				3			7		7	Toxi rad		
					2				2	Trac dif		
	6		4						6	Ligu sty		
							2		2	Cocc car		
							4		4	Viti cin		
					2				2	Athy fil		
					2				2	Rubu arg		
					1				1	Asp pla		
							←(2)		2	Pant qui		
					2				2	Bign cap		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK.13

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V12 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
			3						3	Ulmu rub		
					2				2	Opli set		
	7								7	Quer pag		
		4		1					4	Acer neg		
				2					2	Quer nig		
					1				1	Clem vit		
	5								5	Robi pse		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK. 14

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V12A State: AL (MS) TN Location org: NPS

Provisional community name Liquidambar styraciflua - Carya illinoiensis - Quercus nigra Forest

Classified community name

Classifyer CWN *Date* *NVC ELCODE* CEGL00 4122

Survey date: 9/1/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Sweet gum of 41 cm dbh with tag # 29. Center of 20 x 50m plot is at a bearing of 100 degrees and 3 m from tree. tag is on west side of tree.

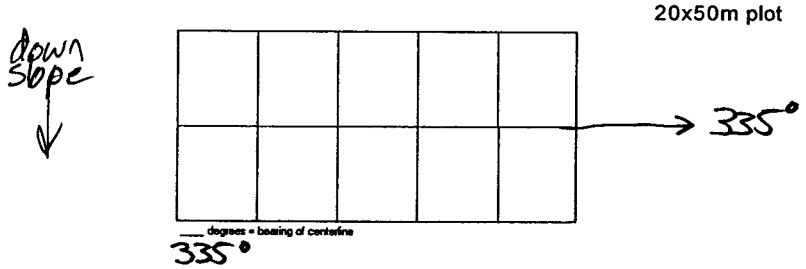
Directions to tag tree (including any notes on best access route, and mile marker): On North Loop Rd, past (N of) Michigan Monument. Park where grassy area narrows and go east into woods about 100 m to NE facing slope with big trees.

Time taken to walk to plot: 10 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓NO - If not, depict below)

PLOT LOCATION (Below show general plot location) to ↑ plot V12 Upper slope (more privet)



Est. Extent of occurrence of community:

(< 1HA 1-10 HA) 10-100HA > 100HA draw

PIC # 89-92 **Description of pictures (N,E,S & W from GPS point at middle of plot) :**

93 & 94 of large water oak at m 13 along transect.

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.35537° N 090.83947° W WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V **Datum(pick one)** ~~NAD 83 OR NAD27~~ **UTM Zone:** ~~15 16~~

GPS Unit ID 3 **GPS file name** V12A (standard = First letter of park + # of plot (N04 or V04)

Field UTM X ___ m E Y ___ m N **Elevation** ___ m / ft

Averaging performed (at least 120 observations)? **Coordinate accuracy** 10 m / ft DOP 2.6 # sats 5

VICK.14

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: VIZA State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 25 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
✓ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 60 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
✓ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
✓ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
__ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

erosion from upslope may be increased due to high cover of Chinese Privet there (see notes on plot V12).

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

May have been cleared during Civil War.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____ % Bedrock	75 % Litter, duff	____ % Other _____
____ % Large rocks (cobbles, boulders >10cm)	5 % Wood (> 1 cm)	
____ % Small rocks (gravel, 0.2-10 cm)	____ % Water	
____ % Sand (0.1-2 mm)	20 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
✓ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
_ dogwood anthr	_ ORV	

Disturbance and animal use comments:

VICK.14

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren **Park:** NATR (VICK) **Plot Code:** V12A **State:** AL (MS) TN **Location org:** NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	80%	Liquidambar styraciflua-30%, Carya illinoensis-30% Quercus nigra-20%	.5-1m	10%
Understory T3	15-20m	50%	Acer negundo-20%, Liriodendron tulipifera-20%	1-2m	20%
Tall shrub S1	2-5m	80%	Ligustrum sinense-70%	2-5m	30%
Short shrub S2	.5-1m	50%	Toxicodendron radicans-20%	5-10m	40%
Herbaceous	–	10%	herb layer sparse; total = 10%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana	–	30%	Vitis cinerea-20%, Lonicera japonica-10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	9			2					7	Cary ill		
	7		4	2					7	Liqu sty		
		6	5	3					7	Acer neg		
	6		2	2					6	Quer nig		
		4	3	1					4	Quer mic		
				6			3		6	Toxi rad		
			8	4					8	Ligu sin		
			6	3					6	Ulmu rub		
			3	1					3	Prun ser		
							5		5	Loni jap		
							1		1	Smil gla		
					2				2	Opli set		
					2				2	Thly fil		
					2				2	Sani can		
			4	3					4	Mony rub		
					2				2	Mateler sp.		
			4	2					4	Celt lae		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK.14

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V12A State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
					2				2	Oeum can		
							3		3	Bign cap		
			3	2					3	Frax car		
					2				2	Polygonum virginianum		
							6		6	Viti rin		
					2				2	Eupa ser		
							2		2	Cocc car		
							1		1	Smil gla		
			4	2					4	Prun ser		
				1					1	Side lyc		
					2				2	Aspl pla		
		6							6	Liri tul		
					1				1	Botr dis		
		4		2					4	Robi pse		
				2					2	Poly acr		

Cover classes

1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK, 15

NCVS PLOT CLASSIFICATION ANNOTATION SHEET (version 12-19-2000)

Plot Record: Study____, Team_____, Plot V15.

Annotated by: CWN

Annotation Date (D-M-Y): 9 / 15 / 2004

****

Method of assignment:

- ☑ inspection
- ☐ tabular analysis
- ☐ multivariate
- ☐ expert system

Assignment to Classification(s)

Class CODE	Fit*	Conf. #	Reference	Notes:
~~7184~~	~~2~~	~~M~~		Liriodendron tulipifera – Acer negundo range extension – high gradient
5033	1	H		Acer negundo Forest Large floodplains
~~4690~~	~~2~~	~~H~~		Acer negundo – (Platanus occidentalis, Populus deltoides) Forest → right area (No liriodendron) streams

Other Comments:

*FIT: 1 = fits concept well
2 = fits;not typal

#CONFIDENCE: H = High
M = Moderate

VICK.15

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: WARREN Park: NATR (VICK) Plot Code: V15 State: AL (MS) TN Location org: NPS

Provisional community name FERN RAVINE

Classified community name Acer negundo Forest
Classifyer CWN Date 5/18/2005 NVC ELCODE CEGL006033

Survey date: 9/11/04 **Surveyors initials:** A.S. E.L.

Tagged tree is a NO TAG of ____ cm dbh with tag #_____. Center of 20 x 50m plot is at a bearing of 55 NE degrees and 15 m from GPS POINT TAKEN ON CLIFF OVERLOOKING PLOT.

Directions to tag tree (including any notes on best access route, and mile marker):

NW CORNER OF PARK. FOLLOW UNION AVE TO ITS NORTH MOST REACH & FOLLOW ITS SHARP CURVES.

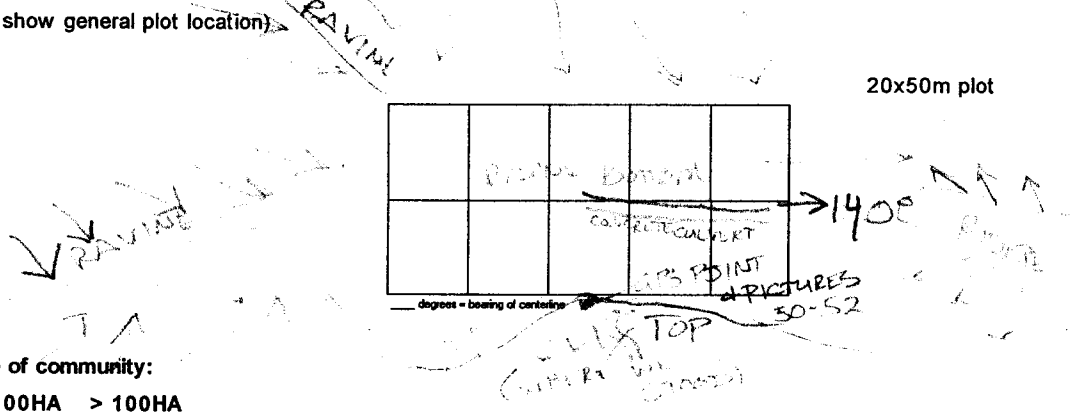
PULL OVER WHERE RD STRAIGHTENS OUT TO THE SW - 220°, IN VIEW OF THE "WASHINGTON MONUMENT" LOOK-ALIKE (= NAVY MONUMENT). WALK SE INTO WOODS & DOWNSLOPE TO ABRUPT EDGE OF RAVINE. GPS POINT TAKEN ATOP CLIFF, OFFSET FROM PLOT CENTER BY 15m.

Time taken to walk to plot:

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 48-52 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** _____

48/49 AL STANDING AT EDGE OF CLIFF ABOVE PLOT; 50 = NW END OF PLOT; 51 = CLOSE-UP OF FERN 52 = SE END OF PLOT FROM ATOP CLIFF

Select one: UTM OR Lat/long (If lat/long, then values are 32.37254 N -90.86163 W
WAS 84

GPS Techniques/Equipment: Garmin III+ Garmin V **Datum(pick one)** ~~NAD 83 OR NAD27~~ **UTM Zone:** 15 16

GPS Unit ID _____ **GPS file name** V15____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? 130 **Coordinate accuracy** 7 (m) / ft **DOP** 1.8 **# sats** 5

VICK.15

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: WARREN Park: NATR (VICK) Plot Code: V15 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope ____ ° ____ %			Measured Aspect 40 ° (N=0 °)			Topographic Postion
__ Flat	0 °	0 %	__ Flat	✓ SE	113-157 °	_ Interfluve (Ridge/summit/crest) __ Toeslope
✓ Gentle	0-5 °	1-9%	__ Variable	__ S	158-202 °	__ High Slope (upper/convex slope)
__ Moderate	6-14 °	10-25%	__ N 338-22 °	__ SW	203-247 °	__ Midslope __ Low level (terrace)
__ Somewhat steep	15-25 °	26-49%	__ NE 23-67 °	__ W	248-292 °	__ Lowslope (lower/footslope) ✓ Channel bed
__ Steep	27-45 °	50-100%	__ E 68-112 °	__ NW	293-337	
__ Very steep	45-69 °	101-275%				*Cowardin System*
__ Abrupt	70-100 °	276-300				✓ *Upland* _ *Palustrine*
__ ovrhng/shltrd	>100 °	>300%				_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
✓ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	✓ Ravine

Rock types present: None apparent

Hydrologic Regime (check only for wetlands)

✓ Not a wetland (Upland: XERIC : DRY - MESIC : (MESIC))

__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)

__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: Colluvium evident; sections of adjacent slopes are steep-sided and heavily eroded. Concrete cover lines stream bottom for roughly 100 feet.

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Previous land use activities (mainly land clearing) were likely responsible for the deep eroded gullies present today.

Soil Texture:

__ Sand __ Peat ✓ Silt Loam (Clay) __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:

__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock
____% Large rocks (cobbles, boulders >10cm)
____% Small rocks (gravel, 0.2-10 cm)
____% Sand (0.1-2 mm)
95 % Litter, duff
✓ % Wood (> 1 cm)
____% Water
____% Bare soil
____% Other _____

Leaf type:

✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)

✓ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class

✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
✓ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments: Erosion an artifact of human influences.

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.15

County: Warren **Park:** NATR (VICK) **Plot Code:** V15 **State:** AL (MS) TN **Location org:** NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	70%	Liriodendron tulipifera - 30%, Acer negundo - 30%	.5-1m	10%
Understory T3	15-20m	30%	Acer negundo - 20%	1-2m	20%
Tall shrub S1	2-5m	5%	Ligustrum sinense - 5%	2-5m	30%
Short shrub S2	.5-1m	5%	short shrubs sparse; cover ≈ <5%	5-10m	40%
Herbaceous	→	70%	Thelypteris kunthii - 40%, Cystopteris protrusa - 20%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana	—	5%	vines sparse; total cover ~ 5%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (>1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	7	6							7	Acer neg		
	7								7	Liri tul		
		5							5	Acer rub		
					7				6	Thel kun		
					6				6	Cyst pro		
					4				4	Athy fil fem		
			4	2					4	Ligu sin		
					2				2	Arun gig		
					3				3	Hede hel		
					1				1	Sani can		
	6								6	Popu del		
					2				2	Cyst pro		
							3		3	Viti rip		
							2		2	Leni jap		
					2				2	Euon ala		
				3					3	Call ame		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK. 16

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR VICK Plot Code: V25 State: AL MS TN Location org: NPS

Provisional community name Liquidambar styraciflua - Carya illinoinensis - Quercus nigra Forest

Classified community name

Classifyer CWN *Date* *NVC ELCODE* CEGL004122

Survey date: 9/11/04 **Surveyors initials:** A S, E L

Tagged tree is a Liq Sty of 28 cm dbh with tag # 42 (FACING ESE). Center of 20 x 50m plot is at a bearing of 80° degrees and 2.5 m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

FROM 3-WAY INTERSECTION OF UNION AVENUE & GRANT AVE (SEE MAP) WHERE UNION AVE TURNS W, FOLLOW BLAZED TRAIL W INTO WOODED RAVINE (PART OF THE AL SCHILLER SCOUT TRAIL -- WHITE-TIPPED POST MARKS ENTRANCE INTO WOODS, FOLLOWED BY ORANGE BLAZES)

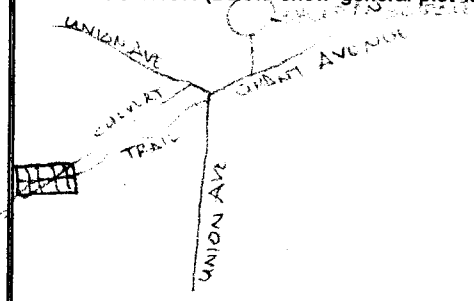
PLOT CENTER SITS ON CEMENT CULVERT

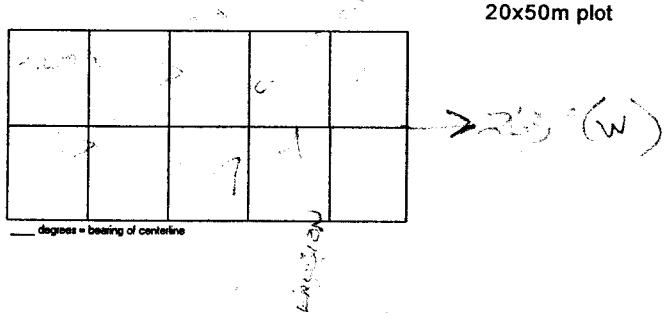
Time taken to walk to plot:

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___NO - If not, depict below)

PLOT LOCATION (Below show general plot location)





Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 35 - 39 Description of pictures (N,E,S & W from GPS point at middle of plot) :

Select one: UTM OR Lat/long (If lat/long, then values are 32.[illegible] N -90.[illegible] W

GPS Techniques/Equipment: Garmin III+ Garmin V Datum(pick one) NAD 83 OR NAD27 UTM Zone: 15 16

GPS Unit ID _____ GPS file name V25 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? Coordinate accuracy [illegible] m / ft DOP [illegible] # sats [illegible]

County: Warren Park: NATR VICK Plot Code: V25 State: AL MS TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 10 ° ___ %			**Measured Aspect** 245 ° (N=0 °)			**Topographic Postion**	
__ Flat	0 °	0 %	__ Flat	__ SE	113-157 °	_ Interfluve (Ridge/summit/crest)	__ Toeslope
__ Gentle	0-5 °	1-9%	__ Variable	__ S	158-202 °	__ High Slope (upper/convex slope)	
✓ Moderate	6-14 °	10-25%	__ N 338-22 °	✓ SW	203-247 °	✓ Midslope	__ Low level (terrace)
__ Somewhat steep	15-25 °	26-49%	__ NE 23-67 °	__ W	248-292 °	__ Lowslope (lower/footslope)	__ Channel bed
__ Steep	27-45 °	50-100%	__ E 68-112 °	__ NW	293-337		
__ Very steep	45-69 °	101-275%	245° ↓			*Cowardin System*	
__ Abrupt	70-100 °	276-300				✓ *Upland*	_ *Palustrine*
__ ovrhng/shltrd	>100 °	>300%				_ *Estuarine*	_ *Lacustrine* _ *Riverine*

Landform (check most applicable)		
__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	✓ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
__ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: RUNOFF FROM PAVED ROADS IS DIRECTED INTO THIS RAVINE. A [illegible] IS INTENDED TO MINIMIZE EROSION. ELSEWHERE IN PLOT EROSION IS UNIMPEDED & CARRYING DUFF DOWNHILL.

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

A PAVED TRAIL PASSES [illegible]

Soil Texture:					**Drainage:**			
__ Sand	__ Peat	✓ Silt loam	__ Muck		__ Rapidly drained	__ Moderately well drained	__ Somewhat poorly drained	
__ Sandy loam	__ Loam	__ Clay loam	__ Clay		✓ Well drained	__ Poorly drained	__ *Very poorly drained*	

Ground cover

____% Bedrock	15 % Litter, duff	2 % Other CLOSED CANOPY
____% Large rocks (cobbles, boulders >10cm)	18 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	____% Bare soil	

Leaf type:	**Leaf phenology** (dominant stratum)	**Physiognomic Class**
✓ Broad-leaved	__ Evergreen	✓ Forest (closed tree canopy)
__ Needle-leaved	✓ Cold-deciduous	__ Woodland (open tree canopy)
__ Microphyllous	__ Drought-deciduous	__ Shrubland
__ Graminoid	__ Mixed evergreen-cold-deciduous	__ Dwarf Shrubland
__ Broad-leaved herbaceous	__ Mixed evergreen drought deciduous	__ Herbaceous (less than 25% woody layers)
__ Pteridophyte	__ Herb - Annual	__ Nonvascular
__ Extremely xeromorphic	__ Herb - Perennial	__ Sparse Vegetation
__ Mixed		

Natural and Anthropogenic Disturbance			*Disturbance and animal use comments:*
_ logging	_ fire	✓ Hydrologic	[illegible]
✓ erosion	✓ trails/roads	_ Agriculture	CHANNELS OF EROSION
_ grazing/browsing	_ wind/ice damage	_ Old Growth	
_ pine bark beetle	✓ exotic plants	_ Fire Suppression	COMMUNITY NEARBY
dogwood anthr	ORV		

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.16

County: Warren **Park:** NATR (VICK) **Plot Code:** V25 **State:** AL (MS) TN **Location org:** NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	90%	Liquidambar styraciflua - 30%, Populus deltoides - 20% Robinia pseudo-acacia - 20%, Quercus pagoda - 20%	.5-1m	10%
Understory T3	15-20m	40%	Ulmus alatus - 20%, Acer negundo - 10%	1-2m	20%
Tall shrub S1	2-5m	80%	Ligustrum sinense - 80%	2-5m	30%
Short shrub S2	.5-1m	20%	Ligustrum sinense - 10%	5-10m	40%
Herbaceous	—	20%	Arundinaria gigantea - 5%	10-15m	50%
Non-vascular	—	~		15-20m	60%
Vine/liana	—	30%	Vitis cinerea - 10%, Lonicera japonica - 10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	5			2					5	Prun ser		
		5	4						5	Acer neg		
	7								7	Ligu sty		
	6								6	Popu del		
			9	5					9	Ligu sin		
										Vitl cin		
					2				2	Elym vir		
					2				2	Elep car		
					2				2	Cheum can		
					2				2	Polygonum virginianum		
							2		2	Bign cap		
					3				3	Cyst pro		
					2				2	Oxal sit		
					2				2	Athy filix-femina		
					2				2	Leer vir		
					4				42	Arun gig		
							5		5	Loni jap		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.16

County: Warren **Park:** NATR (VICK) **Plot Code:** V25 **State:** AL (MS) TN **Location org:** NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
							5		5	Past qui		
		4	4						5	Morutub		
	6		3						6	Robipse		
					2				2	Matelva sp.		
					2				2	Bide bip		
		5		3					5	Quer nig		
			4	1					4	Cary cord		
	6			2					6	Quer pag		
				5			4		5	Toxi rad		
					2				2	Aspl pla		
					2				2	Care oxy		
		6	3						6	Ulmu ala		
							5		5	Viti cin		
	5								5	Liri tul		
					2				2	Sani can		
			2	1					3	Asim tri		
					2				2	Euon ser		
			3						3	Celt lae		
				1					1	Side lyc		
					2				2	Care che		
					2				2	Hede hel		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.17

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V34 State: AL (MS) TN Location org: NPS

Provisional community name Liquidambar styraciflua – Carya illinoinensis – Quercus nigra Forest

Classified community name _____

Classifyer CWN *Date* _____ *NVC ELCODE* CEGL004122

Survey date: 9/3/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Pagoda oak of N55 cm dbh with tag # 36. Center of 20 x 50m plot is at a bearing of 90° degrees and 2.0 m from tree. tag is on N. side of tree

Directions to tag tree (including any notes on best access route, and mile marker):

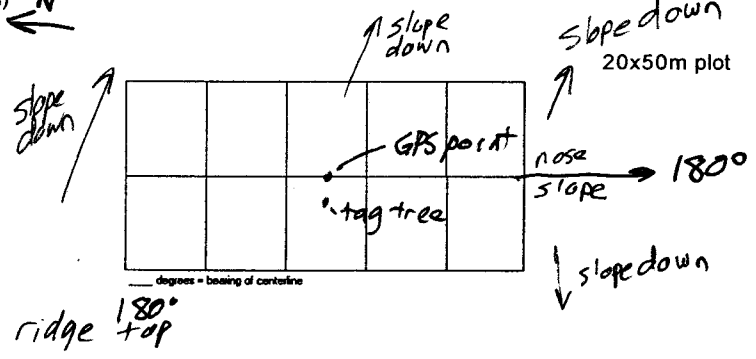
From North Loop Road, turn onto Graveyard Rd. To SW, When Woods on south side of Graveyard Rd. are close pull off on left at dirt pull off just after tree on left. Go S (170°) into woods plot is on SE facing slope.

Time taken to walk to plot: 5 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___✓NO - If not, depict below)

PLOT LOCATION (Below show general plot location) N



Est. Extent of occurrence of community:

< 1HA ? 1-10 HA 10-100HA > 100HA

PIC # 124-127 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** _____

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.36997° N – 090.84180° W WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V **Datum(pick one)** ~~NAD 83 OR NAD27~~ UTM ~~Zone: 15 16~~

GPS Unit ID 3 **GPS file name** V34____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? 199 **Coordinate accuracy** 13 m / ft **DOP** 2.9 # sats 3

County: Warren **Park:** NATR (VICK) **Plot Code:** V34 **State:** AL (MS) TN **Location org:** NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 19 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
✓ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 110 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
✓ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
✓ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC - MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

This site has large trees of Pagoda oak and Shumard Oak.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	90 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	3 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	7 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
_ dogwood anthr	_ ORV	

Disturbance and animal use comments:
Lonicera japonica

VICK.17

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V34 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	70%	Liquidambar styraciflua - 30%, Quercus shumardii - 20%	.5-1m	10%
Understory T3	15-20m	70%	Quercus muehlenbergii - 20%, Quercus shumardii - 10%, Quercus velutina - 10%, Magnolia - 30%	1-2m	20%
Tall shrub S1	2-5m	50%	Quercus muehlenbergii - 10%, Liquidambar sty - 10%, Ulmus alata - 10%	2-5m	30%
Short shrub S2	.5-1m	40%	Toxicodendron radicans - 20%	5-10m	40%
Herbaceous	—	60%	Arundinaria gigantea - 50%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana	—	30	Lonicera japonica - 30%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	7		5	3					7	Liqu sty		
	5			3					5	Quer nig		
		6	3						6	Magn grd		
		4	5						6	Ulmu ala		
					8				8	Arun gig		
				6			4		6	Toxi rad		
			3						3	Corn flo		
			4v						4	Corn dru		
			4v	3					4	Ulmu rub		
							3		3	Bign cap		
			2	3					3	Lind sin		
			2	2					3	Cate can		
			2	1					2	Frax amer		
					1				1	Cyrt for		
							7		7	Loni jap		
							2		2	Gels sem		
		6	5	4					6	Quer mue		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK.17

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V34 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
				2						Samb can		
			4	2					4	Acer neg		
			2	2					3	Celtlae		
							4		4	Viti rot		
	6	5							6	Quer shu		
			3	2					3	Cary cor		
					2				2	Amph bra		
				1					1	Side lyc		
		5							5	Quer ve		
					1				1	Care oxy		
				1					1	Dios vir		
			3	2					3	Prun ser		
			3						3	Rhus jap		
					2				2	Tri pla		
					2				2	Poly vac		
			3						3	Prun car		
	5								5	Quer pag		
							2		2	Smil tam		
								2	2	Pter pal var-mich		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.18

County: Warren Park: NATR (VICK) Plot Code: V35 State: AL (MS) TN Location org: NPS 2:55

Provisional community name Liquidambar styraciflua – Carya illinoinensis – Quercus nigra Forest

Classified community name

Classifyer CWN *Date* *NVC ELCODE* CEGL004122

Survey date: 9/10/04 Surveyors initials: AL SCHOTZ, ERWLINGFORD

Tagged tree is a LIQ STY of 49 cm dbh with tag # 39. Center of 20 x 50m plot is at a bearing of 292 degrees and 3.5 m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

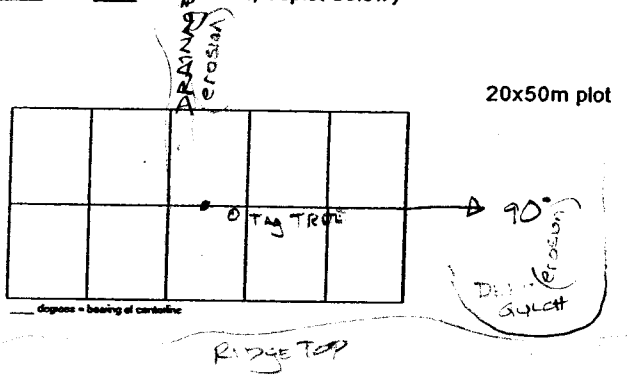
FROM BROWN MEMORIAL TO 17TH INFANTRY (WISCONSIN), WALK INTO WOODS ~100m. SLOPE EVENTUALLY

Time taken to walk to plot: 5 min

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___NO (If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 14-17 Description of pictures (N,E,S & W from GPS point at middle of plot) : _____

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.36428 N 90.84150 W

WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) ~~NAD 83 OR NAD27~~ UTM Zone: 15 16

GPS Unit ID _____ GPS file name V35 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? 200 Coordinate accuracy 6 m/ ft DOP 1.6 # sats 6

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.18

County: Warren Park: NATR (VICK) Plot Code: V35 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 30-33 ____ %			Measured Aspect 0 ° (N=0 °)			Topographic Postion
__ Flat	0 °	0 %	__ Flat	__ SE	113-157 °	_ Interfluve (Ridge/summit/crest) __ Toeslope
__ Gentle	0-5 °	1-9%	__ Variable	__ S	158-202 °	✓ High Slope (upper/convex slope)
__ Moderate	6-14 °	10-25%	✓ N 338-22 °	__ SW	203-247 °	__ Midslope __ Low level (terrace)
__ Somewhat steep	15-25 °	26-49%	__ NE 23-67 °	__ W	248-292 °	__ Lowslope (lower/footslope) __ Channel bed
✓ Steep	27-45 °	50-100%	__ E 68-112 °	__ NW	293-337	
__ Very steep	45-69 °	101-275%				*Cowardin System*
__ Abrupt	70-100 °	276-300				_ *Upland* _ *Palustrine*
__ ovrhng/shltrd	>100 °	>300%				_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)		
__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)

✓ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)

__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)

__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: IMMEDIATELY E of PLOT IS A HIGHLY ERODED HEAD of A GULLY OR GULTCH

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Based on size and structure of forest, site was likely cleared during Civil War. Subsequently, site was allowed to revegetate into a climax stage of early successional species, most notably Liquidambar. Former land disturbance has also served as an avenue for exotics, namely Lonicera jap.

Soil Texture:

__ Sand __ Peat __ Silt loam __ Muck
__ Sandy loam __ Loam ✓ Clay loam (silty) __ Clay

Drainage:

✓ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
__ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock
____% Large rocks (cobbles, boulders >10cm)
____% Small rocks (gravel, 0.2-10 cm)
____% Sand (0.1-2 mm)
95 % Litter, duff
4 % Wood (> 1 cm)
____% Water
1 % Bare soil
____% Other _____

Leaf type:

✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)

__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class

✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging _ fire ✓ Hydrologic
_ erosion _ trails/roads _ Agriculture
_ grazing/browsing _ wind/ice damage _ Old Growth
_ pine bark beetle ✓ exotic plants _ Fire Suppression
dogwood anthr ORV

Disturbance and animal use comments:

Some Japanese honeysuckle; site is relatively free of exotics, however.

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.18

County: Warren Park: NATR (VICK) Plot Code: V35 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES
Emergent – T1			
Tree Canopy T2	20-35m	80%	Liquidambar styraciflua - 50%,
Understory T3	15-20m	20%	Liquidambar styraciflua - 10%
Tall shrub S1	2-5m	60%	Hydrangea quercifolia - 40%
Short shrub S2	.5-1m	40%	Toxicodendron radicans - 20%
Herbaceous	—	20%	Arundinaria gigantea - 5%
Non-vascular	—	—	
Vine/liana	—	20%	Vitis cinerea - 5%

Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):

Height scale (use tallest one for strata)	% cover for strata = top of cover class
< .5m	5%
.5-1m	10%
1-2m	20%
2-5m	30%
5-10m	40%
10-15m	50%
15-20m	60%
20-35m	70%
35-50m	80%
>50m	90%
	100%

T1: Emergent | T2: Tree Canopy | T3 Subcanopy | S1 Tall Shrub (> 1m; to 5m) | S2 Short Shrub (< 1m) | H Herbaceous | N Nonvascular | V Vines (lianas) | E Epiphytes

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	8								8	Liqu sty		
			7	4					7	Hydr que		
			5	2					5	Corn flo		
					3				3	Poly acr		
			3	2					3	Cerc can		
				6			3		6	Toxi rad		
			3	2					3	Ulmu ala		
							3		3	Bign cap		
	5		5	3					6	Quer mue		
					1				1	Botr vir		
			2	1					2	Side lyc		
		4	5	2					5	Cary cor		
							2		2	Viti rot		
					2				2	Phry lep		
					1				1	Aris tri		
					4				4	Arun gig		
				1					1	Fran car		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.18

County: Warren Park: NATR (VICK) Plot Code: V35 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
					2				2	Aspl pla		
	6			2					6	Quer nig		
					2				2	Opli set		
							1		1	Smil gla		
							2		2	Cela Sca		
					2				2	Dios vil		
							1		1	Smil tam		
				2					2	Liqu sin		
					1				1	Ast lat		
					1				1	Sani can		
					2				2	Lact Flo		
	5			2					5	Prun ser		
					1				1	Clem vir		
					1				1	Eupa ser		
					2				2	Care oxy		
	6			2					6	Sass alb		
		4							4	Moru rub		
							4		4	Viti cin		
	4								4	Liri tul		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK-19

County: WARREN Park: NATR (VICK) Plot Code: V35A State: AL (MS) TN Location org: NPS

Provisional community name

Classified community name Liriodendron tulipifera / (Cercis canadensis) / (Lindera benzoin) Forest
Classifyer CWN *Date* 5/2005 *NVC ELCODE* CEGL00 7220

Survey date: 9/10/04 **Surveyors initials:** A.S. E.L

Tagged tree is a LIQU STY of 48 cm dbh with tag # 40. Center of 20 x 50m plot is at a bearing of 320 degrees and 7 m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

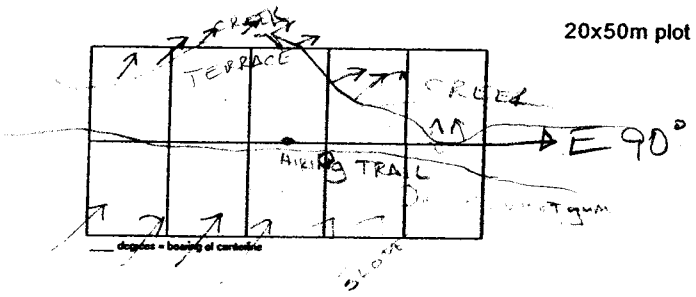
AT BASE OF SLOPE BELOW PLOT V35 (NOT V35)
RIDGE TO [illegible] TO V35.
(≈ 150 m FROM MONUMENT)

Time taken to walk to plot:

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:
< 1HA 1-10 HA 10-100HA > 100HA

PIC # 18-22 Description of pictures (N,E,S & W from GPS point at middle of plot): 18-21 NESW
22 = CANOPY

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.36670 N -90.84136 W

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) ~~NAD 83 OR NAD27~~ WGS 84 ~~UTM Zone: 15 16~~

GPS Unit ID _____ GPS file name V35A (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? YES Coordinate accuracy 9 m / ft DOP 2.5 # sats

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.19 Page 2

County:_____ Park: NATR (VICK) Plot Code: V35A State: AL (MS) TN Location org: NPS

W/ LEVEL BENCH

ENVIRONMENTAL / SITE INFORMATION

Measured Slope ___° ___%		Measured Aspect 0 ° (N=0 °)		Topographic Postion
__ Flat	0 ° 0 %	__ Flat	__ SE 113-157 °	_ Interfluve (Ridge/summit/crest) __ Toeslope
__ Gentle	0-5 ° 1-9%	__ Variable	__ S 158-202 °	__ High Slope (upper/convex slope)
__ Moderate	6-14 ° 10-25%	✓ N 338-22 °	__ SW 203-247 °	__ Midslope __ Low level (terrace)
__ Somewhat steep	15-25 ° 26-49%	__ NE 23-67 °	__ W 248-292 °	✓ Lowslope (lower/footslope) __ Channel bed
✓ Steep	27-45 ° 50-100%	__ E 68-112 °	__ NW 293-337	W/ MANMADE TERRACE
__ Very steep	45-69 ° 101-275%			*Cowardin System*
__ Abrupt	70-100 ° 276-300			✓ *Upland* _ *Palustrine*
__ ovrhng/shltrd	>100 ° >300%			_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
✓ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	Nose slope	Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)

__ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)

__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)

__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

FLASH FLOODING HAS CAUSED DEEP EROSION / CHANNELING IN NEARBY STREAM.

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

SITE MAY HAVE BEEN FORMER ROAD PLACED ON WIDTH N LEVEL BENCH-LIKE TERRAIN ALONG TRANSECT OF PLOT; SLOPE ON EITHER SIDE OF BENCH IS STEEP.

Soil Texture: ✓ SANDY CLAY LOAM

__ Sand __ Peat __ Silt loam __ Muck

__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:

__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained

✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	93% Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	5 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	2 % Bare soil	

Leaf type:

✓ Broad-leaved

__ Needle-leaved

__ Microphyllous

__ Graminoid

__ Broad-leaved herbaceous

__ Pteridophyte

__ Extremely xeromorphic

Mixed

Leaf phenology (dominant stratum)

__ Evergreen

✓ Cold-deciduous

__ Drought-deciduous

__ Mixed evergreen-cold-deciduous

__ Mixed evergreen drought deciduous

__ Herb - Annual

__ Herb - Perennial

Physiognomic Class

✓ Forest (closed tree canopy)

__ Woodland (open tree canopy)

__ Shrubland

__ Dwarf Shrubland

__ Herbaceous (less than 25% woody layers)

__ Nonvascular

__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	✓ Hydrologic
_ erosion	✓ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:

FOOT PATH THROUGH TRANSECT OF PLOT.

LOTS OF OPPORTUNISTIC NASTY EXOTICS!

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.19

County: Warren Park: NATR (VICK) Plot Code: V35A State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES
Emergent – T1			
Tree Canopy T2	20-35	80%	Liquidambar styraciflua - 60%
Understory T3	15-20m	30%	Liquidambar styraciflua - 10%, Acer negundo - 10%, Ulmus rubra - 10%
Tall shrub S1	2-5m	30%	Ligustrum sinense - 10%
Short shrub S2	.5-1m	30%	Hydrangea arborescens - 10%
Herbaceous	—	40%	Arundinaria gigantea - 30%
Non-vascular	—	—	
Vine/liana	—	30%	Parthenocissus quinquefolius - 20%, Toxicodendron radicans - 10%

Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):

Height scale (use tallest one for strata)	% cover for strata = top of cover class
< .5m	5%
.5-1m	10%
1-2m	20%
2-5m	30%
5-10m	40%
10-15m	50%
15-20m	60%
20-35m	70%
35-50m	80%
>50m	90%
	100%

T1: Emergent | T2: Tree Canopy | T3 Subcanopy | S1 Tall Shrub (>1m; to 5m) | S2 Short Shrub (< 1m) | H Herbaceous | N Nonvascular | V Vines (lianas) | E Epiphytes

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	8	5	4						8	Liqu sty		
	6								6	Liri tul		
			3						3	Quer alb		
			5	3					5	Ligu sin		
				5					5	Hydr arb		
		5	3						5	Acer neg		
					2				2	Boeh cyl		
					3				3	Athy filix-femina		
					2				2	Amph bra		
					2				2	Poly acr		
				3					3	Nand dom		
					7				7	Arun gig		
			4	2					4	Hydr spe		
							3		3	Bign cap		
					2				2	Thel kun		
					2				2	Leer vir		
							3		3	Lonj jap		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.19

County: Warren Park: NATR (VICK) Plot Code: V35A State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
							3		3	Coll car		
				2					2	Samb can		
					1				1	Pter mul		
					1				1	Eupa res		
					2				2	Cyst pro		
					2				2	Elep car		
					2				2	Duch ind		
					2				2	Polygonum virginianum		
					2				2	Care oxy		
							1		1	Smil tam		
					1				1	Phry lep		
					2				2	Hede hel		
					1				1	Viol aff		
					1				1	Sani can		
					2				2	Cryp can		
			3						3	Panc tri		
					2				2	Care dig		
					1				1	Matelea sp		
					1				1	Aris tri		
							6		6	Part qui		
			4	2					4	Lind ben		
				2					2	Liriope sp.		
				2					2	Opli set		
				2					2	Pile pum		
			3				5		5	Toxi rad		
				1					1	Aris dra		
		3							3	Celt lae		
		1							1	Prun car		
		2							2	Ulmu ala		
				2					2	Eupa rug		
		5	4						5	Ulmu rub		
				2					2	Micr vim		
				1					1	Ranu rec		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.20

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V36 State: AL (MS) TN Location org: NPS

Provisional community name Quercus pagoda–Quercus nigra Forest

Classified community name

Classifyer CWN *Date* *NVC ELCODE* CEGL004109

Survey date: 9/3/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Water oak of ~33 cm dbh with tag # 37. Center of 20 x 50m plot is at a bearing of 300 degrees and 1.3 m from tree. Tag is on west side of tree

Directions to tag tree (including any notes on best access route, and mile marker):

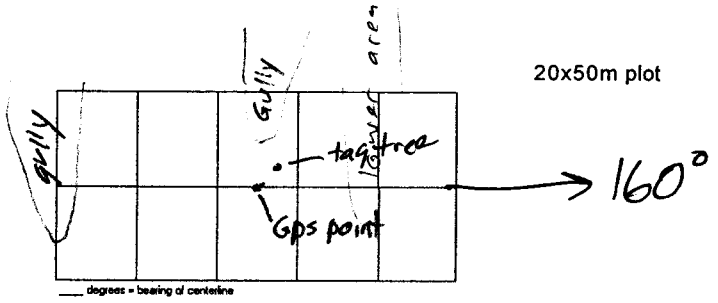
From Missouri Monument (south of Graveyard Rd.) walk South on mowed narrow ridge to grey stone marker for "ILLINOIS 116th Infantry. 1st Brig., 2d DIV., 15th CORPS. sharpshooters line from May 23 to July 4, 1863" After 6ive sign (2nd). From here go about 40 m at 120° SE to tag tree.

Time taken to walk to plot: 10 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ✓ YES ___ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 128-131 Description of pictures (N,E,S & W from GPS point at middle of plot) : _____

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.36641 N -090.84336 W

WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) ~~NAD 83 OR NAD27~~ UTM ~~Zone: 15 16~~

GPS Unit ID 3 GPS file name V36____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? 224 Coordinate accuracy 9 m / ft DOP 2.2 # sats 4

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.20

County: Warren Park: NATR (VICK) Plot Code: V36 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 20 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
✓ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 80 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
✓ E	68-112 °	__ NW	293-337

Topographic Postion

__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
✓ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC (MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

Ravines have formed from erosion, the one just downslope of GPS point is vegetated with Giant Cane.

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

This site has fewer large trees than some of the other sites on the North end. It may be a younger forest.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	92% Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	2 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	6% Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:
Lonicera japonica
Ligustrum sinense (only in small patches)

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.20

County: Warren Park: NATR (VICK) Plot Code: V36 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	90%	Quercus nigra - 50%, Quercus pagoda - 30%	.5-1m	10%
Understory T3	15-20m	30%	Quercus nigra - 10%	1-2m	20%
Tall shrub S1	2-5m	60%	Prunus serotina - 20%, Ulmus alata - 10%, Cercis canadensis - 10%	2-5m	30%
Short shrub S2	.5-1m	60%	Toxicodendron radicans - 40%	5-10m	40%
Herbaceous	–	20%	Arundinaria gigantea - 10%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana	–	30%	Vitis cinerea - 10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	8	5	3	3					8	Quer nig		
	7			2					7	Quer pag		
	5								5	Pinu tae		
			6	3					6	Prun ser		
		3	5	3					6	Ulmu ala		
				7			3		7	Toxi rad		
			3	2					3	Fran car		
							4		4	Loni jap		
							3		3	Gels sem		
			4	3					4	Corn flo		
							4		4	Viti rot		
		4		3					4	Cary cor		
							5		5	Viti cin		
		3	5	3					5	Cerc can		
							3		3	Bign cap		
				2					2	Ligu sin		
							4		4	Part qui		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK.20

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V36 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
							2		2	Smil gla		
			3						3	Ulmu ame		
					2				2	Poly acr		
			3	2					3	Prun cer		
					5				5	Arun dio		
					1				1	Iris dea		
							2		2	Smil bon		
			3	2					3	Sass alb		
	5	3							5	Ligu sty		
				1					1	Side lyc		
			3						3	Ligu jap		
			4	2					4	Quer hem		
							2		2	Berc sca		
			4	2					4	Hydr qua		
			4	2					4	Corn dru		
			3						3	Robi pse		
							2		2	Cela sca		
								2	2	Pleo pol var. mich		
				2					2	Nand dom		
			4	3					4	Ulmy rub		
							2		2	Smil tam		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.21

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V37 State: AL (MS) TN Location org: NPS

Provisional community name Quercus nigra – Quercus muhlenbergii – Quercus velutina

Classified community name Liquidambar styraciflua – Carya illinoinesis – Quercus nigra Forest
Classifyer CWN *Date* _____ *NVC ELCODE* CEGL004122

Survey date: 9/2/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Basswood of 32 cm dbh with tag # 32. Center of 20 x 50m plot is at a bearing of 265 degrees and 4 m from tree. Tag is on east side of tree.

Directions to tag tree (including any notes on best access route, and mile marker):

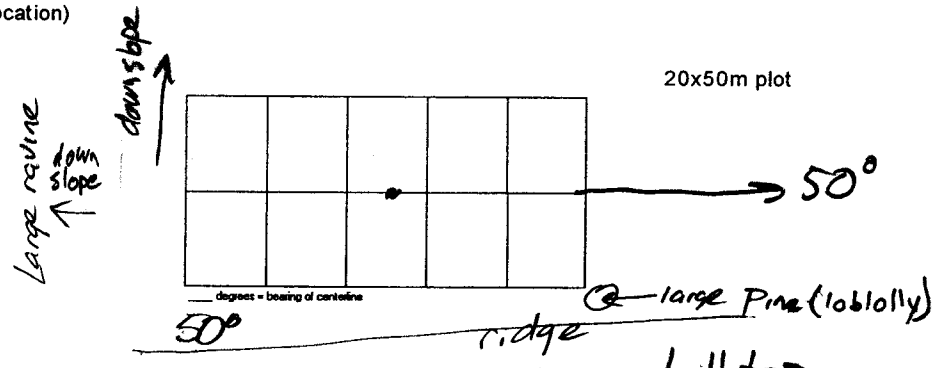
North Loop Road stop at Tour Stop 4, before Wisconsin Monument. Plot is west of Tour Stop 4 on NW facing wooded slope.

Time taken to walk to plot: 5 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___✓NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 103-106 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** _____

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.36467° N -090.84245° W
WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V **Datum(pick one)** __NAD ~~83~~ OR NAD27__ UTM ~~Zone: 15 16~~

GPS Unit ID 3 **GPS file name** V37 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? 237 **Coordinate accuracy** 10 m / ft **DOP** 2.6 **# sats** 6

VICK.21

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V37 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 23 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
✓ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 320 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	✓ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
✓ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : (DRY - MESIC) : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

May have been cleared during Civil War.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	94 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	2 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	4 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	_ exotic plants	_ Fire Suppression
_ dogwood anthr	_ ORV	

Disturbance and animal use comments:
Very little exotic plant cover relative to other plots at Vicksburg NMP.

VICK.21

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V37 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	90%	Quercus nigra-30%, Quercus multinerbergii-20%, Quercus [illegible]=10%, Quercus velutina-20%	.5-1m	10%
Understory T3	15-20m	70%	Quercus multinerbergii-20%, Sassafras albidum-20%	1-2m	20%
Tall shrub S1	2-5m	50%	Hydrangea quercifolia-20%	2-5m	30%
Short shrub S2	.5-1m	40%	Toxicodendron radicans-20%	5-10m	40%
Herbaceous	—	20%	Arundinaria gigantea-10%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana		30%	Vitis cinerea-20%, Toxicodendron radicans-10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (>1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	6	6	5	2					7	Quer mue		
	6	5		1					6	Quer vel		
	6	5							6	Quer rub		
	7	5	5	3					7	Quer nig		
	5	6	4	2					6	Sass alb		
			5	5					5	Ulmu ala		
			4	2					4	Prun ser		
				6			5		6	Toxi rad		
		5	4	2					5	Cary cor		
		4	4	3					5	Cocn flo		
							3		3	Bign cap		
			4						4	Juni vir		
					2				2	Poly acr		
			3	3					3	Cerc can		
			3	2					3	Fran car		
					5				5	Arun gig		
				1					1	Prun car		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.21

County: Warren **Park:** NATR (VICK) **Plot Code:** V37 **State:** AL (MS) TN **Location org:** NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
		4		2					4	Tili amer var. car		
							3		3	Pari qui		
					2				2	Aspl pla		
							2		2	Betu sca		
			2						2	Frax ame		
	6	5	4						6	Liqu sty		
				2					2	Hind ben		
					2				2	Sani can		
					2				2	Cyno vir		
				1					1	Aral spi		
					2				2	Desm per		
							6		6	Viti cin		
					1				1	Trac dif		
			6	3					6	Hydr que		
			4	1					4	Morv rub		
				2					2	Dios vir		
							2		2	Smil gla		
					1				1	Aris dra		
							3		3	Smil sma		
							4		4	Loni jap		
				2					2	Corn flo		
			4	2					4	Ulmu rub		
							2		2	Viti rot		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.22

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR VICK Plot Code: V41 State: AL MS TN Location org: NPS

Provisional community name Liquidambar styraciflua – Carya illinoinensis – Quercus nigra Forest

Classified community name _____

Classifyer CWN *Date* _____ *NVC ELCODE* CEGL004122

Survey date: 9/11/04 **Surveyors initials:** AS, EL

Tagged tree is a CELT LAE of 21 cm dbh with tag # 44. Center of 20 x 50m plot is at a bearing of 270 degrees and 4 m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

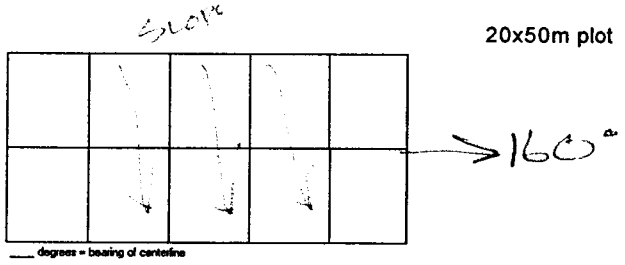
ON UNION AVE TRAVELLING W & THEN N W, STOP ± 110 m BEFORE BRIDGE BY GRAY MONUMENT TO THE 46th INFANTRY, AT TAG # 44 IN RD. HEAD ~ E UPSLOPE TO GPS

Time taken to walk to plot: _____

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 43-46 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** _____

Select one: UTM OR Lat/long (If lat/long, then values are 32.37644 N -90.25464 W WGS 84

GPS Techniques/Equipment: Garmin III+ Garmin V **Datum(pick one)** NAD 83 OR NAD27 ___ **UTM Zone:** 15 16

GPS Unit ID _____ **GPS file name** V41_____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E **Y** _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? yes **Coordinate accuracy** 13 m / ft **DOP** 3.1 **# sats** 4

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.22

County:_____ **Park:** NATR (VICK) **Plot Code:** V41 **State:** AL (MS) TN **Location org:** NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 29 ° ____ %		**Measured Aspect** 250 ° (N=0 °)		**Topographic Postion**
__ Flat	0 ° 0 %	__ Flat	__ SE 113-157 °	_ Interfluve (Ridge/summit/crest) __ Toeslope
__ Gentle	0-5 ° 1-9%	__ Variable	__ S 158-202 °	__ High Slope (upper/convex slope)
__ Moderate	6-14 ° 10-25%	__ N 338-22 °	__ SW 203-247 °	✓ Midslope __ Low level (terrace)
__ Somewhat steep	15-25 ° 26-49%	__ NE 23-67 °	✓ W 248-292 °	__ Lowslope (lower/footslope) __ Channel bed
✓ Steep	27-45 ° 50-100%	__ E 68-112 °	__ NW 293-337	
__ Very steep	45-69 ° 101-275%			*Cowardin System*
__ Abrupt	70-100 ° 276-300			✓ *Upland* _ *Palustrine*
__ ovrhng/shltrd	>100 ° >300%			_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)		
__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	✓ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)

✓ Not a wetland (Upland: XERIC : DRY - MESIC (MESIC)

__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)

__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: SURPRISINGLY LITTLE/NO EROSION FOR SUCH A STEEP SLOPE & LOOSE SOIL.

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Soil Texture:				**Drainage:**		
__ Sand	__ Peat	✓ Silt loam	__ Muck	__ Rapidly drained	__ Moderately well drained	__ Somewhat poorly drained
__ Sandy loam	__ Loam	__ Clay loam	__ Clay	✓ Well drained	__ Poorly drained	__ *Very poorly drained*

Ground cover

____ % Bedrock	10 % Litter, duff	____ % Other _____
____ % Large rocks (cobbles, boulders >10cm)	5 % Wood (> 1 cm)	
____ % Small rocks (gravel, 0.2-10 cm)	____ % Water	
____ % Sand (0.1-2 mm)	5 % Bare soil	

Leaf type:	**Leaf phenology** (dominant stratum)	**Physiognomic Class**
✓ Broad-leaved	✓ Evergreen	✓ Forest (closed tree canopy)
__ Needle-leaved	✓ Cold-deciduous	__ Woodland (open tree canopy)
__ Microphyllous	__ Drought-deciduous	__ Shrubland
__ Graminoid	__ Mixed evergreen-cold-deciduous	__ Dwarf Shrubland
__ Broad-leaved herbaceous	__ Mixed evergreen drought deciduous	__ Herbaceous (less than 25% woody layers)
__ Pteridophyte	__ Herb - Annual	__ Nonvascular
__ Extremely xeromorphic	__ Herb - Perennial	__ Sparse Vegetation
__ Mixed		

Natural and Anthropogenic Disturbance			*Disturbance and animal use comments:*
_ logging	_ fire	_ Hydrologic	LOGGING
_ erosion	_ trails/roads	_ Agriculture	
_ grazing/browsing	_ wind/ice damage	_ Old Growth	
_ pine bark beetle	✓ exotic plants	_ Fire Suppression	
dogwood anthr	ORV		

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.22

County: Warren **Park:** NATR (VICK) **Plot Code:** V41 **State:** AL (MS) TN **Location org:** NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	80%	Liquidambar styraciflua - 30%, Celtis laevigata - 20%, Toxicodendron radicans - 20%	.5-1m	10%
Understory T3	15-20m	30%	Celtis laevigata - 20%	1-2m	20%
Tall shrub S1	2-5m	70%	Ligustrum sinense - 30%	2-5m	30%
Short shrub S2	.5-1m	30%	Various, no particular species appears dominant, total - 30%	5-10m	40%
Herbaceous	—	40%	Arundinaria gigantea - 40%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana	—	60%	Lonicera japonica - 50%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

T1: Emergent* | *T2: Tree Canopy* | *T3 Subcanopy* | *S1 Tall Shrub (> 1m; to 5m)* | *S2 Short Shrub (< 1m)* | *H Herbaceous* | *N Nonvascular* | *V Vines (lianas)* | *E Epiphytes

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	7								7	LIQU STY		
	6	6	3	3					7	CELT lae		
			3						3	PRUN SER		
					7				7	ARUN gig		
							8		8	LONI JAP		
				1					1	ASIM TRI		
			4						4	QUER SHU		
	6		4						6	Ulmu rub		
	6			N					6	Gled tri		
			3						3	Ilex dec		
				3			3		4	Toxi rad		
			4	2					4	Prun car		
			5	3					5	Acer neg		
				2					2	Quer nig		
			7	3					7	Ligu sin		
	6			1					6	Cayill		
			3						3	Ostr vir		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.22

County: Warren **Park:** NATR (VICK) **Plot Code:** V41 **State:** AL (MS) TN **Location org:** NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
							5		5	Viti cin		
					2				2	Geum can		
			2						2	Mor rub		
		4							4	Quer pag		
					1				1	Care cep		
					2				2	Opl set		
				1					1	Jug nig		
							2		2	Smi bon		
					2				2	Rudbeck sp.		
							2		2	Bign cap		
			4	2					4	Quer mic		

Use bottom of this sheet or additional pages for other species in 1 ha plot

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

VICK.23

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V46 State: AL (MS) TN Location org: NPS

Provisional community name Liquidambar styraciflua – Carya illinoinensis – Quercus nigra Forest

Classified community name

Classifyer CWN *Date* _____ *NVC ELCODE* CEGL004122

Survey date: 9/11/04 **Surveyors initials:** AS, EL

Tagged tree is a Quercus sp. of 19.5 cm dbh with tag # 43. Center of 20 x 50m plot is at a bearing of 345 degrees and 1.5 m from tree. SHUMARD OAK

Directions to tag tree (including any notes on best access route, and mile marker):

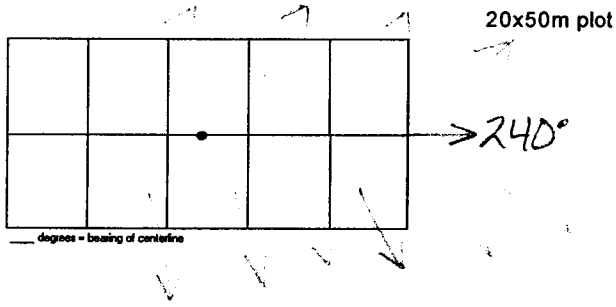
FROM PARKING AREA ON UNION AVENUE HEADING W, ~20m E OF PLAQUE MONUMENT TO IOWA 30th INFANTRY, ENTER WOODS TO SW (± 230°), & FOLLOW RIDGE OF NOSE SLOPE OUT TO GPS POINT

Time taken to walk to plot: 5

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 39-42 Description of pictures (N,E,S & W from GPS point at middle of plot) : _____

Select one: UTM OR Lat/long (If lat/long, then values are 32.37330 N -90.84824 W

NAD 84

GPS Techniques/Equipment: Garmin II+ Garmin V Datum(pick one) NAD 83 OR NAD27 ~~UTM~~ Zone: 15 ~~16~~

GPS Unit ID _____ GPS file name V46_____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? yes Coordinate accuracy 5 m / ft DOP 1.7 # sats 6

County:_____ **Park:** NATR (VICK) **Plot Code:** V46 **State:** AL (MS) TN **Location org:** NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 12 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
✓ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 240° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	✓ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
✓ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* _ *Palustrine*
_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	✓ Nose slope	Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: NO EVIDENCE OF EROSION

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

LONG NOSE RIDGE WITH FAIRLY STEEP SIDES.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	90 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	10 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	____% Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:
HONEYSUCKLE, TRIFOLIATE ORANGE, PRIVET

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.23

County: Warren Park: NATR (VICK) Plot Code: V46 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	30-35m	80%	Liquidambar styraciflua – 40%, Fraxinus americana – 20%, Quercus nigra – 20%	.5-1m	10%
Understory T3	15-20m	60%	Quercus muehlenbergii – 30%	1-2m	20%
Tall shrub S1	2-5m	50%	Cercis canadensis – 20%, Ulmus rubra – 10%	2-5m	30%
Short shrub S2	.5-1m	50%	Toxicodendron radicans – 30%	5-10m	40%
Herbaceous	–	40%	Arundinaria gigantea – 30%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana	—	40%	Lonicera japonica – 30%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

T1: Emergent | T2: Tree Canopy | T3 Subcanopy | S1 Tall Shrub (> 1m; to 5m) | S2 Short Shrub (< 1m) | H Herbaceous | N Nonvascular | V Vines (lianas) | E Epiphytes

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	6		4	3					6	Frax ame		
	6		4	3					6	Quer nig		
		7	5						7	Quer muh		
		4		1					4	Quer shu		
		4							4	Quer pag		
					7				7	Arun gig		
					3				3	Rubu dfc		
							7		7	Loni jap		
	7		3						7	Ligu sty		
				7			5		7	Toxi rad		
										~~Rubu fla~~		
				2					2	Aspl pla		
			6	3					6	Cerc can		
			5	3					5	Ulmu rub		
		4							4	Juni vir		
							5		5	Viti cin		
							4		4	Bign cap		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.23

County: Warren Park: NATR (VICK) Plot Code: V46 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
							3		3	Part qui		
							3		3	Bere sca		
			3	1					3	Cary cor		
			4	2					4	Ligu sin		
		5	2	2					6	Sass alb		
			2	2					3	Celt lae		
			5	2					5	Fran car		
			4	2					4	Ptsim tri		
			3						3	Ulmu ala		
			4						4	Pone tri		
					2				2	Geum can		
			4	3					4	Prun cer		
			3						3	Moru rub		
				1					1	Poun ser		
		3							3	Liri tul		
			4	2					4	Corn dru		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.24

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V47 State: AL (MS) TN Location org: NPS

Provisional community name Liquidambar styraciflua - Carya illinoinensis - Quercus nigra Forest

Classified community name

Classifyer CWN *Date* _____ *NVC ELCODE* CEGL004122

Survey date: 9/2/2004 **Surveyors initials:** CWN & AS

Tagged tree is a Sweetgum of 180 cm dbh with tag # 33. Center of 20 x 50m plot is at a bearing of 210 degrees and 4 m from tree. Tag is on west side of tree (upslope side)

Directions to tag tree (including any notes on best access route, and mile marker):

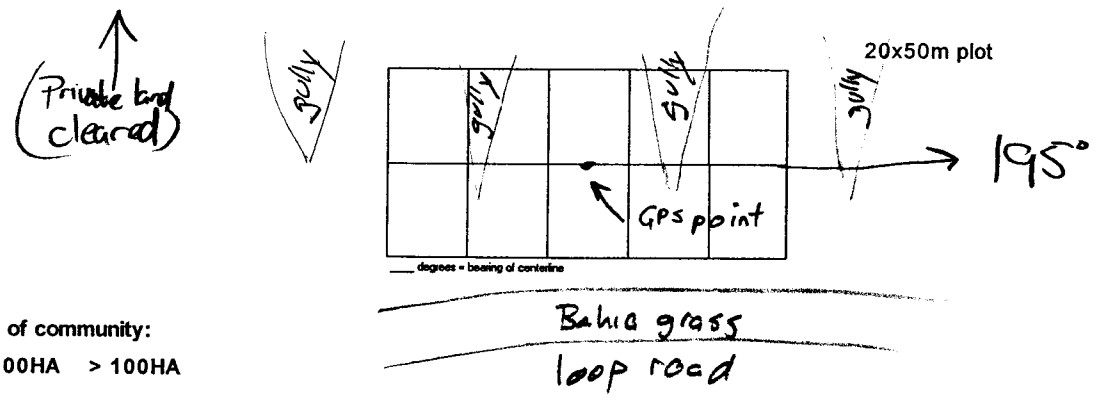
North Loop Road, East side – ~~East~~ Wisconsin statue park where road turns from east back to NE. Plot is on east facing steep slope. ~~east~~ just east of Loop Road.

Time taken to walk to plot: 5 min.

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES _✓_ NO - If not, depict below) Bottom of ravine slope is variable

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 107-110 Description of pictures (N,E,S & W from GPS point at middle of plot) : _____

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.36523 N -90.83885 W WGS 84

GPS Techniques/Equipment: (Garmin III+) ~~Garmin V~~ Datum~~(pick one)~~ ~~NAD 83 OR NAD27~~ UTM Zone: ~~15 16~~

GPS Unit ID 3 GPS file name V47_____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? ✓ Coordinate accuracy 6 m / ft DOP 1.2 # sats 6

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.24

County: Warren Park: NATR (VICK) Plot Code: V47 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 22 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
✓ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 105 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
✓ E	68-112 °	__ NW	293-337

Topographic Postion
_ Interfluve (Ridge/summit/crest) __ Toeslope
✓ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* _ *Palustrine*
_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC : (MESIC))
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Midstory is relatively free of exotic plants.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	88 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	2 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	10 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:
Lonicera japonica

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.24

County: Warren **Park:** NATR (VICK) **Plot Code:** V47 **State:** AL (MS) TN **Location org:** NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	80%	Liquidambar styraciflua - 60%	.5-1m	10%
Understory T3	15-20m	60%	Liquidambar styraciflua - 20% Acer negundo - 20%	1-2m	20%
Tall shrub S1	2-5m	60%	Ulmus rubra - 10%, Cornus drummondii - 10% Quercus michauxii - 10%, Hydrangea qua - 10%	2-5m	30%
Short shrub S2	.5-1m	60%	Toxicodendron radicans - 40%	5-10m	40%
Herbaceous	–	50%	Arundinaria gigantea - 40%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana	–	40%	Vitis cinerea - 30%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	8	(6)	4	2					8	Liqu sty		
	(6)		3	3					6	Quer nig		
		(6)	5	2					6	Acer neg		
	(6)		6	3					7	Ulmu rub		
			3						3	Fran car		
					7				7	Arun gig		
			3						3	Panc fil		
				1					1	Aslm tri		
					2				2	Poly acr		
					2				2	Cyno vir		
		4	3						4	Tilia ame var. car		
				7			4		7	Toxi rad		
			(5)	(4)					5	Corn dru		
							2		2	Smil bon		
		4	5	3					6	Quer muc		
							4		4	Loni jap		
							2		2	Pari qui		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.24

County: Warren **Park:** NATR (VICK) **Plot Code:** V47 **State:** AL (MS) TN **Location org:** NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
			2						2	Dios vir		
			2	2					3	Ligu sin		
							3		3	Smil sma		
		4	4						5	Carp car		
			3						3	Pun ser		
			3						3	Celt lae		
				2					2	Cerc can		
		4		2					4	Cary cor		
				2					2	Pun car		
							1		1	Viti cin		
			5	2					5	Hydr que		
			4						4	Cum flo		
					2				2	Dich bos		
							2		2	Smil tam		
							2		2	Cela sca		
					1				1	Fact flo		
					1				1	Pass lut		
					2				2	Oeli set		
				1					1	Side lyc		
					1				1	Phry lep		
				2					2	Samb can		
					2				2	Cyst pro		
					2				2	Care dig		
					1				1	Eupa ser		
			3						3	Moru rub		
					2				2	Sani can		
					2				2	Bote vir		
					2				2	Desm per		
					1				1	Iris tri		
			2						2	Lind bra		
							2		2	Viti rot		
					2				2	Amph bra		
					1				1	Care oxy		
			3						3	Magn gra		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.25

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V50 State: AL (MS) TN Location org: NPS

Provisional community name Quercus pagoda - Quercus nigra Forest

Classified community name

Classifyer CWN *Date* *NVC ELCODE* CEGL004109

Survey date: 8/31/2004 **Surveyors initials:** CWN & AS & Kurt Foote

Tagged tree is a water oak of 59 cm dbh with tag # 19. Center of 20 x 50m plot is at a bearing of 250° degrees and 3.5 m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

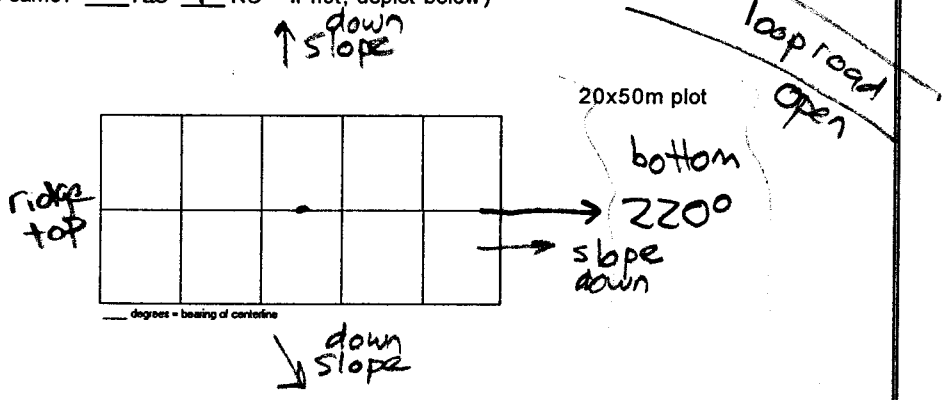
South loop, Confederate side, continue just past Indiana Monument and bridge across ravine. Plot is on SW facing slope (a nose slope) north of bridge on east side of ravine. Tag tree is upslope next to another large oak.

Time taken to walk to plot: 7 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES _✓_ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA ~~1-10 HA~~ 10-100HA > 100HA

PIC # 32-35 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** _____

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.33341° N -090.86124° W

GPS Techniques/Equipment: (Garmin III+) Garmin V **Datum(pick one)** WGS 84 ~~NAD 83 OR NAD27~~ **UTM Zone:** 15 16

GPS Unit ID 3 **GPS file name** V50 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? Z21 **Coordinate accuracy** 7 m / ft **DOP** 2.0 **# sats** 5

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: VS0 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 13 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
✓ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 215 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	✓ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion

__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
✓ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	✓ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Was cleared during the civil war.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____ % Bedrock	85 % Litter, duff	____ % Other _____
____ % Large rocks (cobbles, boulders >10cm)	2 % Wood (> 1 cm)	
____ % Small rocks (gravel, 0.2-10 cm)	____ % Water	
____ % Sand (0.1-2 mm)	13 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
__ Cold-deciduous
__ Drought-deciduous
✓ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments: exotic plants —
Lonicera japonica
Ligustrum sinense

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.25

County: Warren **Park:** NATR (VICK) **Plot Code:** V50 **State:** AL (MS) TN **Location org:** NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	90%	Quercus nigra - 60%,	.5-1m	10%
Understory T3	15-20m	40%	Quercus nigra - 10%, Ulmus rubra - 10%	1-2m	20%
Tall shrub S1	2-5m	60%	Cornus drummondii - 20%, Morus rubra - 10% Ulmus rubra - 10%	2-5m	30%
Short shrub S2	.5-1m	30%	Cornus drummondii - 5%	5-10m	40%
Herbaceous	–	10%	Rubus argutus - 5%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana	–	40%	Lonicera japonica - 20%, Vitis cinerea - 10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	6	4		1					6	Quer pag		
	8	5		3					8	Quer nig		
		4		2					4	Celt lae		
		5	5	3					6	Ulmu rub		
			5	1					5	Moru rub		
			6	4					6	Corn drU		
			4	2					4	Ligu sin		
							3		3	Ampe arb		
							6		6	Loni jap		
							3		3	Cocc car		
			4	2					4	Prun car		
					2				2	Eupa ser		
					2				2	Aspl pla		
							3		3	Iexi rad		
			4	3					4	Fran car		
					1				1	Carex sp.		
					1				1	Sapi car		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.25

County: Warren **Park:** NATR (VICK) **Plot Code:** V60 **State:** AL (MS) TN **Location org:** NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
					2				2	Cheum can		
							3		3	Bign cap		
					2				2	Matelea sp.		
							5		5	Part qui		
		4		3					4	Prun ser		
					2				2	Osm cet		
			3	3					4	Acer neg		
					2				2	Phyto ame		
			3						3	Liri tul		
					4				4	Rubu arg		
			4	3					4	Ulmu alb		
							5		5	Viti cin		
		3	2	2					4	Cary ill		
				1					1	Samb can		
			3						3	Ligu sty		
				1					1	Gled tri		
					1				1	Peri fru		
							2		2	Viti rot		
					2				2	Trac dif		
							3		3	Bacc sca		
			3						3	Side lyc		
					2				2	Boeh cyl		
				1					1	Nand dom		
					1				1	Lact flo		
				2					2	Dios vir		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.26

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V51 State: AL (MS) TN Location org: NPS

Provisional community name Ulmus americana – Robinia Pseudoacacia

Classified community name Robinia pseudoacacia Forest
Classifyer CWN *Date* 9/16/2004 *NVC ELCODE* 7279

Survey date: 8/31/2004 **Surveyors initials:** AS & CWN

Tagged tree is a box-elder of 18 cm dbh with tag # 20. Center of 20 x 50m plot is at a bearing of 290 degrees and 2.5 m from tree. Tag on E. side of tree.

Directions to tag tree (including any notes on best access route, and mile marker):

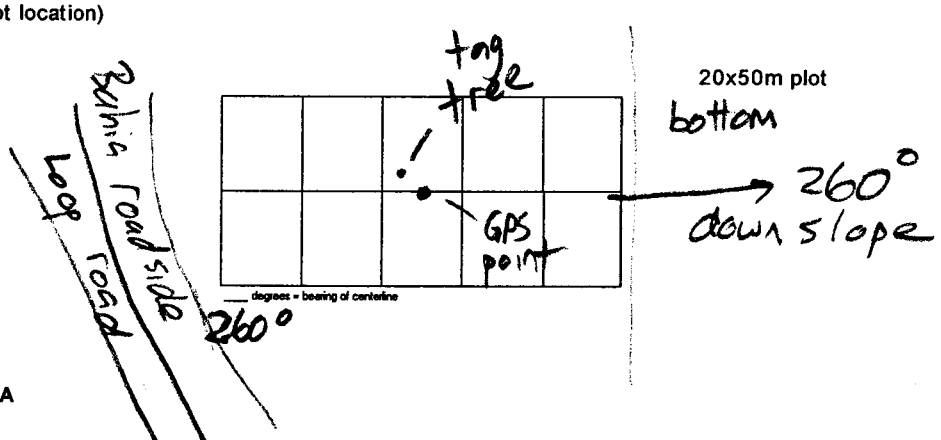
South loop road, Union (east) side. Past Hoveys Approach, ~~to~~ south of road where road goes SE, just before road turns back to north.
Go south into woods, about 30 m.

Time taken to walk to plot: 5 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ✓ YES ___ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:
< 1HA 1-10 HA 10-100HA > 100HA

PIC # 44 – 47 Description of pictures (N,E,S & W from GPS point at middle of plot) : _____

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.33574 N 090.85893 W

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) ~~NAD 83~~ OR ~~NAD27~~ WGS 84 UTM Zone: 15 16

GPS Unit ID 3 GPS file name V51 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? 405 Coordinate accuracy 7 m / ft DOP 2.1 # sats 6

County: Warren Park: NATR (VICK) Plot Code: V51 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 16 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
✓ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 260 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	✓ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
✓ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC - DRY - MESIC: MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Was clear during the Civil War

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	60 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	5 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	35 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
_ dogwood anthr	_ ORV	

Disturbance and animal use comments:
Ligustrum sinense

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.26

County: Warren Park: NATR (VICK) Plot Code: V51 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	80%	Ulmus americana – 30%	.5-1m	10%
Understory T3	15-20m	90%	Celtis laevigata – 30%, Broussonetia pap. – 30%	1-2m	20%
Tall shrub S1	2-5m	90%	Ligustrum sinense – 80%	2-5m	30%
Short shrub S2	.5-1m	30%	Ligustrum sinense – 10%	5-10m	40%
Herbaceous	—	5%	herbs very sparse	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana	—	30%	Vitis cinerea – 10%, Lonicera japonica – 10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	7		3						7	Ulmu ame		
	7								7	Robi pse		
		7		3					7	Celt lae		
		6		2					6	Acer neg		
		6	3	3					6	Prun ser		
		7	6	3					7	Brou pap		
							3		3	Toxi rad		
							5		5	Loni jap		
							3		3	Bign cap		
							4		4	Cock car		
			4	3					4	Quer nig		
			9	5					9	Ligu sin		
	5								5	Quer pag		
				1					1	Cary ill		
							2		2	Ampe arb		
				1	1				1	Phyt ame		
				2					2	Samb can		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.26

County: Warren Park: NATR (VICK) Plot Code: V51 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
					2				2	Geum can		
							4		4	Part qui		
			3						3	Mayn asa		
					2				2	Opli sol		
					2				2	Lupa ser		
							5		5	Viti cin		
							1		1	Smil gla		
					2				2	Athy fel		
					1				1	Fisp pla		
					3		2		3	Hede hel		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.27

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR VICK Plot Code: VS1A State: AL MS TN Location org: NPS

Provisional community name Paper Mulberry Broussonetia papyrifera Forest

Classified community name

Classifyer CEGL *Date* *NVC ELCODE* CEGL004106

Survey date: 8/31/2004 **Surveyors initials:** CWN&AS

Tagged tree is a Paper mulberry 15 cm dbh with tag # 21. Center of ~~20 x 50m~~ 10x30 plot is at a bearing of 180° degrees and 4 m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

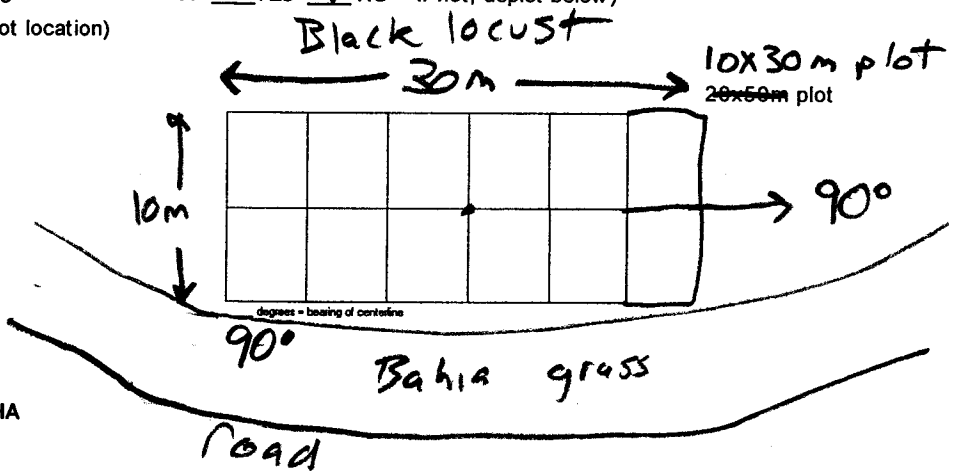
On N. side of South Loop Road, Union side. Past Hoveys Approach where road goes SE. just before road turns to N.

Time taken to walk to plot: 2 min

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 48-51, 52 Description of pictures (N,E,S & W from GPS point at middle of plot) :

48(N), 49(E), 50(S), 51(W), 52 from South, towards plot center

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.33586 N 090.85806 W

WGS 84

GPS Techniques/Equipment: Garmin III+ Garmin V **Datum(pick one)** ~~NAD 83 OR NAD27~~ **UTM Zone:** ~~15 16~~

GPS Unit ID 3 **GPS file name** VS1A (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? 165 **Coordinate accuracy** 7 m / ft **DOP** 1.7 **# sats** 5

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.27

County: Warren Park: NATR (VICK) Plot Code: V51A State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope ____ ° ____ %			**Measured Aspect** ____ ° (N=0 °)			**Topographic Postion**
__ Flat	0 °	0 %	__ Flat	__ SE	113-157 °	_ Interfluve (Ridge/summit/crest) __ Toeslope
__ Gentle	0-5 °	1-9%	__ Variable	✓ S	158-202 °	✓ High Slope (upper/convex slope)
✓ Moderate	6-14 °	10-25%	__ N 338-22 °	__ SW	203-247 °	__ Midslope __ Low level (terrace)
__ Somewhat steep	15-25 °	26-49%	__ NE 23-67 °	__ W	248-292 °	__ Lowslope (lower/footslope) __ Channel bed
__ Steep	27-45 °	50-100%	__ E 68-112 °	__ NW	293-337	
__ Very steep	45-69 °	101-275%				*Cowardin System*
__ Abrupt	70-100 °	276-300				✓ *Upland* _ *Palustrine*
__ ovrhng/shltrd	>100 °	>300%				_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)

✓ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)

__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)

__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

~~Successional.~~ Was cleared in past, including civil war, but also perhaps 1970s.

Soil Texture:

__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:

__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	55 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	5 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	40 % Bare soil	

Leaf type:

✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)

__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class

✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.27

County: Warren Park: NATR (VICK) Plot Code: VS1A State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	5-10m	90%	Broussonetia papyrifera - 80%	.5-1m	10%
Understory T3	2-5m	60%	Broussonetia papyrifera - 30%	1-2m	20%
Tall shrub S1	1-2m	20%	Broussonetia papyrifera - 20%	2-5m	30%
Short shrub S2	.5-1m	20%	Broussonetia papyrifera - 10%	5-10m	40%
Herbaceous	—	5%	Herbaceous component sparse - 5%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana	—	5%	Vines are sparse - 5%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	9	7	6	5					9	Brou pap		
	5			2					2	Robi pse		
	5	3							5	Acer neg		
		5							5	Ulmu amer		
							3		3	Lonijap		
			3	2					3	Ligu sin		
					2				2	Rubu tri		
							2		2	Cocc car		
		4		2					4	Prun car		
					1				1	Liriope sp.		
					1				1	Allicar		
					2				2	Care che		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK-28 Page 1

County: Warren Park: NATR (VICK) Plot Code: V53 State: AL (MS) TN Location org: NPS

Provisional community name Kudzu Vineland

Classified community name Pueraria montana var. lobata Vine-Shrubland

Classifyer CWN *Date* 8/31/04 *NVC ELCODE* 3882

Survey date: 8/31/2004 **Surveyors initials:** AS & CWN & Kurt Foote

Tagged tree is a No tag tree of ____ cm dbh with tag #_____. Center of 20 x 50m plot is at a bearing of ____ degrees and ____ m from tree.

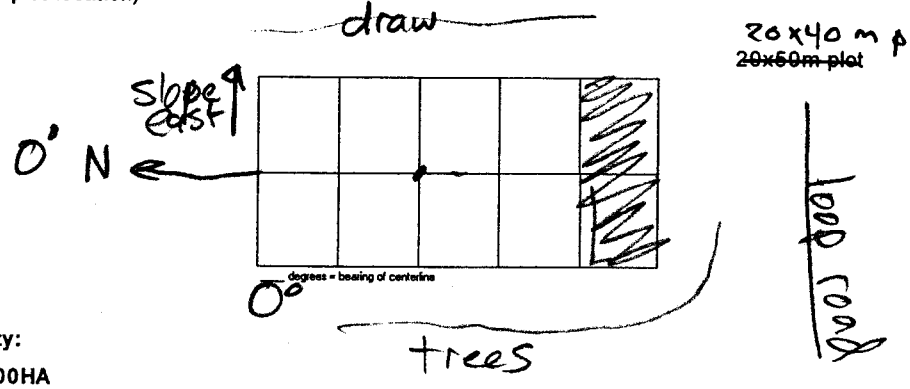
Directions to tag tree (including any notes on best access route, and mile marker): Confederate, South loop Kudzu Management Area, NW of open area by road down hill and up opposite east facing slope.

Time taken to walk to plot: 10 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 19-22 Description of pictures (N,E,S & W from GPS point at middle of plot) :_____

Select one: UTM OR Lat/long (If lat/long, then values are 32.33861 N 090.86180 W WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) ~~NAD 83~~ OR ~~NAD27~~ UTM Zone: 15 16

GPS Unit ID 3 GPS file name V53_____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? Coordinate accuracy 7 m / ft DOP 2.0 # sats 7

VICK.28

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: VS3 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope ____ ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
✓ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect ____ ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
✓ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
✓ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : ORY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

dominated by kudzu treated with Roundup, Garlon 4 & transline (most recently 8/29/04).

Soil Texture:
__ Sand __ Peat __ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____ % Bedrock	80 % Litter, duff	____ % Other _____
____ % Large rocks (cobbles, boulders >10cm)	4 % Wood (> 1 cm)	
____ % Small rocks (gravel, 0.2-10 cm)	____ % Water	
____ % Sand (0.1-2 mm)	16 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
__ Forest (closed tree canopy)
__ Woodland (open tree canopy)
✓ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

__ logging	__ fire	__ Hydrologic
✓ erosion	__ trails/roads	__ Agriculture
__ grazing/browsing	__ wind/ice damage	__ Old Growth
__ pine bark beetle	✓ exotic plants	__ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:

kudzu treated with Roundup; Garlon 4 & Transline

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.28

County: Warren Park: NATR (VICK) Plot Code: V53 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2				.5-1m	10%
Understory T3				1-2m	20%
Tall shrub S1				2-5m	30%
Short shrub S2				5-10m	40%
Herbaceous		100%	Pueraria montana var. lobata - 90%	10-15m	50%
Non-vascular				15-20m	60%
Vine/liana				20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
					9				9	Puer mon var. lob		
					4				4	Ambr tri		
					4				4	Sola nig		
					4				4	Polygonum con		
					3				3	Phytolacc		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK.29

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: VS4 State: AL (MS) TN Location org: NPS

Provisional community name Liquidambar styraciflua - Carya illinoinensis - Quercus nigra Forest

Classified community name

Classifyer CWN *Date* *NVC ELCODE* CEGL000 4122

Survey date: 8/31/2004 **Surveyors initials:** AS & CWN & Kurt Foote

Tagged tree is a sweetgum of 19 cm dbh with tag # 17. Center of 20 x 50m plot is at a bearing of 270° degrees and 3.5 m from tree.

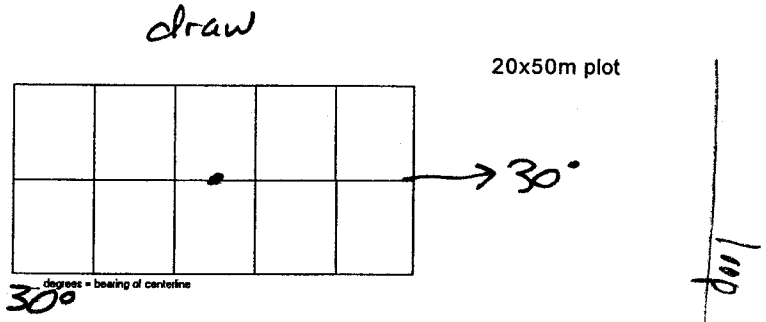
Directions to tag tree (including any notes on best access route, and mile marker): South Loop road, Confederate side, just past Georgia monument and Fort Garrott. As loop road turns from SE to S, park and walk into woods to NW. Plot is on lower slope facing NW.

Time taken to walk to plot: 8 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___✓ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA (1-10 HA) 10-100HA > 100HA

PIC # 23-26 Description of pictures (N,E,S & W from GPS point at middle of plot) : _____

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.33540 N -090.86346 W

WGS 84

GPS Techniques/Equipment: (Garmin III) Garmin V Datum(pick one) ~~NAD 83 OR NAD27~~ UTM Zone: 15 16

GPS Unit ID 3 GPS file name VS4_____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? 346 Coordinate accuracy _____ m / ft DOP _____ # sats

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.29

County: Warren **Park:** NATR VICK **Plot Code:** V54 **State:** AL MS TN **Location org:** NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 13 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
✓ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 300 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	✓ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
✓ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC (MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Was cleared during civil war.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	78 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	2 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	20% Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:
Lonicera japonica
Ligustrum sinense

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: VS4 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	90%	Liquidambar styraciflua - 70%	.5-1m	10%
Understory T3	15-20m	40%	Liquidambar styraciflua - 10%, Prunus serotina - 10%, Quercus nigra - 10%, Ligustrum sinense - 10%	1-2m	20%
Tall shrub S1	2-5m	100%	Ligustrum sinense - 80%	2-5m	30%
Short shrub S2	.5-1m	40%	Ligustrum sinense - 20%	5-10m	40%
Herbaceous	–	10%	Hedera helix - 5%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana	–	30%	Lonicera japonica - 20%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	8	5		3					8	Liqu sty		
	5	5		3					6	Quer nig		
			9	6					9	Ligu sin		
							6		6	Lobi jap		
			5	4					5	Ulmu ala		
							2		2	Part qui		
			6	4					6	Prun car		
			4	3					4	Ulmu ame		
		5	3						5	Prun ser		
					2				2	Bohr vir		
							5		5	Viti rot		
					2				2	Ager coe		
				2					2	Sand dom		
					4				4	Hede hel		
					2				2	Opli set		
					1				1	Sche oli		
					1				1	Mate sp		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.29

County: Warren Park: NATR (VICK) Plot Code: VS4 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
			4	3					4	Liqu jap		
			4	3					4	Cel Pal		
					2				2	Aspl pla		
					1				1	Liriope sp.		
				2					2	Asim tri		
		5							5	Viri tul		
					1				1	Poly acr		
					1				1	Sani can		
			2	2					3	Acer neg		
					2				2	Boty dis		
					3				3	Vinc maj		
				2					2	Cerc can		
				1					1	Juni vir		
				1					1	Cary ill		
				2					2	Dios vir		
				1					1	Sass alb		
				2					2	Frax ame		
				2			3		3	Toxi rad		
				2					2	Corn alt		
							1		1	Ampe cor		
							2		2	Berc sca		

Cover classes

1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.30

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V55 State: AL (MS) TN Location org: NPS

Provisional community name Quercus pagoda - Quercus nigra Forest

Classified community name Quercus pagoda - Quercus nigra Forest

Classifyer CWN *Date* _____ *NVC ELCODE* CEGL004109

Survey date: 8/31/2004 **Surveyors initials:** AS, CWN, Kurt Foote

Tagged tree is a White ash of 45 cm dbh with tag # _____. Center of 20 x 40 m plot is at a bearing of 30 degrees and 2.3 m from tree. A double trunked tree, the larger trunk measured.

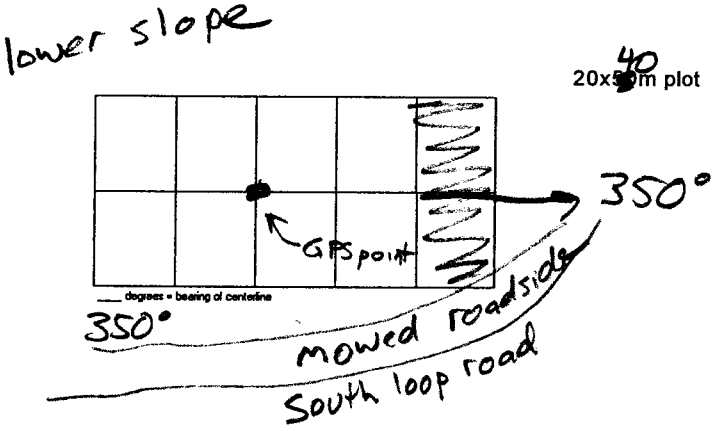
Directions to tag tree (including any notes on best access route, and mile marker): South loop road, Confederate side just past Georgia Monument and Fort Garrott. In woods on SW side of road as road turns from East towards South, upper slope, about 15 meters into woods. 40 m at 50° from center of plot (GPS point) V54.

Time taken to walk to plot: 5 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 40 m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES _✓_NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 27, 28-31 Description of pictures (N,E,S & W from GPS point at middle of plot) : _____

27 (lily "naked ladies"), 28 (N), 29 (E), 30 (S), 31 (W)

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.33562 N 090.86316 W WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V **Datum(pick one)** NAD 83 OR NAD27 UTM ~~Zone: 15 16~~

GPS Unit ID 3 **GPS file name** V55 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? 200 **Coordinate accuracy** _____ m / ft **DOP** _____ **# sats** _____

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.30

County: Warren Park: NATR (VICK) Plot Code: VS5 State: AL MS TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 11 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
✓ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 270 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	✓ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
✓ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC DRY - MESIC MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Old fence goes thru plot.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	80% Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	2 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	18% Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
Mixed

Leaf phenology (dominant stratum)
__ Evergreen
__ Cold-deciduous
__ Drought-deciduous
✓ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
✓ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
_ dogwood anthr	_ ORV	

Disturbance and animal use comments:
Lonicera japonica
trash pile with old cans and bottles in plot.

County: Warren Park: NATR (VICK) Plot Code: V55 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	90%	Quercus nigra - 40%, Quercus pagoda - 30%	.5-1m	10%
Understory T3	15-20m	20%	Quercus nigra - 10%	1-2m	20%
Tall shrub S1	2-5m	30%	Prunus caroliniana - 10%, Ulmus americana - 10%	2-5m	30%
Short shrub S2	.5-1m	30%	Total short shrub - 30%	5-10m	40%
Herbaceous	–	5%	herb layer is very sparse - 5%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana	—	20%	Parthenocissus quinquefolia - 10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

T1: Emergent | T2: Tree Canopy | T3 Subcanopy | S1 Tall Shrub (> 1m; to 5m) | S2 Short Shrub (< 1m) | H Herbaceous | N Nonvascular | V Vines (lianas) | E Epiphytes

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	7			1					7	Quer pag		
	8	5		2					8	Quer nig		
	6		4	3					6	Ligu sty		
	6		3	2					6	Frax ame		
			5	3					5	Prun car		
			4	2					4	Corn dru		
			3	3					4	Ligu sin		
							3		3	Ligu jap Hemarthria japonicum		
			5	3					5	Ulmu ame		
							5		5	Part qui		
		4	3	2					4	Ulmu ala		
					1				1	Botr vir		
							3		3	Hede hel		
							4		4	Viti rot		
			3	2					3	Dios vir		
			3	1					3	Firm sim		
			2						2	Juni vir		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.30

County: Warren Park: NATR (VICK) Plot Code: V55 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
				2					2	Magn vir		
				2					2	Cyr ill		
					1				1	Asp pla		
				3					3	Cer can		
				2					2	Nand dom		
							4		4	Ber sca		
					2				2	Opli set		
				2					2	Toxi rad		
							2		2	Ampe arb		
				1					1	Side lyc		
							2		2	Smilax		
					2				2	Liriope sp.		
			2						2	Lage ind		
					2				2	Viti rot		
							2		2	Viti cin		
					1				1	Clem vir		
				2					2	Sassalb		

Cover classes

1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

VICK.31

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V56 State: AL (MS) TN Location org: NPS

Provisional community name Eleocharis montevidensis herbaceous

Classified community name (Artificially maintained) NLCD class #92 Emergent/Herbaceous Wetland
Classifyer CWN *Date* / *NVC ELCODE*

Survey date: 8/31/2004 **Surveyors initials:** CWN, AS, Kurt Foote

Tagged tree is a No tag tree of ____ cm dbh with tag #_____. Center of 20 x 50m plot is at a bearing of ____ degrees and ____ m from tree.

Directions to tag tree (including any notes on best access route, and mile marker): Parking Area for Hovey's Approach by "Restoration of historic scene" sign. From parking area downhill to wetland in bottom at 240° SW. Center of plot is about 18m N 350° from Blue "US union trench McGinnis Brigade" sign.

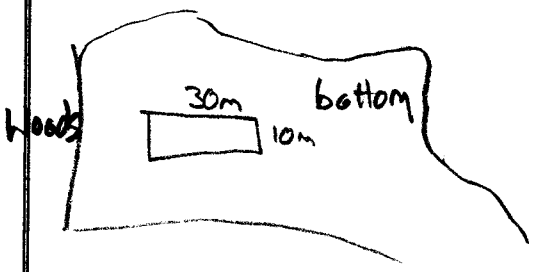
Extensive in these bottoms.

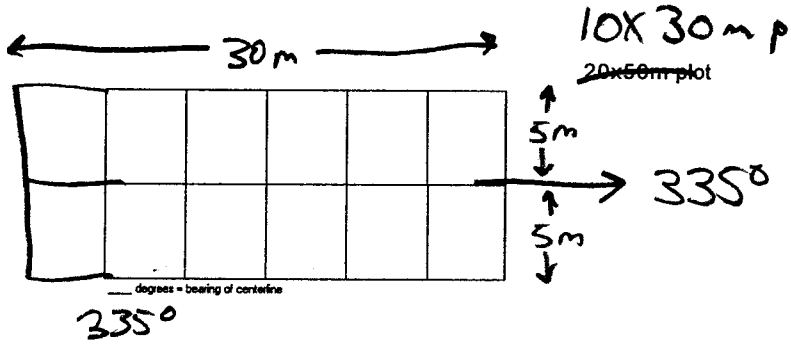
Time taken to walk to plot: 2 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___NO - If not, depict below)

PLOT LOCATION (Below show general plot location)





Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 36-39 **Description of pictures (N,E,S & W from GPS point at middle of plot) :**_____

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.33451 N -090.86108 W WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V **Datum(pick one)** ~~NAD 83 OR~~ NAD27 **UTM Zone:** 15 16

GPS Unit ID 3 **GPS file name** V56 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? **Coordinate accuracy** 8 m / ft **DOP** 2.1 **# sats** 6

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.31

County: Warren Park: NATR (VICK) Plot Code: V56 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope ____ ° ____ %		**Measured Aspect** ____ ° (N=0 °)		**Topographic Postion**
✓ Flat	0 ° 0 %	✓ Flat	__ SE 113-157 °	_ Interfluve (Ridge/summit/crest) __ Toeslope
__ Gentle	0-5 ° 1-9%	__ Variable	__ S 158-202 °	__ High Slope (upper/convex slope)
__ Moderate	6-14 ° 10-25%	__ N 338-22 °	__ SW 203-247 °	__ Midslope __ Low level (terrace)
__ Somewhat steep	15-25 ° 26-49%	__ NE 23-67 °	__ W 248-292 °	__ Lowslope (lower/footslope) ✓ Channel bed
__ Steep	27-45 ° 50-100%	__ E 68-112 °	__ NW 293-337	
__ Very steep	45-69 ° 101-275%			*Cowardin System*
__ Abrupt	70-100 ° 276-300			_ *Upland* ✓ *Palustrine*
__ ovrhng/shltrd	>100 ° >300%			_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	✓ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	Nose slope	Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)

__ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) ✓ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

Saturated

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Cleared of forest since 1997 For Restoration of historic scene

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
__ Well drained ✓ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	10 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	____% Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	70 % Water	
____% Sand (0.1-2 mm)	20 % Bare soil	

Leaf type:
__ Broad-leaved
__ Needle-leaved
__ Microphyllous
✓ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
__ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
✓ Herb - Perennial

Physiognomic Class
__ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
✓ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

✓ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	_ exotic plants	_ Fire Suppression
_ dogwood anthr	ORV	

Disturbance and animal use comments:

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.31

County: Warren Park: NATR (VICK) Plot Code: V56 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2				.5-1m	10%
Understory T3				1-2m	20%
Tall shrub S1				2-5m	30%
Short shrub S2				5-10m	40%
Herbaceous		100%	Eleocharis montevidensis -90%	10-15m	50%
Non-vascular				15-20m	60%
Vine/liana				20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
					10				10	Eleo mon		
					3				3	Agro sto		
					2				2	Pasp lae		
					2				2	Care cha		
					2				2	Phyla lan		
					1				1	Plue odo		
					1				1	Fest acu		
					1				1	Boeh cyl		
			2						2	Sali nig		
					1				1	Mika sca		
					1				1	Poly pun		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK.32

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V57 State: AL (MS) TN Location org: NPS

Provisional community name Sorghum halapense herbaceous vegetation

Classified community name

Classifyer CWN *Date* *NVC ELCODE* CEGL004108

Survey date: 8/31/2004 **Surveyors initials:** CWN, AS, Kurt Foote

Tagged tree is a No tag tree of ____ cm dbh with tag #_____. Center of 20 x 50m plot is at a bearing of ____ degrees and ____ m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

Near Hoveys Approach parking area, south of it. From Tour Stop 15 sign about 25 m SW at 200° to plot center

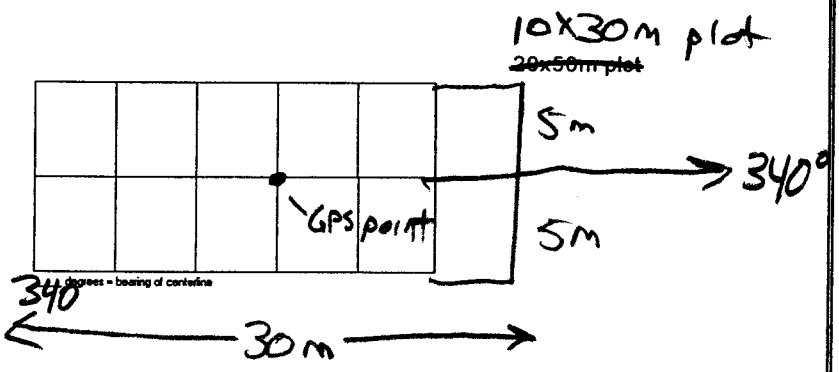
Time taken to walk to plot: 2 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓NO - If not, depict below)

PLOT LOCATION (Below show general plot location)





Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 40-43 Description of pictures (N,E,S & W from GPS point at middle of plot) :_____

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.33431 N -090.86050 W WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) ~~NAD 83~~ OR NAD27 UTM ~~Zone: 15 16~~

GPS Unit ID 3 GPS file name V57_____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? Coordinate accuracy _____ m / ft DOP _____ # sats

VICK.32

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR VICK Plot Code: VS7 State: AL MS TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope ____ ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
✓ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 205 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		✓ S	158-202 °
__ N	338-22 °	✓ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion

_ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
✓ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System

✓ *Upland* _ *Palustrine*
_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)

✓ Not a wetland (Upland: XERIC : DRY - MESIC / MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Was also clear during civil war.

Soil Texture:

__ Sand __ Peat ✓ Silt loam __Muck
__ Sandy loam __ Loam __ Clay loam __Clay

Drainage:

__ Rapidly drained __ Moderately well drained __Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	60% Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	____% Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	40% Bare soil	

Leaf type:

__Broad-leaved
__Needle-leaved
__Microphyllous
✓ Graminoid
__Broad-leaved herbaceous
__Pteridophyte
__Extremely xeromorphic
__Mixed

Leaf phenology (dominant stratum)

__ Evergreen
__ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
✓ Herb - Perennial

Physiognomic Class

__ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
✓ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
✓ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	_ ORV	

Disturbance and animal use comments:

mowed 2 x/year

VICK.32

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V57 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2				.5-1m	10%
Understory T3				1-2m	20%
Tall shrub S1				2-5m	30%
Short shrub S2				5-10m	40%
Herbaceous		100%	Sorghum halapense - 80%	10-15m	50%
Non-vascular				15-20m	60%
Vine/liana				20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
					9				9	Sorg hal		
					6				6	Fest aru		
					5				5	Melo pen		
					3				3	Comm dif / Commelina	COMMUNIS	
					2				2	Digi isc		
							2		2	Cock car		
					1				1	Erec hie		
					2				2	Seta par		
					1				1	Lact flo		
					2				2	Case che		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK.33

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V58 State: AL (MS) TN Location org: NPS

Provisional community name Robinia Pseudoacacia Shrubland

Classified community name Robinia pseudoacacia Forest
Classifyer CWN *Date* 9/1/2004 *NVC ELCODE* CEGL00 7279

Survey date: 9/1/2004 **Surveyors initials:** CWN & AS

Tagged tree is a No tag tree of ____ cm dbh with tag #_____. Center of 20 x 50m plot is at a bearing of ____ degrees and ____ m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

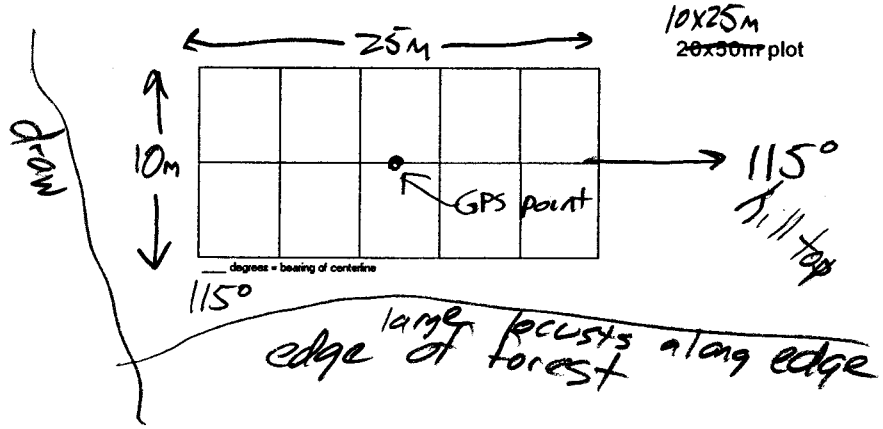
About 0.1 - 0.2 mile past, east of intersection of East side North loop Rd. and Pemberton Ave. (Before Michigan Monument on west facing slope between road and forest just past bridge, south of road.

Time taken to walk to plot: 2 Minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:
< 1HA 1-10 HA 10-100HA > 100HA

PIC # 61-84 Description of pictures (N,E,S & W from GPS point at middle of plot) :_____

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.35476° N -090.84235° W
WGS 84

GPS Techniques/Equipment: (Garmin III) Garmin V **Datum(pick one)** ~~NAD 83 OR NAD27~~ **UTM Zone:** ~~15 16~~

GPS Unit ID _____ **GPS file name** V58_____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E **Y** _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? ✓ Coordinate accuracy 5 m / ft DOP 1.3 # sats 7

County: Warren Park: NATR (VICK) Plot Code: V58 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 18 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
✓ Moderate	6-14 °	10-25%
✓ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect ____ ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	✓ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion

__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
✓ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Was open in past, black locust is seeding in from trees to south at edge of forest

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	40% Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	____% Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	60% Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
__ Forest (closed tree canopy)
__ Woodland (open tree canopy)
✓ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	_ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:
See notes under landscape landuse history above.

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V58 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2				.5-1m	10%
Understory T3				1-2m	20%
Tall shrub S1	2-5m	90%	Robinia pseudo-acacia-90%	2-5m	30%
Short shrub S2	—	—		5-10m	40%
Herbaceous	—	80%	Sorghum halepense - 46% Festuca arundinacea - 5%	10-15m	50%
Non-vascular				15-20m	60%
Vine/liana				20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
			9						9	Robi pse		
				1					1	Jugl nig		
					7				7	Soy hal		
					3				3	Comm ass Commelina communis		
					4				4	Fest aru		
					2				2	Case che		
					3				3	Soli can		
					3				3	Pasp not		
					2				2	Lact can		
							1		1	Cocc car		
					1				1	Ager coe		
							2		2	Viti rot		
					1				1	Oxal dil		
					2				2	Elym dis		
					1				1	Digi fil		
					2				2	Phyto ame		
					1				1	Duch ind		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK·34

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V59 State: AL (MS) TN Location org: NPS

Provisional community name _____

Classified community name Salix nigra large river Floodplain Forest
Classifyer CWN *Date* 9/2/2004 *NVC ELCODE* 7410

Survey date: 9/2/2004 **Surveyors initials:** CWN & AS & Kurt Foote

Tagged tree is a black willow of 37 cm dbh with tag # 34. Center of 20 x 50m plot is at a bearing of 10° degrees and 4 m from tree. tag is on SW side of tree.

Directions to tag tree (including any notes on best access route, and mile marker):

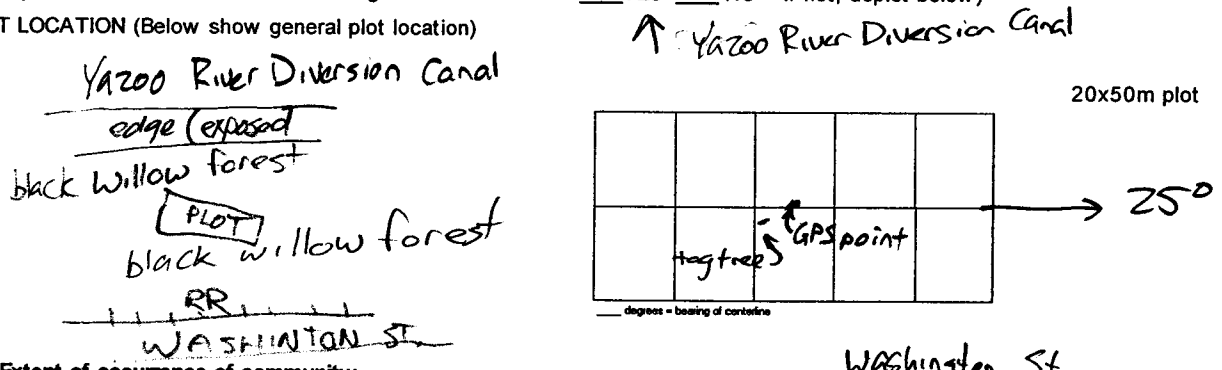
Vicksburg, take Washington St. North from downtown, pull off on west side of road at wide area, go back to vicinity of 45 mph sign (facing N.) and go in along NPS South property line. Be careful, river was low. Plot is about 40 m NE of NPS corner by Yazoo River Diversion Canal.

Time taken to walk to plot: 12 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ✓ YES ___ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 111-114 **Description of pictures (N,E,S & W from GPS point at middle of plot) :** _____

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.36887° N -090.87482° W WGS 84

GPS Techniques/Equipment: (Garmin III+) ~~Garmin V~~ **Datum(pick one)** NAD 83 OR NAD27 | ~~UTM Zone: 15 16~~

GPS Unit ID 3 **GPS file name** V59____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E **Y** _____ m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? **Coordinate accuracy** 8 m / ft **DOP** 2.5 **# sats** 7

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.34

County: Warren Park: NATR (VICK) Plot Code: V59 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 0 ° 0 %

✓ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 0 ° (N=0 °)

✓ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
__ Midslope ✓ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
__ *Upland* ✓ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

✓ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present: None apparent

Hydrologic Regime (check only for wetlands)
__ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded ✓ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: Periodically flooded from overflow of the Yazoo River Diversion Canal.

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):
Site may have been partially enhanced from spoil deposited during dredging operations the Yazoo River Diversion Canal.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained ✓ Somewhat poorly drained
__ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	20 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	10 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	70 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

__ logging	__ fire	__ Hydrologic
__ erosion	__ trails/roads	__ Agriculture
__ grazing/browsing	__ wind/ice damage	__ Old Growth
__ pine bark beetle	__ exotic plants	__ Fire Suppression
__ dogwood anthr	__ ORV	

Disturbance and animal use comments:
Association likely an artifact of anthropogenic disturbance.

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V59 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	80%	Salix nigra - 80%	.5-1m	10%
Understory T3	—	—		1-2m	20%
Tall shrub S1	2-3m	80%	Forestiera acuminata - 40%, Planera aquatica - 20%, Cephalanthus occidentalis - 20%	2-5m	30%
Short shrub S2	.5-1m	30%	Forestiera acuminata - 10%, Cephalanthus occidentalis - 10%	5-10m	40%
Herbaceous	—	20%	Saururus cernuus - 10%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana	—	20%	Brunnichia ovata - 10%, Vitis vulpina - 10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	9								9	Sali nig		
			7	5					7	Fore acu		
							5		5	Brun ova		
			6	4					6	Plan aqu		
					1				1	Cyna tal		
			6	5					7	Ceph occ		
					2				2	Hibi mos		
					2				2	Bach cyl		
					5				5	Saur cer		
				2					2	Toxi rad		
							5		5	Viti vul		
			1	2					2	Gled tri		
					2				2	Xant str		
					3				3	Leersia sp		
				2					2	Taxo dis		
					3				3	Alte phi		
					2				2	Sicy ang		
			2	1					2	Cary aqu		
					2				2	Ipom lac		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK-35

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V60 State: AL (MS) TN Location org: NPS

Provisional community name Broussonetia papyrifera Forest

Classified community name Broussonetia papyrifera Forest

Classifyer CWN *Date* _____ *NVC ELCODE* CEGL000406

Survey date: 9/2/2004 **Surveyors initials:** CWN, AS, Kurt Foote

Tagged tree is a Paper mulberry of 29 cm dbh with tag # 35. Center of 20 x 50m plot is at a bearing of 90° degrees and 0.6 m from tree. Tag is on south side of tag tree

Directions to tag tree (including any notes on best access route, and mile marker):

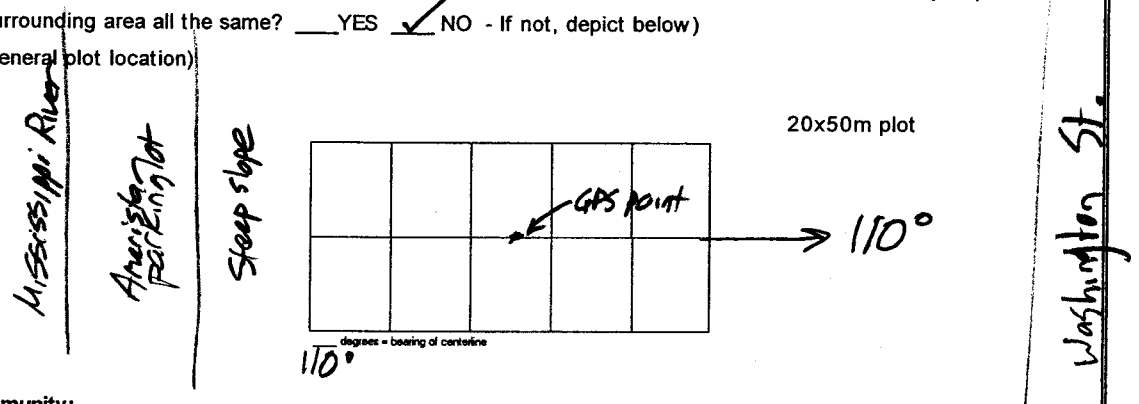
Vicksburg NMP, South Fort Unit, just N. of Ameristar Casino parking lot. Park at Ameristar Casino upper parking lot From top of hill where cannon are go N from NW corner of grassy area. Tag tree is about 25 m N.

Time taken to walk to plot: 5 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 115-118

Description of pictures (N,E,S & W from GPS point at middle of plot) : mowed monument area

Select one: ~~UTM~~ OR (Lat/long) (If lat/long, then values are 32.31617° N -090.89895° W WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) ~~NAD 83 OR NAD27~~ UTM Zone: ~~15 or 16~~

GPS Unit ID 3 GPS file name V60 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? ✓ Coordinate accuracy 30 m / ft DOP 7 # sats 4

VICK.35

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V60 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 9 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
✓ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 300 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	✓ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
✓ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC (DRY) - MESIC: MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: Dense vegetation cover likely prevents excessive runoff. However, low shrub and herbaceous components are sparse, thus having high potential for erosion if canopy is thinned or removed.

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability): Currently dominated by an exotic species (Broussonetia papyrifera), an artifact of human disturbance. Cleared during Civil War era.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	80 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	10 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	10 % Bare soil	

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments: Association is an artifact of human disturbance.

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.35

County: Warren Park: NATR (VICK) Plot Code: V60 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	15-20m	80%	Broussonetia papyrifera - 80%	.5-1m	10%
Understory T3	10-15m	50%	Broussonetia papyrifera - 50%	1-2m	20%
Tall shrub S1	2-5m	20%	Broussonetia papyrifera - 20%	2-5m	30%
Short shrub S2	.5-1m	10%	Broussonetia papyrifera - 10%	5-10m	40%
Herbaceous	—	—	Arundinaria gigantea - 20%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana	—	5%	Lonicera japonica - 5%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	9	9	6	5					10	Brou pap		
				2					2	Rubi pse		
		3		1					3	Acer neg		
		3							3	Ulmu rub		
							4		4	Loni jap		
		3							3	Ulmu ala		
					5				5	Elym vir		
					2				2	Caly hyp		
					6				6	Arun gig		
				2					2	Lige sid		
					2				2	Geum can		
				1					1	Prun car		
				2					2	Samb can		
							2		2	Part qui		
					1				1	Care cry		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.36

County: Warren Park: NATR (VICK) Plot Code: V61 State: AL (MS) TN Location org: NPS

Provisional community name Kudzu vineland

Classified community name Pueraria montana var. lobata Vine-shrubland
Classifyer CWN *Date* 9/2/2004 *NVC ELCODE* 3.B82

Survey date: 9/2/2004 **Surveyors initials:** CWN & AS

Tagged tree is a No tag tree or ____ cm dbh with tag #_____. Center of 20 x 50m plot is at a bearing of ____ degrees and ____ m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

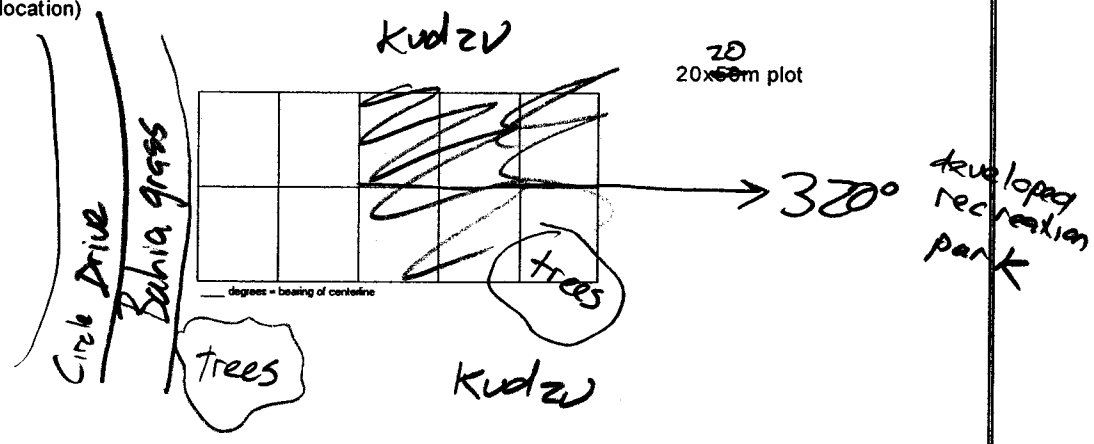
Vicksburg NMP, Louisiana Circle on bluff of Mississippi River. From middle of circle drive on NW facing slope. Center of plot is 10 m into Kudzu.

Time taken to walk to plot: 2 minutes

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x ~~50~~ 20m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ✓ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:
< 1HA 1-10 HA 10-100HA > 100HA

PIC # 119-122 Description of pictures (N,E,S & W from GPS point at middle of plot) :

123 View of Kudzu and Mississippi River.

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.31989° N -090.89735° W WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) ~~NAD 83 OR NAD27~~ UTM ~~Zone: 15 16~~

GPS Unit ID 3 GPS file name V61____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? ✓ Coordinate accuracy 8 m / ft DOP 1.7 # sats 6

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.36

County: Warren Park: NATR (VICK) Plot Code: V61 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 24 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
✓ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 320 (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	✓ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
✓ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	Ravine

Rock types present: Not observed

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: Dense covering of kudzu likely precludes any excessive runoff of precipitation, thus minimizing erosion.

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):
Apparently cleared during Civil War and subsequently periodically thereafter. Current conditions are an artifact of human disturbance.

Soil Texture:
__ Sand __ Peat __ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	____% Litter, duff	0 % Other _____
____% Large rocks (cobbles, boulders >10cm)	____% Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	____% Bare soil	

Leaf type:
__ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
✓ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
__ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
✓ Herb - Perennial

Physiognomic Class
__ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
✓ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	✓ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:
Association an artifact of anthropogenic disturbance.

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.36

County: Warren Park: NATR (VICK) Plot Code: V61 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2				.5-1m	10%
Understory T3				1-2m	20%
Tall shrub S1				2-5m	30%
Short shrub S2				5-10m	40%
Herbaceous		100%	Pueraria montana var. lobata - 100%	10-15m	50%
Non-vascular				15-20m	60%
Vine/liana				20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
					10				10	Puer mon var. lob		
					2				2	Ambr tri		
					3				3	Digi cil		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK-37

County: WARREN Park: NATR (VICK) Plot Code: V62 State: AL (MS) TN Location org: NPS

Provisional community name BLACK LOCUST

Classified community name Robinia pseudoacacia Forest
Classifyer CWN *Date* 9/15/2004 *NVC ELCODE* 7279

Survey date: 9-10-04 **Surveyors initials:** A. SCHOTZ, E. LUNSFORD

Tagged tree is a ROBI PSE of 32 cm dbh with tag # 41. Center of 20 x 50m plot is at a bearing of 200 degrees and 2 m from tree. GPS POINT IS AT S BASE OF TREE. FACING EAST

Directions to tag tree (including any notes on best access route, and mile marker):

FOLLOW GRAVEYARD ROAD W FROM UNION AVENUE FOR ~0.25 MILES UNTIL REACHING 2ND DIRT ROAD ON S (ON N, TREE WHITE). GPS PT WILL BE ~85M DUE S.

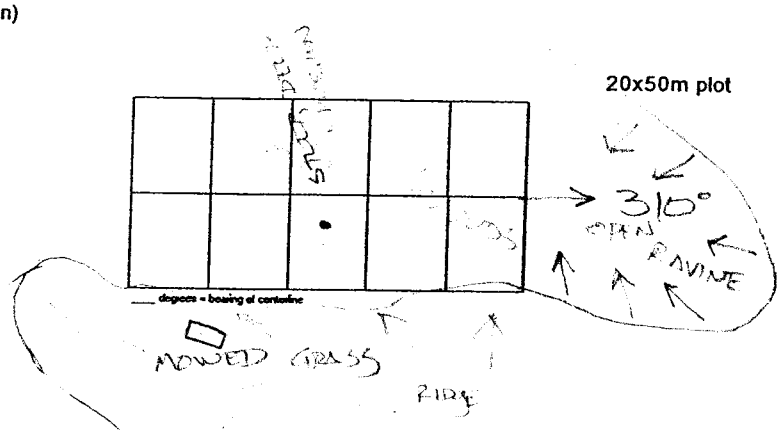
PLOT IS ON SLOPE TO W OF "UNION TRENCH - 1 WING'S BRIGADE" (BLUE SIGNS MARK TRENCH)

Time taken to walk to plot:

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC # 23-27 Description of pictures (N,E,S & W from GPS point at middle of plot): 24-27 NESW

23 = FROM OUTSIDE NE OF PLOT, LOOKING AT CANYON / BLACK LOCUST

Select one: UTM OR Lat/long (If lat/long, then values are 32.36732 N -87.85224 W NAD 84

GPS Techniques/Equipment: Garmin III+ Garmin V Datum(pick one) ~~NAD 83 OR NAD27~~ UTM Zone: ~~15~~ 16

GPS Unit ID _____ GPS file name V62 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? YES Coordinate accuracy 6 m / ft DOP 2.6 # sats 7

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.37

County: Warren Park: NATR (VICK) Plot Code: V62 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 15 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
✓ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 220 (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		✓ S	158-202 °
__ N	338-22 °	✓ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion

__ Interfluve (Ridge/summit/crest) __ Toeslope
✓ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat
__ Alluvial terrace
__ Bald
__ Bank
__ Bar
__ Bench
__ Bottomlands
__ Cliff
__ Cove
__ Depression
__ Draw
__ Exogenous dome
__ Floodplain
__ Gap
__ Gorge
__ Hillslope bedrock outcrop
__ Midslope
__ Nose slope
__ Ridge
__ Ridgetop bedrock outcrop
__ Saddle
__ Seep
__ Toe slope
✓ Slope
__ Streambed
__ Streamhead
__ Periglacial boulderfield
__ Ravine

Rock types present: None apparent

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC (MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: Severe erosion in the past, as suggested by a series of deep, steep-sided gullies. Presently in the process of recovering.

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):
Association is an artifact of human disturbance - a mature stand of an early successional species (Robinia). Erosion likely resulted from land clearing years ago and is now subsiding as site becomes revegetated.

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock
____% Large rocks (cobbles, boulders >10cm)
____% Small rocks (gravel, 0.2-10 cm)
____% Sand (0.1-2 mm)
80% Litter, duff
10% Wood (> 1 cm)
____% Water
10% Bare soil
____% Other _____

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
✓ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
✓ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

__ logging __ fire __ Hydrologic
✓ erosion __ trails/roads __ Agriculture
__ grazing/browsing __ wind/ice damage __ Old Growth
__ pine bark beetle ✓ exotic plants __ Fire Suppression
__ dogwood anthr __ ORV

Disturbance and animal use comments: Severe infestation of Chinese privet, English ivy, and other exotics. Series of deep eroded gullies present.

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.37

County: Warren Park: NATR (VICK) Plot Code: V62 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	15-20m	60%	Robinia pseudo-acacia - 50%	.5-1m	10%
Understory T3	10-15m	50%	Robinia pseudo-acacia - 10%, Ulmus ruban - 20%	1-2m	20%
Tall shrub S1	2-5m	50%	Ligustum sinense - 30%	2-5m	30%
Short shrub S2	.5-1m	20%	Ligustum sinense - 5%	5-10m	40%
Herbaceous	—	30%	Arundinaria gigantea - 30%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana		30%	Ampelopsis arborea - 10%, Toxicodendron radicans - 10%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

T1: Emergent | T2: Tree Canopy | T3 Subcanopy | S1 Tall Shrub (> 1m; to 5m) | S2 Short Shrub (< 1m) | H Herbaceous | N Nonvascular | V Vines (lianas) | E Epiphytes

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	7	(6							7	Robi pse		
		5	3						5	Moru rub		
		6	3						6	Ulmu rub		
	5								5	Liri tul		
			4						4	Celt lae		
			7	4 ✓					7	Ligu sin		
							5		5	Ampe arb		
							4		4	Loni jap		
				2			5		5	Toxi rad		
					2				2	Itea hel		
		4	3	1					5	Acer neg		
	4	2							4	Ulmu ala		
			4	3					5	Prun cer		
					2				2	Geum can		
					3				3	Cyrt for		
					7				7	Arun gig		
				3					3	Quer nig		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.37

County: Warren Park: NATR (VICK) Plot Code: V62 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
					1				1	Aslm tri		
							3		3	Carc cur		
					1				1	Pass lut		
							4		4	Viti cin		
		4							4	Juni vir		
							3		3	Part qui		
				2					2	Rubu arg		
				2					2	Euon ame		
				2					2	Elyp cur		

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK-38

County: WARREN Park: NATR (VICK) Plot Code: V63 State: AL (MS) TN Location org: NPS

Provisional community name GRAPE HOLE?

Classified community name *Liriodendron tulipifera* / (*Cercis canadensis*) / (*Lindera benzoin*) Forest
Classifyer CWN Date 5/18/2005 NVC ELCODE 7220

Survey date: 9/10/04 Surveyors initials: A SCHOTZ, E. LUNSFORD

Tagged tree is a NO TAG of ____ cm dbh with tag #_____. Center of 20 x 50m plot is at a bearing of ____ degrees and ____ m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

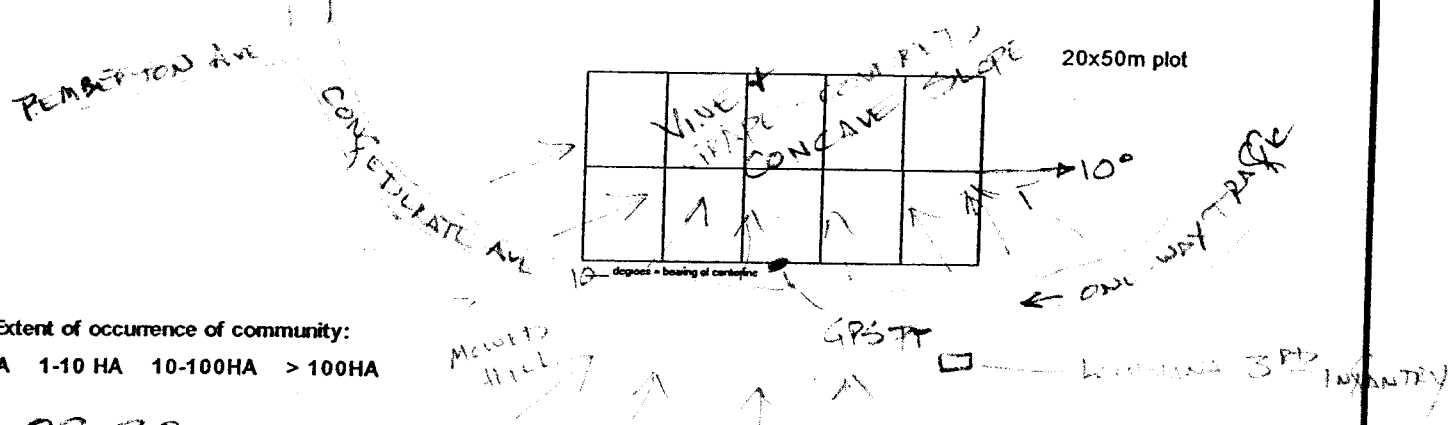
PARK NEAR JUNCTION OF PEMBERTON & CONFEDERATE AVENUE. WALK N BACK DOWN CONFEDERATE AVE (ca. 50M). PLOT IS ON W SIDE OF CONFEDERATE AVE.

Time taken to walk to plot:

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:
< 1HA 1-10 HA 10-100HA > 100HA

PIC # 28-30 Description of pictures (N,E,S & W from GPS point at middle of plot): 28=N

29=S 30=W

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.358873 N -90.84476 W
WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) ~~NAD 83~~ OR NAD27 UTM Zone: 15 16

GPS Unit ID _____ GPS file name V63____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? Coordinate accuracy 5 m / ft DOP 1.2 # sats 8

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.38

County:_____ Park: NATR (VICK) Plot Code: 153 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 30 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
✓ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 280° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	✓ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion

__ Interfluve (Ridge/summit/crest) __ Toeslope
✓ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
✓ *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat
__ Alluvial terrace
__ Bald
__ Bank
__ Bar
__ Bench
__ Bottomlands
__ Cliff
__ Cove
__ Depression
__ Draw
__ Exogenous dome
__ Floodplain
__ Gap
__ Gorge
__ Hillslope bedrock outcrop
__ Midslope
__ Nose slope
__ Ridge
__ Ridgetop bedrock outcrop
__ Saddle
__ Seep
__ Toe slope
✓ Slope CONCAVE
__ Streambed
__ Streamhead
__ Periglacial boulderfield
__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
✓ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Soil Texture:
__ Sand __ Peat ✓ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover UNVEGETATED = 0%

____% Bedrock
____% Large rocks (cobbles, boulders >10cm)
____% Small rocks (gravel, 0.2-10 cm)
____% Sand (0.1-2 mm)
____% Litter, duff
____% Wood (> 1 cm)
____% Water
____% Bare soil
____% Other _____

Leaf type:
✓ Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
✓ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
__ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation
__ VINE

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	_ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.38

County: Warren Park: NATR (VICK) Plot Code: V63 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	10-15m	10%	Liriodendron tulipifera-10%	.5-1m	10%
Understory T3	—	—		1-2m	20%
Tall shrub S1	2-5m	10%	tall shrubs sparse; coverage = 10%	2-5m	30%
Short shrub S2	.5-1m	<1%	short shrubs sparse; total cover = <1%	5-10m	40%
Herbaceous	—	—		10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana		100%	Ampelopsis cordata - 40%, Vitis cinerea - 30% Polygonum convolvulus - 30%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
							2		2	Ampe cor		
							2		2	Viti cin		
							6		6	Poly con		
			2						2	Samb can		
							4		4	Ampe arb		
							3		3	Cocc car		
					2				2	Sorg hal		
			3						3	Melo aze		
	3								3	Lini tul		
			3						3	Acer neg		
				2					2	Brou pap		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.39

County: WARREN Park: NATR (VICK) Plot Code: V64 State: AL (MS) TN Location org: NPS

Provisional community name LOBLOLLY PINE - PLANTED

Classified community name PINUS taeda planted Forest
Classifyer CWN *Date* 9/15/2004 *NVC ELCODE* 7179

Survey date: 9/11/04 **Surveyors initials:** AL SCHOTZ, ERIN LUNSFORD

Tagged tree is a NO TAG of ____ cm dbh with tag #_____. Center of 20 x 50m plot is at a bearing of ____ degrees and ____ m from tree.

Directions to tag tree (including any notes on best access route, and mile marker):

DRIVE TO NE REGION of PARK, TO SHERMAN'S CIRCLE. PLOT IS UNDER PINES ON NE LENGTH of GRASSY KNOLL.

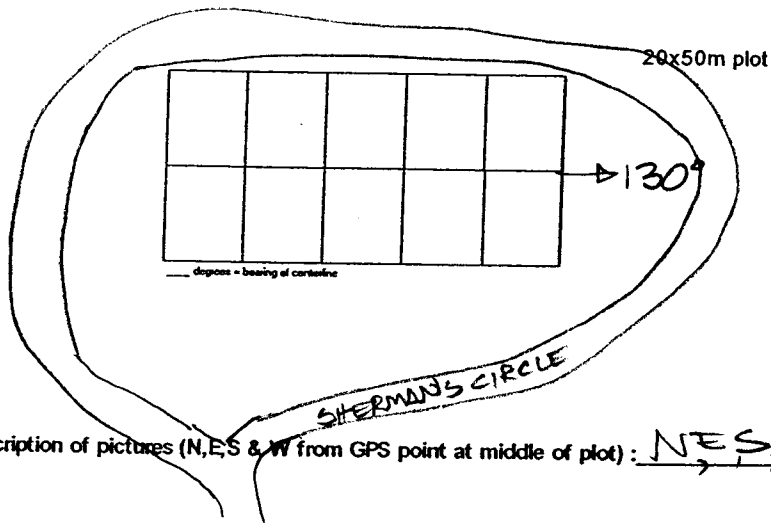
FROM THE MONUMENT TO INDIANA'S 100th INFANTRY, PLOT CENTER IS 318° ± 21 M.

Time taken to walk to plot:

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:
< 1HA 1-10 HA 10-100HA > 100HA

PIC # 31-34 Description of pictures (N,E,S & W from GPS point at middle of plot): N, E, S, W

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.37656 N -90.83741 W

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) WGS84 ~~NAD 83 OR NAD27~~ ~~UTM Zone: 15 16~~

GPS Unit ID _____ GPS file name V64_____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? 165 Coordinate accuracy 11 (m) ft DOP 3.2 # sats 6

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.39

County: WARREN Park: NATR VICK Plot Code: V64 State: AL MS TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope ____ ° ____ %			Measured Aspect ____ ° (N=0 °)			Topographic Postion	
__ Flat VARIABLE	0 °	0 %	__ Flat	__ SE	113-157 °	_ Interfluve (Ridge/summit/crest)	__ Toeslope
__ Gentle	0-5 °	1-9%	✓ Variable	__ S	158-202 °	✓ High Slope (upper/convex slope)	
__ Moderate	6-14 °	10-25%	__ N 338-22 °	__ SW	203-247 °	__ Midslope	__ Low level (terrace)
__ Somewhat steep	15-25 °	26-49%	__ NE 23-67 °	__ W	248-292 °	__ Lowslope (lower/footslope)	__ Channel bed
__ Steep	27-45 °	50-100%	__ E 68-112 °	__ NW	293-337		
__ Very steep	45-69 °	101-275%				*Cowardin System*	
__ Abrupt	70-100 °	276-300				_ *Upland*	_ *Palustrine*
__ ovrhng/shltrd	>100 °	>300%				_ *Estuarine*	_ *Lacustrine* _ *Riverine*

Landform (check most applicable)		
__ Alluvial flat	__ Cove	✓ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope ✓ KNOLL
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)

✓ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)

__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)

__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

A GRASSY KNOLL SURROUNDED BY A PAVED LOOP RD — SHERMAN'S CIRCLE.
PLANTED W/ EVERGREENS

Soil Texture:				Drainage:		
__ Sand	__ Peat	__ Silt loam	__ Muck	__ Rapidly drained	__ Moderately well drained	__ Somewhat poorly drained
__ Sandy loam	__ Loam	✓ Clay loam	__ Clay	✓ Well drained	__ Poorly drained	__ *Very poorly drained*

Ground cover

____% Bedrock	99 % Litter, duff	____% Other _____
____% Large rocks (cobbles, boulders >10cm)	1 % Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	____% Bare soil	

Leaf type:	Leaf phenology (dominant stratum)	Physiognomic Class
__ Broad-leaved	✓ Evergreen	__ Forest (closed tree canopy)
✓ Needle-leaved	__ Cold-deciduous	✓ Woodland (open tree canopy)
__ Microphyllous	__ Drought-deciduous	__ Shrubland
__ Graminoid	__ Mixed evergreen-cold-deciduous	__ Dwarf Shrubland
__ Broad-leaved herbaceous	__ Mixed evergreen drought deciduous	__ Herbaceous (less than 25% woody layers)
__ Pteridophyte	__ Herb - Annual	__ Nonvascular
__ Extremely xeromorphic	__ Herb - Perennial	__ Sparse Vegetation
Mixed		

Natural and Anthropogenic Disturbance			*Disturbance and animal use comments:*
_ logging	_ fire	_ Hydrologic	AN ARTIFACT OF HUMAN DISTURBANCE
_ erosion	_ trails/roads	_ Agriculture	TREES WERE PLANTED; GRASSES
_ grazing/browsing	_ wind/ice damage	_ Old Growth	MOWED
_ pine bark beetle	_ exotic plants	_ Fire Suppression	
dogwood anthr	ORV		

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren **Park:** NATR (VICK) **Plot Code:** V64 **State:** AL (MS) TN **Location org:** NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35m	50%	Pinus taeda - 50%	.5-1m	10%
Understory T3	10-15m	20%	Juniperus virginiana - 20%	1-2m	20%
Tall shrub S1	—	—		2-5m	30%
Short shrub S2	—	—		5-10m	40%
Herbaceous	—		Paspalum notatum - 60%	10-15m	50%
Non-vascular	—	—		15-20m	60%
Vine/liana	—	5%	Parthenocissus quinquefolius - 5%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T 1	T 2	T 3	S 1	S 2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	7								7	Pinu tae		
		6							6	Juni vir		
					8				8	Pasp not		
					3				3	Viol sor		
					5				5	Digi fil		
					2				2	Opli set		
							4		4	Part qui		
							2		2	Smil bon		
							1		1	Smil gla		
				2					2	Toxi rad		
							2		2	Loni jap		
					2				2	Camm asi		
					1				1	Care che		
					1				1	Oxal dil		
							2		2	Viti cin		
			2						2	Ulmu ala		
					1				1	Lact flo		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

VICK.40

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: WARREN Park: NATR (VICK) Plot Code: V65 State: AL (MS) TN Location org: NPS

Provisional community name SUMAC SHRUBLAND

Classified community name NLCD (1992) COVER CLASS #51 SHRUBLAND (DECIDUOUS)
Classifyer CWAL *Date* _____ *NVC ELCODE* _____

Survey date: 9/11/04 **Surveyors initials:** A.S., E.L.

Tagged tree is a NO TAG of ____ cm dbh with tag #_____. Center of ~~20 x 50m~~ 10x30 plot is at a bearing of ____ degrees and ____ m from tree.

Directions to tag tree (including any notes on best access route, and mile marker): ON CONFEDERATE AVENUE HEADING E, PARK AT PULLOVER OVERLOOKING THAYER'S APPROACH TO N. ONE OF SIGNS = RED "CONFEDERATE LINE - 26th LOUISIANA". WALK N DOWN HILL ON RIGHT (EASTMOST) SIDE OF CLEARING, DOWN TO SUMAC SHRUBLAND ON LEFT (W-FACING SLOPE OF RAVINE)

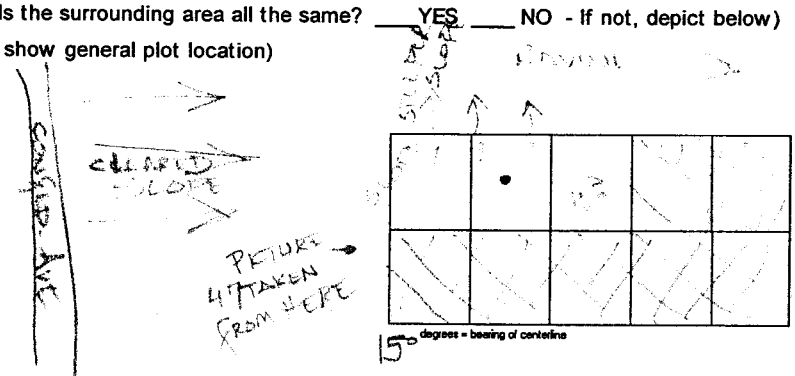
FROM BROWN MONUMENT TO MISSOURI 17th INFANTRY, CENTER OF PLOT IS 240°, 10.5m

Time taken to walk to plot:

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ____ YES ____ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA 1-10 HA 10-100HA > 100HA

PIC #_____ **Description of pictures (N,E,S & W from GPS point at middle of plot) :** 47=FROM OUTSIDE SE CORNER OF PLOT, LOOKING N AT PLOT

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.37253 N -90.85024 W WGS 84

GPS Techniques/Equipment: (Garmin III+) Garmin V **Datum(pick one)** ~~NAD 83 OR NAD27~~ ~~UTM Zone: 15 16~~

GPS Unit ID _____ **GPS file name** V65____ (standard = First letter of park + # of plot (N04 or V04)

Field UTM X ____m E **Y** ____m N **Elevation** _____ m / ft

Averaging performed (at least 120 observations)? 20% **Coordinate accuracy** 8 (m) / ft **DOP** 2.0 **# sats** 6

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.40

County: Warren Park: NATR (VICK) Plot Code: V65 State: AL (MS) TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 18 ° ___ %			**Measured Aspect** 240 (N=0 °)			**Topographic Postion**
__ Flat	0 °	0 %	__ Flat	__ SE	113-157 °	_ Interfluve (Ridge/summit/crest) __ Toeslope
__ Gentle	0-5 °	1-9%	__ Variable	__ S	158-202 °	✓ High Slope (upper/convex slope)
__ Moderate	6-14 °	10-25%	__ N 338-22 °	__ SW	203-247 °	__ Midslope __ Low level (terrace)
✓ Somewhat steep	15-25 °	26-49%	__ NE 23-67 °	✓ W	248-292 °	__ Lowslope (lower/footslope) __ Channel bed
__ Steep	27-45 °	50-100%	__ E 68-112 °	__ NW	293-337	
__ Very steep	45-69 °	101-275%				*Cowardin System*
__ Abrupt	70-100 °	276-300				✓ *Upland* _ *Palustrine*
__ ovrhng/shltrd	>100 °	>300%				_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	✓ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)

✓ Not a wetland (Upland: XERIC : DRY - MESIC : (MESIC))

__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)

__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: No erosion observed. Heavily vegetated, duff greatly precluding any potential for erosion.

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Community is an artifact of human disturbance - cleared by Park service to enhance visual effect of battlefield.

Soil Texture:

__ Sand __ Peat ✓ Silt loam __ Muck

__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:

__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained

✓ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock	____% Litter, duff	0 % Other _____
____% Large rocks (cobbles, boulders >10cm)	____% Wood (> 1 cm)	
____% Small rocks (gravel, 0.2-10 cm)	____% Water	
____% Sand (0.1-2 mm)	____% Bare soil	

Leaf type:	**Leaf phenology** (dominant stratum)	**Physiognomic Class**
✓ Broad-leaved	✓ Evergreen	__ Forest (closed tree canopy)
__ Needle-leaved	✓ Cold-deciduous	✓ Woodland (open tree canopy)
__ Microphyllous	__ Drought-deciduous	✓ Shrubland
__ Graminoid	__ Mixed evergreen-cold-deciduous	__ Dwarf Shrubland
__ Broad-leaved herbaceous	__ Mixed evergreen drought deciduous	__ Herbaceous (less than 25% woody layers)
__ Pteridophyte	__ Herb - Annual	__ Nonvascular
__ Extremely xeromorphic	__ Herb - Perennial	__ Sparse Vegetation
__ Mixed		

Natural and Anthropogenic Disturbance

_ logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	_ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:

Association is an artifact of anthropogenic disturbance.

VICK.40

NPS GULF COAST PROJECT: Plot *Sampling Form*

County: Warren Park: NATR (VICK) Plot Code: V65 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2				.5-1m	10%
Understory T3				1-2m	20%
Tall shrub S1	2-5m	80%	Rhus glabra - 80%	2-5m	30%
Short shrub S2	.5-1m	5%	short shrub very sparse; total cover < 5%	5-10m	40%
Herbaceous	–	80%	Solidago canadensis - 40%	10-15m	50%
Non-vascular	–	–		15-20m	60%
Vine/liana		10%	Lonicera japonica 5%	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

***T1:** Emergent | **T2:** Tree Canopy | **T3** Subcanopy | **S1** Tall Shrub (> 1m; to 5m) | **S2** Short Shrub (< 1m) | **H** Herbaceous | **N** Nonvascular | **V** Vines (lianas) | **E** Epiphytes*

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
			9						9	Rhus gla		
			2						2	Quer nig		
					7				7	Soli can		
					5				5	Sorg hal		
			2						2	Sambu can		
					5				5	Rubu arg		
							4		4	Loni jap		
				3					3	Toxi rad		
					2				2	Pass inc		
							2		2	Cocc car		
							3		3	Ampe cor		
					2				2	Amph tri		
							3		3	Ampe arb		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK, V66

County: WARREN Park: NATR (VICK) Plot Code: V66 State: AL (MS) TN Location org: (NPS)

Provisional community name

Classified community name Liriodendron tulipifera / (Cercis canadensis) / (Lindera benzoin) Forest
Classifyer CWN *Date* 5/18/2005 *NVC ELCODE* 7220

Survey date: 28 SEPT 2004 **Surveyors initials:** MP, KF

Tagged tree is a ULMUS AME of ___ cm dbh with tag # 307, Center of 20 x 50m plot is at a bearing of 300 degrees and 4 m from tree. 10.1 INCH TAG ON NE (UPHILL) SIDE OF TREE

Directions to tag tree (including any notes on best access route, and mile marker):

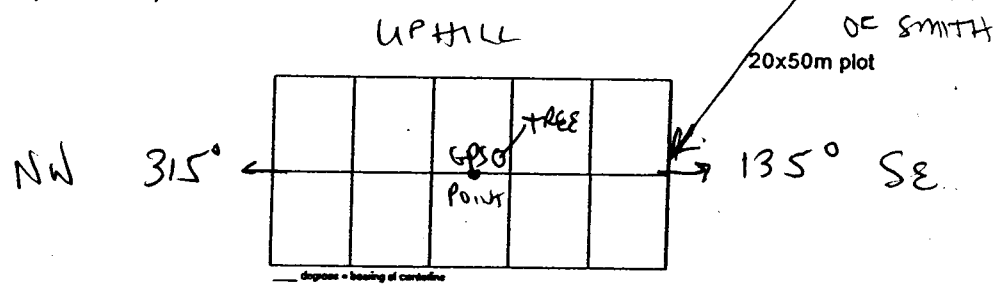
PARK AT 2ND NE BIG MISSOURI PLAQUE NEAR (W OF) JCT GRAVEYARD RD & CONFEDERATE AVE. WALK BACK W on Rd ca 30m and drop into woods Below BUST OF MARTIN L. SMITH & GO CA. E 50 m from BUST (FIND BREAK IN RUBUS OR MAKE ONE) to SE END OF PLOT. you can follow NW - SE "TONGUE" of land and drop off S/SW into plot

Time taken to walk to plot: 3 MINUTES - 5 MIN

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? X YES ___ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:
< 1HA 1-10 HA (10-100HA) > 100HA

PIC # ___ Description of pictures (N,E,S & W from GPS point at middle of plot): uphill / downhill 9, 10, 11, 12

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.37070 N 090.84725 W WGS84

GPS Techniques/Equipment: Garmin III+ Garmin V Datum(pick one) NAD 83_OR_NAD27 UTM Zone: 15 16

GPS Unit ID 3 GPS file name V66 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X 3 ___ m E Y ___ m N Elevation ___ m / ft

Averaging performed (at least 120 observations)? (250) yes Coordinate accuracy 7.4 m / ft DOP 1.7 # sats 4 (10 m EPE)

VJ
ent. BOLD 12/22/04

County:_____ Park: NATR VICK Plot Code: VG6 State: AL MS TN Location org: NPS

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 30 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	(27-45 °)	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 225 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	X SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
(High Slope (upper/convex slope)
__ Midslope
__ Lowslope (lower/footslope) __ Low level (terrace)
__ Channel bed

Cowardin System
(*Upland*) _ *Palustrine*
_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat	X Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	Nose slope	Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)
X Not a wetland (Upland: XERIC : DRY - MESIC (MESIC))
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:
Mesic upland - concave landform

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):
Probably originally oak - dominated - Now more successional species (LIRITU)

large dead (old) JUNIVIR in plot

Soil Texture: (LOESS)
__ Sand __ Peat __ Silt loam __ Muck
__ Sandy loam X Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
X Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____ % Bedrock	50 % Litter, duff	____ % Other _____
____ % Large rocks (cobbles, boulders >10cm)	20 % Wood (> 1 cm)	
____ % Small rocks (gravel, 0.2-10 cm)	____ % Water	
____ % Sand (0.1-2 mm)	30 % Bare soil	

Leaf type:
X Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
Mixed

Leaf phenology (dominant stratum)
__ Evergreen
X Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
X Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

X logging	_ fire	_ Hydrologic
X erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	_ exotic plants	X Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.66

County: WARR Park: NATR (VICK) Plot Code: V66 State: AL (MS) TN Location org: NPS

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1			~~LIRI TUL~~	< .5m	5%
Tree Canopy T2	20-35	60	LIRI TUL, LIQUSTY	.5-1m	10%
Understory T3	15-20	60	ACER NEG	1-2m	20%
Tall shrub S1	2-5	60	ASIM TRIL, LIGUVUL, ARUNG16 (SIM)	2-5m	30%
Short shrub S2	.5-1	40	LIGU (SIM) VUL, ASIMTRIL, NANDOM	5-10m	40%
Herbaceous	<.5	30	~~ATHY~~ FILA, CYST PROT	10-15m	50%
Non-vascular				15-20m	60%
Vine/liana	20-35	10	VITIS CIN, ~~TOXIRAD~~	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

T1: Emergent | T2: Tree Canopy | T3 Subcanopy | S1 Tall Shrub (>1m; to 5m) | S2 Short Shrub (< 1m) | H Herbaceous | N Nonvascular | V Vines (lianas) | E Epiphytes

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	7								7	LIRITUL		
		4			2				4	ALBIJUL		
		5							5	QUERC MICHL ?*	C	
		7							7	ACER NEG		
			4	4					5	ASIMTRIL		
							(4)		4	VITIS CIN		
				2					2	PRUN CAR		
	6								6	LIQUSTY		
		3							3	MORU RUBS		
	5								5	FRAX AME		
		3							3	ULMU AME		
	4								4	QUER NIG		
							~~(3)~~			~~SMOOTH BIG VINE~~		
							3		3	VITIS ROT		
			2						2	CELT LAEV ~~LOUI~~		
				1					1	DIOS VIR		
						3			3	POLYACR		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

* COULDN'T SEE LEAVES

* CF MICH / MUHL ?

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.66

County: WARR Park: NATR (VICK) Plot Code: V66 State: AL (MS) TN Location org: NPS

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
					3				3	PASSLUT		
					4				4	CYST PROT		
					3				3	~~Diplazium pycnocarpon~~ "sladorfern"	C	
					4				4	~~ATHY FIL~~ LOSP	C	
				2					2	NAND DOM		
					4				4	LONI JAP		
					3				3	BOEH CYL		
					2				2	CAREX SP		
			3	4					4	LIGU ~~VAR~~ SIN		
					2				2	CYRT FORT cyrtomium JAP HOLLY FERN	C	
					2		5		5	TOXI RAD		
					1				1	SANICULA CAN	E	✓
					2				2	ASPL PLATY		
					2				2	COCC CAR		
					2				2	AGER ALT ~~var alt Bud~~ !,	E	✓
			6						6	ARUN GIG *		
				2					2	FLEISH INC (= EUPA)		
				2					2	OPLI SET (Muhlenbergia Bud)		
					4		4		5	PART QUE		
					2				2	SYMP DRUMM		
					2				2	SOLA PTYC		
					5				5	HEDA HED		
					2				2	PTERIS MULTIFID "WEEDY FERN"	C	
					2				2	SMIL ~~RAC~~ SP = SMIL TAM		
			~~5~~						~~5~~	~~*"OTHER BAMBOO"~~		
					2				2	BIGN CAP		

Use bottom of this sheet or additional pages for other species in 1 ha plot

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

* 30-40% ? NOT CWN
"ARUNDINARIA" may be Elliottii
ON EXOTIC LOOK-ALIKE WITH HISPID PERSISTENT PALE TAN SHEATHS & SPARSELY WIRY CULMS - ADVISED AS "OTHER BAMBOO"

Community Survey
Page 4

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.67

County: WARREN Park: NATR (VICK) Plot Code: V67 State: AL (MS) TN Location orgs: (NPS)

Provisional community name Liquidambar styraciflua - Carya illinoinensis – Quercus nigra Forest

Classified community name New

Classifyer CWN Date _____ NVC ELCODE CEGL004122

Survey date: 28 Sept 2004 Surveyors initials: MP 6 PM EDT

Tagged tree is a QUERNI6 of 48 cm dbh with tag # 308. Center of 20 x 50m plot is at a bearing of 340 degrees and 5.3 m from tree.

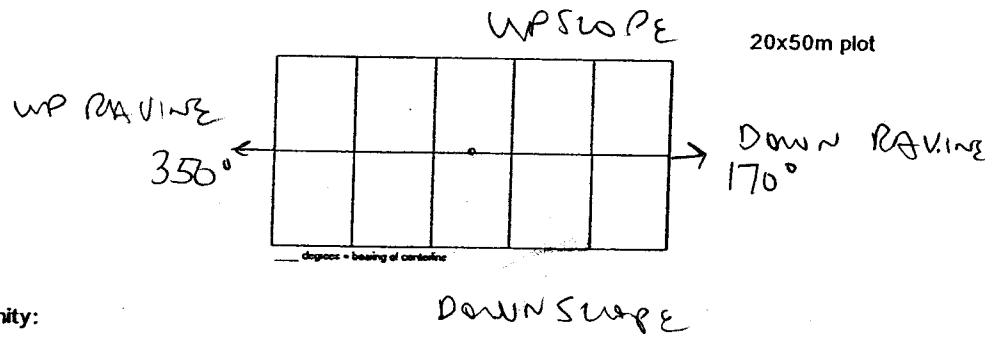
Directions to tag tree (including any notes on best access route, and mile marker): go just past 1st BRIDGE PAST THAYERS, PARK PAST "DO NOT ENTER" GATE (ROAD TO BOY SCOUT CAMPING AREA) WALK IN TO FIRING RANGE (?) ON RIGHT (SET OF GREEN POSTS IN FRONT OF EMBANKMENT - WALK UP RAVINE PAST EMBANKMENT CA 30 m TO TREE

Time taken to walk to plot: 4-5 MINUTES from Car (under Walnut tree on Rd)

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? (YES) ___ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA (1-10 HA) 10-100HA > 100HA

PIC # 24, 25, 26, 27 Description of pictures (N,E,S & W from GPS point at middle of plot): VIEWS OF PLOT & VICINTY FROM TOPE N-24, E-25, S-26, W, 27

Select one: UTM (OR Lat/long) (If lat/long, then values are 32.37605 N 090.85011 W

GPS Techniques/Equipment: Garmin III+ Garmin V Datum(pick one) (WGS84) NAD 83 OR NAD27 UTM Zone: 15 16

GARM3 # 3 GPS Unit ID _____ GPS file name V67 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? ✓ Coordinate accuracy 6.2 m / ft DOP 2.2 # sats 6

ent 12/21/04 BOD VD

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.67

County: Warren Park: NATR (VICK) Plot Code: V67 State: AL (MS) TN Location org: (NPS)

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 13 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
X Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 260 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	X W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion

_ Interfluve (Ridge/summit/crest) __ Toeslope
_ High Slope (upper/convex slope)
X Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System

_ *Upland* _ *Palustrine*
_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat
__ Alluvial terrace
__ Bald
__ Bank
__ Bar
__ Bench
__ Bottomlands
__ Cliff
__ Cove
__ Depression
__ Draw
__ Exogenous dome
__ Floodplain
__ Gap
__ Gorge
__ Hillslope bedrock outcrop
__ Midslope
__ Nose slope
__ Ridge
__ Ridgetop bedrock outcrop
__ Saddle
__ Seep
__ Toe slope
__ Slope
__ Streambed
__ Streamhead
__ Periglacial boulderfield
X Ravine

Rock types present:

Hydrologic Regime (check only for wetlands)

__ Not a wetland (Upland: XERIC : DRY - MESIC : (MESIC))
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY:

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Soil Texture:

__ Sand __ Peat __ Silt loam __ Muck
__ Sandy loam __ Loam __ Clay loam __ Clay

Drainage:

__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
__ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____% Bedrock
____% Large rocks (cobbles, boulders >10cm)
____% Small rocks (gravel, 0.2-10 cm)
____% Sand (0.1-2 mm)
____% Litter, duff
____% Wood (> 1 cm)
____% Water
____% Bare soil
____% Other _____

Leaf type:

__Broad-leaved
__Needle-leaved
__Microphyllous
__Graminoid
__Broad-leaved herbaceous
__Pteridophyte
__Extremely xeromorphic
__Mixed

Leaf phenology (dominant stratum)

__ Evergreen
__ Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class

__ Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

_ logging _ fire _ Hydrologic
_ erosion _ trails/roads _ Agriculture
_ grazing/browsing _ wind/ice damage _ Old Growth
_ pine bark beetle _ exotic plants _ Fire Suppression
_ dogwood anthr _ ORV

Disturbance and animal use comments:

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK. 67

County: WARREN Park: NATR (VICK) Plot Code: V67 State: AL (MS) TN Location org: (NPS)

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
			COVERAGE CANOPY & SUBCAN DOMINANTS VERY SUBJECTIVE		
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35	70	QUERNIG, CELTIS LAEV, LIQUSTY	.5-1m	10%
Understory T3	10-15	50	ULMUS ~~AME~~ RUB, QUERMICH.	1-2m	20%
Tall shrub S1	2-5	60	PONCTRI, LIGUVULSIN.	2-5m	30%
Short shrub S2	.5-1	30	~~LIGUVUL~~, 1 *LIGUSIN	5-10m	40%
Herbaceous	<.5	30	CYST PROT	10-15m	50%
Non-vascular				15-20m	60%
Vine/liana	15-20	20	VITIS CIN, PARTQUE, BERCSCA	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

T1: Emergent | T2: Tree Canopy | T3 Subcanopy | S1 Tall Shrub (> 1m; to 5m) | S2 Short Shrub (< 1m) | H Herbaceous | N Nonvascular | V Vines (lianas) | E Epiphytes

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	6	4	2						6	QUERNIG		
	5	5							6	LIQUSTY		
	4	~~2~~	2						4	ULMURUB		
		4							4	MORURUB		
					2				2	ACER ~~N~~ RUB		
	3		4						4	QUER MICH / ~~MAGN~~	~~✓~~	✓
				2					2	ASIMTRI		
		4							4	LIRITUL		
		3	4						4	ACER NEG		
			4						4	QUERCUS RUBRA ~~CHAMLOST~~	✓	
	5	5							6	CELTIS LAEV		
		4							4	CARYA CORD!?	✓	✓
		3	2						3	ULMUS AME		
							4		4	VITIROT * dup-next page		
			6						6	LIGU ~~VULG~~ SIN		
			4						4	PONCTRIF		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.67

County: Warren Park: NATR (VICK) Plot Code: V 67 State: AL (MS) TN Location org: (NPS)

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
					1				1	PHYLLEP		
					3				3	TOXI RAD		
					2				2	SYMP DRUM		
					1				1	ARIS DRAC		
					2				2	POLY ACR		
					3				3	CYST PROT		
					3				3	ASPL PLA		
			6						6	ARUN GIG		
			5						5	~~"DIPAC" BAMBOO~~	*	
					2				2	NAND DOM		
					1				1	SANICULA SP		
					1				1	OPLI SET = Oplismenus hirtellus (BOW)		
				2					2	SAMB CAN		
				3		2			4	PART QUE		
				3	3				4	LONI JAP		
					2				2	BIGN CAP		
					1				1	ASTER (SYMP) [not from Symphiotrichum oblongifolium BOW]	C	
					1				1	CAREX SP		
							2		2	VITIS CIN		
				2					2	PASSLUT		
					2				2	ALBIZ JUL		
		3		2					3	SMIL GLAU +		
					2				2	PTERIS MULTIFIDA [OTHER WEIRD FERN] *		
					1				1	LACT FLO		
			2						2	ULMU RUB		
			2						2	PHYS POL ?	C	
						3			3	VITI ROT		
					2				2	CYRT FORT ?	C	✓
					1				1	OXAL / OILL ? = stricta		
					1				1	COCC CAR		
					1				1	MATTEUCCIA SP		
						2			2	BERC SCA		
					1				1	POLY VIRG		
					1				1	SMALL UVEA		
		1							1	PRUN CAR		

Cover classes

1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

* call @ V66

+ POSS NEW to park, Not coll

Use bottom of this sheet or additional pages for other species in 1 ha plot

					1				1	SYMPHIOTRICHUM	C	

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.68 4/22 - Judy Teague's call

County: Warren Park: NATR (VICK) Plot Code: V68 State: AL (MS) TN Location org: (NPS)

10 AM

Provisional community name QUERCUS MUEHLENBERGII

Classified community name Liquidambar styraciflua–Carya illinoinensis – Quercus nigra Forest
Classifyer JT Date 3/17/2006 NVC ELCODE CEGL004122

Survey date: 29 SEPT 2004 **Surveyors initials:** MP

1.9

Tagged tree is a CERC CAN of 27 cm dbh with tag # 309. Center of 20 x 50m plot is at a bearing of 11 degrees and 1.9 m from tree. TAG ON E (DOWN RIDGE) SIDE OF TREE

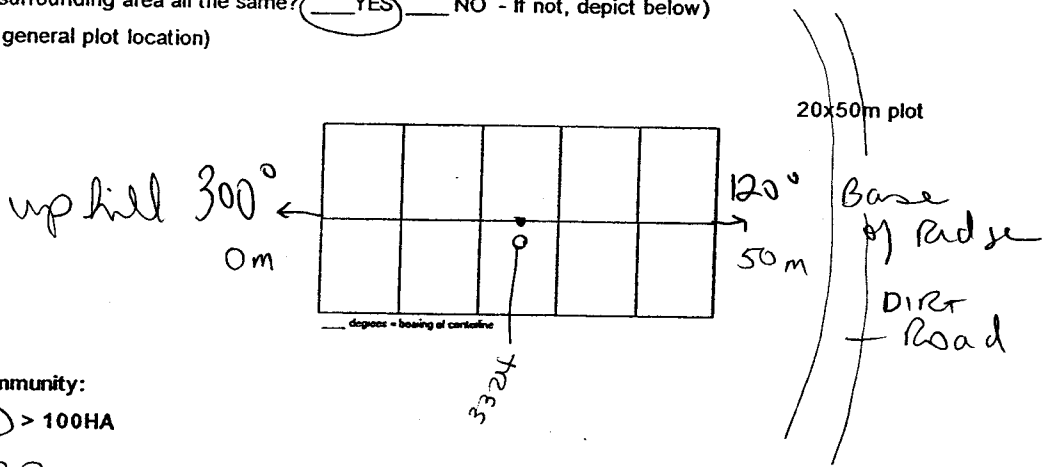
Directions to tag tree (including any notes on best access route, and mile marker): CROSS FIRST BRIDGE BELOW THAYERS APPROACH" (GATED ROAD IS JUST PAST THIS BRIDGE) go forward, Park under Black Walnut Tree before Second Bridge. Walk back to "DO NOT ENTER" GATE AT 1ST BRIDGE and walk in to Boy Scout camping area. WALK IN ROAD, ASCEND RIDGE ON LEFT THAT MEETS ROAD. PLOT BEGINS NEAR LARGE QUERCUS MUHL and goes up Spine of Ridge

Time taken to walk to plot: 4-5 MINUTES

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? (YES) ___ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:
< 1HA 1-10 HA (10-100HA) > 100HA

PIC # 35, 36, 37 38 Description of pictures (N,E,S & W from GPS point at middle of plot): general

Views from Center Point: N=35, E=36, S=37, W=38

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.37518 N 090.85051 W

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) (WGS84) NAD 83 OR NAD27 UTM Zone: 15 16

GPS Unit ID 3 GPS file name V68 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation 105 (m) / ft

Averaging performed (at least 120 observations)? ✓ 382 Coordinate accuracy 7 m / ft DOP 1.4 # sats 6

Rec'd. BCMP 12/23/04 VCI

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK,68

County: WARR Park: NATR (VICK) Plot Code: V68/68 State: AL (MS) TN Location org: (NPS)

ENVIRONMENTAL / SITE INFORMATION

Measured Slope VARIES 21 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
X Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 115 ° (N=0 °)

__ Flat		__ SE	113-157 °
X Variable		__ S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

ASPECT of Centerline = 115°

Topographic Postion
X Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
X *Upland* __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	X Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	Nose slope	__ Ravine

Rock types present: RIVER GRAVELS @ BASE OF SLOPE (ON ROAD) EXOGENOUS ?

Hydrologic Regime (check only for wetlands)
X Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: MODERATELY DRY SLOPES

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

PLOT IS ON RIDGE - SLOPE VARIES. MEASURMENT TAKEN ON TAPE AT 36 M. POINT - SIDES are steeper

Soil Texture: LOESS
__ Sand __ Peat __ Silt loam __ Muck
__ Sandy loam X Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained X Moderately well drained __ Somewhat poorly drained
__ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____ % Bedrock	63 % Litter, duff	____ % Other _____
____ % Large rocks (cobbles, boulders >10cm)	3 % Wood (> 1 cm)	
____ % Small rocks (gravel, 0.2-10 cm)	% Water	
____ % Sand (0.1-2 mm)	34 % Bare soil	

Leaf type:
X Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
Mixed

Leaf phenology (dominant stratum)
__ Evergreen
X Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
X Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

logging	_ fire	_ Hydrologic
X erosion	X trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	_ exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:
DEER/FOOT TRAIL IN PLOT
TURKEYS, CRACKLES(?) LINED SNAKE

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.68 Page 3

County: WARR Park: NATR (VICK) Plot Code: V68 State: AL (MS) TN Location org: (NPS)

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1			[illegible]	< .5m	5%
Tree Canopy T2		60	QUERMUH, QUERNIG (LEFT THIS ONE OUT AS CONSIDIAG BK NOT IN T2 DATA BELOW - BCD)	.5-1m	10%
Understory T3		60	MORRUB, CELT LAEV, CERC CAN	1-2m	20%
Tall shrub S1		50	LIGU ~~SUL~~ SIN	2-5m	30%
Short shrub S2		30	LIGU ~~SUL~~ SIN	5-10m	40%
Herbaceous		50	LONI JAP	10-15m	50%
Non-vascular				15-20m	60%
Vine/liana		10	LONI JAP, TOXI RAD	20-35m	70%
				35-50m	80%
				>50m	90%
					100%

Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):
QUERMUHL (in canopy) tends to ~~be~~ dominate on convex surfaces; QUERMICH IN TALL SHRUB, SUBCAN, more on SIDE SLOPES

T1: Emergent | T2: Tree Canopy | T3 Subcanopy | S1 Tall Shrub (> 1m; to 5m) | S2 Short Shrub (< 1m) | H Herbaceous | N Nonvascular | V Vines (lianas) | E Epiphytes

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec # ?	Discarded ?
	7								7	QUERMUHL	~~C~~ (LYS off ground)	✓
		3	2						3	QUERMICH	~~C~~ Bland	
		4	2						4	CERC CAN		
	5								5	GLED TRI		
		7	3						7	MORU RUB		
	5	5							6	CELT LAEV		
			3	3					4	QUER NIG		
				3					3	ACER NEG		
			2	2					~~3~~ 2	PRUN SER		
	5								5	ULMU AME		
	3		2						3	ULMU ALA		
	3	4							5	LIQU STY		
			2						2	LONI FRAG ? one plant		
		3							3	ULMU RUB		
			2						2	RHAM CAR ~~Frangula californica ssp californica~~ → FRAN CAR		
			1						1	CARYA ILL		
			5						5	ARUNDIG (?) *	C	

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

~~Worried about Possible~~ ~~LOOK - OLIVE BOMBAY~~ NO! - CWN !

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.68

County: WARR Park: NATR (VICK) Plot Code: V68 State: AL (MS) TN Location org: (NPS)

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
					2				2	GEUM CAN		
					3				3	ELEP CAR elephantopus rotundifolius		
					2				2	SYMPORUM		
					2				2	POLY VIR polygonum virginianum		
					1				1	ELYMUS		
					3				3	SYMP	C	
					1				1	ALBI JUL		
					1				1	CAREX SP		
					1				1	HEDE HEL		
					1				1	DICH LONG		
					3				3	AMPE ARB.		
					6		3		6	LONI JAP		
					2				2	BIGN CAP		
			5	3					5	LIGU ~~STAL~~ SIN		
					2				2	DICHON CAR		
					1				1	MATELEA GONO?		
					2				2	LACT FLO		
					2				2	TRIST SIN		
					2				2	CYST PROT		
					2				2	CYRT FORT		
					2				2	PASS LUT		
					1				1	WOODS OBT	C	
					2				2	FLEISH INC		
					2				2	ACER RUT		
					3	4			5	TOXI RAD		
						4			4	VITIS SP	Clf	
					3				3	PART QUE		
					2	2			2	BERCSCA		
		2	2						2	NAND DOM		
					2				2	SMILAX HISP. = SMILTAM		
					2				2	OPLIS SET. = hirtellus		
					1				1	SANICULA Can ~~C~~ ✓		
						1				AMPH BRAC Amphicarpaea bracteata		
					1				1	SMIL GLA.	C	
					2				2	ASPL PLA		

Cover classes

1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

* Not coll for Park New to Park

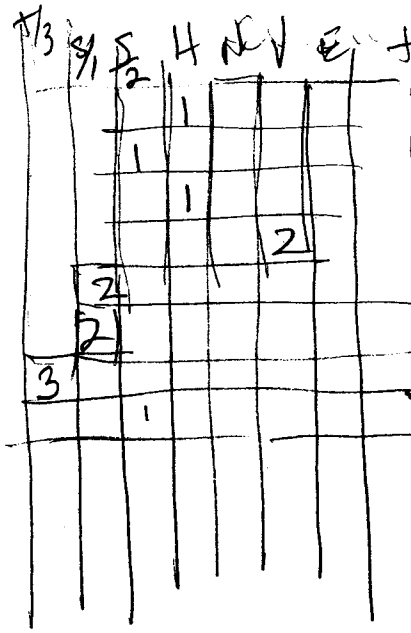
Use bottom of this sheet or additional pages for other species in 1 ha plot

0 ZANTHAME just off (up) plot — collected

OVER →

VICK.68

D.5



1 RUBUS ARCTICUS
1 QUERCUS RUBRA (?
1 BETULA PAPYRIFERA
2 COCCOTHRAUSTES VESPERTINUS
2 LIGUSTRUM VULGARE ?
2 PONCTUATA
3 POPULUS TREMULOIDES
1 SAMBUCUS CANADENSIS = nigra ssp. canadensis

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK 69 Page 1

County: WARREN Park: NATR (VICK) Plot Code: V69 State: AL (MS) TN Location org: NPS 11 30 AM

Provisional community name SWEETGUM SLOPE W/ QUERPAL

Classified community name Liquidambar styraciflua Forest
Classifyer CWN *Date* 10/04/2004 NVC ELCODE CEGL007216

Survey date: 29 Sept 2004 **Surveyors initials:** MP

Tagged tree is a LIQUSTY of 33 cm dbh with tag # 310. Center of 20 x 50m plot is at a bearing of 71 degrees and 6.25 m from tree. TAG ON UP HILL (N) SIDE of tree.

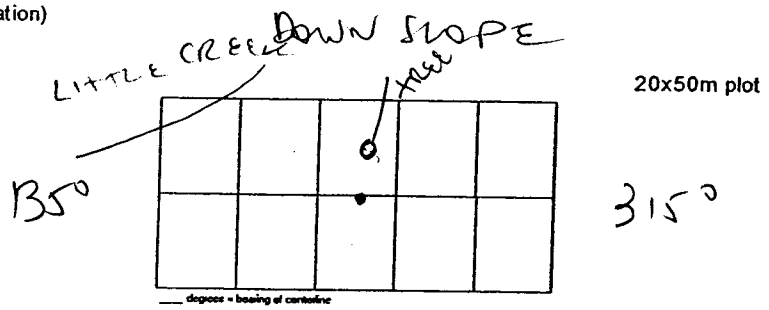
Directions to tag tree (including any notes on best access route, and mile marker): Cross 1st BRIDGE PAST "FARMERS APPROACH" (NOTE LOCKED GATE ON L). Park @ TURNOUT ON R before 2ND BRIDGE. Walk Back to Gate - Walk in on Road Ca 500 meters? Cross creek on L ascend slope. Plot is in SE-NW TRENDING DRAW, On ± SW FACING SLOPE

Time taken to walk to plot: ca 10 MIN

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? (YES) ___ NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:
< 1HA 1-10 HA (10-100HA) > 100HA

UP SLOPE

PIC # 39, 40, 41, 42 Description of pictures (N,E,S & W from GPS point at middle of plot): N E S W general

View in 4 direction N=39, E=40 S=41 W=42

Select one: UTM OR (Lat/long) (If lat/long, then values are 32.37567 N 090.84772 W

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) (WGS 84) NAD 83 OR NAD27 UTM Zone: 15 16

GPS Unit ID 3 GPS file name V69 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation _____ m / ft

Averaging performed (at least 120 observations)? ✓ 300 Coordinate accuracy 9.0 (m) / ft DOP 3.1 # sats 4

Preceeding 4 pics = V69

elw. ROMO 12/23/04 fd

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.69

County: WARR Park: NATR (VICK) Plot Code: V69 State: AL (MS) TN Location org: (NPS)

ENVIRONMENTAL / SITE INFORMATION

Measured Slope 22 ° ____ %

__ Flat	0 °	0 %
__ Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
X Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 225 ° (N=0 °)

__ Flat		__ SE	113-157 °
__ Variable		__ S	158-202 °
__ N	338-22 °	X SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
__ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
__ Midslope __ Low level (terrace)
X Lowslope (lower/footslope) __ Channel bed

Cowardin System
(Upland) __ *Palustrine*
__ *Estuarine* __ *Lacustrine* __ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
__ Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	X Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	X Slope ? how to apply
__ Bottomlands	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	(Ravine) ? DRAW VS. COVE VS. RAVINE ?

Rock types present:

Hydrologic Regime (check only for wetlands)
__ Not a wetland (Upland: XERIC : DRY - MESIC (MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded __ Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded __ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: a small creek is in the corner of the plot creek is intermittent plot would not flood

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Soil Texture: LOESS
__ Sand __ Peat __ Silt loam __ Muck
__ Sandy loam X Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained X Moderately well drained __ Somewhat poorly drained
__ Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____ % Bedrock	85 % Litter, duff
____ % Large rocks (cobbles, boulders >10cm)	5 % Wood (> 1 cm)
____ % Small rocks (gravel, 0.2-10 cm)	____ % Water
____ % Sand (0.1-2 mm)	10 % Bare soil

____ % Other _____

Leaf type:
X Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__ Evergreen
X Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
X Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

X logging	__ fire	__ Hydrologic
X erosion	__ trails/roads	__ Agriculture
__ grazing/browsing	__ wind/ice damage	__ Old Growth
__ pine bark beetle	__ exotic plants	__ Fire Suppression
__ dogwood anthr	__ ORV	

Disturbance and animal use comments:

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.69

County: WARR Park: NATR (VICK) Plot Code: V69 State: AL (MS) TN Location org: (NPS)

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2	20-35	70	LIQUSTY, QUERPAG	.5-1m	10%
Understory T3	15-20	40	LIRI TUL *	1-2m	20%
Tall shrub S1	5-10	30	LIGU ~~SIN~~, ARUNGIG, ASIMTRI	2-5m	30%
Short shrub S2	.5-1	20	LINOBEN, LIGUVUL	5-10m	40%
Herbaceous	<.5	60	LONI JAP	10-15m	50%
Non-vascular				15-20m	60%
Vine/liana		10	VITIS	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species):				35-50m	80%
				>50m	90%
					100%

T1: Emergent | T2: Tree Canopy | T3 Subcanopy | S1 Tall Shrub (>1m; to 5m) | S2 Short Shrub (< 1m) | H Herbaceous | N Nonvascular | V Vines (lianas) | E Epiphytes

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	8								8	LIQUSTY		
	5								5	CELT LAEV		
	6	3							6	QUERC PAG	Cleaner	
			3	4					5	ASIM TRI		
		4		2					4	QUER MICH *		
			3						3	ULMU AME		
			3						3	FRAX AME		
		4	4						5	MORU RUB		
				4					4	LINOBENZ		
			4						4	ULMU RUB		
				4					4	ACER NEG		
	4			3					5	QUER NIG		
			2	2					3	CARY CORD		
		6								LIRI TUL		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.69

County: WARR Park: NATR (VICK) Plot Code: V69 State: AL (MS) TN Location org: (NPS)

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
		3							3	HYDRANGEA		
					2				2	SANICAN +	C	
					5				5	~~TOXI~~ RAD		
					7				7	LONI JAP		
			5						5	ARUN GIG *		
					1				1	CAREX SP		
				2					2	PRUNSER		
					3		2		3	HEDE HEL		
					3				3	CYST PROT		
					2				2	POLY ACR		
		5	4						6	LIGU ~~JAPO~~ SIN		
					2				2	ATHY FILA		
					2				2	BOEH CYL		
					2				2	ASPL PLA		
							4		4	VITIS		
					2				2	POLY ACR		
			1						1	BUME LYC = Sideroxylon lycioides		
		2	2						2	PANC TRIF		
					1				1	ACER ART		
			3						3	EMON AME		
			2						2	SAMB CAN nigra ssp. canadensis		
			2						2	CERC CAN		
					1				1	MATE GONO		
			2						2	SMIL HISP = hannoides		
					1				1	AMPH BRAC		
				2					2	CLEM VIR		
				1					1	CYNO VIRG		
				2					2	CYRT FORT		
			1						1	HYDR ARB		
				1					1	POLY VIR		
				1					1	ARIS SERP		
				1					1	GENN CAN		

Cover classes

1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

+ genus New to Park

* more confident it is all one thing! But still concerned

Use bottom of this sheet or additional pages for other species in 1 ha plot

INCONSISTENT Placement into STRATO-

P.j SMILAX, LONI JAP

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.70

County: WARREN Park: NATR (VICK) Plot Code: V70 State: AL (MS) TN Location org: (NPS) 6

1:30 PM

Provisional community name Carya illinoinensis - Platanus occidentalis - Quercus nigra - Liquidambar styraciflua

Classified community name Platanus occidentalis - Liquidambar styraciflua - (Ulmus americana) / Crataegus viridis Forest

Classifyer CWN *Date* 10/4/2004 *NVC ELCODE* 7335

Survey date: 29 Sept 2004 **Surveyors initials:** MP, KF

Tagged tree is a CARYILL of 46 cm dbh with tag # 896. Center of 20 x 50m plot is at a bearing of ~~270~~ 240 degrees and 1.5 m from tree. TAG ON S. SIDE of TREE

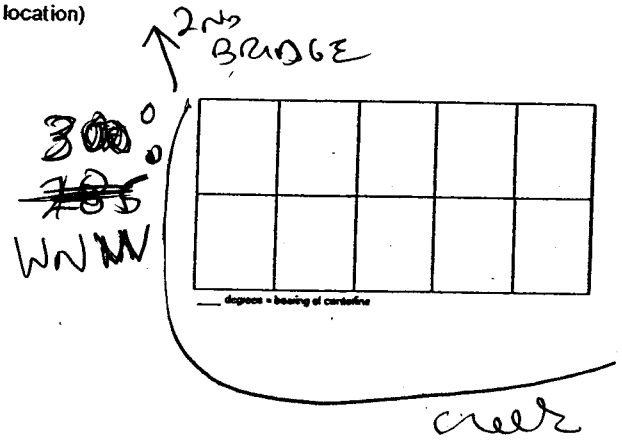
Directions to tag tree (including any notes on best access route, and mile marker): PARK AT FLORANS NIGHT BETWEEN 2 BRIDGES BELOW "THOMAS APPROACH" 2ND BRIDGE can be seen from WNW end of plot

Time taken to walk to plot: 3 MINUTES

PLOT CONFIGURATION (Depict the plot layout on right with respect to the surrounding area and attempt to draw in points where GPS positions were collected, witness tree, bearing of centerline, locations of pictures taken, and communities near the 20 x 50m plot.)

Plot representativeness -Is the surrounding area all the same? ___YES ___NO - If not, depict below)

PLOT LOCATION (Below show general plot location)



Est. Extent of occurrence of community:

< 1HA (1-10 HA) 10-100HA > 100HA

PIC # 44, 45, 46, 47 Description of pictures (N,E,S & W from GPS point at middle of plot) : 44=N 45=E 46=S 47=W

Select one: UTM OR Lat/long (If lat/long, then values are 32.37462 N 090.85327 W

GPS Techniques/Equipment: (Garmin III+) Garmin V Datum(pick one) NAD 83 OR NAD27 UTM Zone: 15 16

GPS Unit ID 3 GPS file name V70 (standard = First letter of park + # of plot (N04 or V04)

Field UTM X _____ m E Y _____ m N Elevation 68 (m) / ft

720 ✓

Averaging performed (at least 120 observations)? Coordinate accuracy 6.9 m / ft DOP 2.0 # sats 7

entered SEAN 12/23/04 JD

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK.70

County: WARR Park: NATR (VICK) Plot Code: V70 State: AL (MS) TN Location org: (NPS)

ENVIRONMENTAL / SITE INFORMATION

Measured Slope ____ ° ____ %

__ Flat	0 °	0 %
X Gentle	0-5 °	1-9%
__ Moderate	6-14 °	10-25%
__ Somewhat steep	15-25 °	26-49%
__ Steep	27-45 °	50-100%
__ Very steep	45-69 °	101-275%
__ Abrupt	70-100 °	276-300
__ ovrhng/shltrd	>100 °	>300%

Measured Aspect 195 ° (N=0 °)

__ Flat		SE	113-157 °
__ Variable)		X S	158-202 °
__ N	338-22 °	__ SW	203-247 °
__ NE	23-67 °	__ W	248-292 °
__ E	68-112 °	__ NW	293-337

Topographic Postion
_ Interfluve (Ridge/summit/crest) __ Toeslope
__ High Slope (upper/convex slope)
__ Midslope X Low level (terrace)
__ Lowslope (lower/footslope) __ Channel bed

Cowardin System
_ *Upland* X *Palustrine*
_ *Estuarine* _ *Lacustrine* _ *Riverine*

Landform (check most applicable)

__ Alluvial flat	__ Cove	__ Ridge
X Alluvial terrace	__ Depression	__ Ridgetop bedrock outcrop
__ Bald	__ Draw	__ Saddle
__ Bank	__ Exogenous dome	__ Seep
__ Bar	__ Floodplain	__ Toe slope
__ Bench	__ Gap	__ Slope
X ~~Bottomlands~~	__ Gorge	__ Streambed
__ Cliff	__ Hillslope bedrock outcrop	__ Streamhead
	__ Midslope	__ Periglacial boulderfield
	__ Nose slope	__ Ravine

TERRACE

Rock types present:

Hydrologic Regime (check only for wetlands) (COULD BE INTERPRETED AS MESIC)
__ Not a wetland (Upland: XERIC : DRY - MESIC : MESIC)
__ Intermittently flooded __ Permanently flooded __ Semipermanently flooded X Temporarily Flooded (e.g. floodplains)
__ Seasonally Flooded (e.g. seasonal ponds) __ Saturated (e.g. bogs, perennial seeps) __ Unknown __ Irregularly flooded _ *Irrglrly exposed*

QUALITATIVE ASSESSMENT:

A) HYDROLOGY: FLOODING would take place at least in most of the plot
AMBIGUOUS

B) LANDSCAPE AND LANDUSE HISTORY (including disturbance history and possible threats to sustainability):

Soil Texture: LOESS
__ Sand __ Peat __ Silt loam __ Muck
__ Sandy loam X Loam __ Clay loam __ Clay

Drainage:
__ Rapidly drained __ Moderately well drained __ Somewhat poorly drained
X Well drained __ Poorly drained __ *Very poorly drained*

Ground cover

____ % Bedrock	80 % Litter, duff	____ % Other _____
____ % Large rocks (cobbles, boulders >10cm)	10 % Wood (> 1 cm)	
____ % Small rocks (gravel, 0.2-10 cm)	____ % Water	
____ % Sand (0.1-2 mm)	10 % Bare soil	

Leaf type:
X Broad-leaved
__ Needle-leaved
__ Microphyllous
__ Graminoid
__ Broad-leaved herbaceous
__ Pteridophyte
__ Extremely xeromorphic
__ Mixed

Leaf phenology (dominant stratum)
__
X Evergreen
X Cold-deciduous
__ Drought-deciduous
__ Mixed evergreen-cold-deciduous
__ Mixed evergreen drought deciduous
__ Herb - Annual
__ Herb - Perennial

Physiognomic Class
X Forest (closed tree canopy)
__ Woodland (open tree canopy)
__ Shrubland
__ Dwarf Shrubland
__ Herbaceous (less than 25% woody layers)
__ Nonvascular
__ Sparse Vegetation

Natural and Anthropogenic Disturbance

X logging	_ fire	_ Hydrologic
_ erosion	_ trails/roads	_ Agriculture
_ grazing/browsing	_ wind/ice damage	_ Old Growth
_ pine bark beetle	X exotic plants	_ Fire Suppression
dogwood anthr	ORV	

Disturbance and animal use comments:

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK. 70

County: WARR Park: NATR (VICK) Plot Code: V70 State: AL (MS) TN Location org: (NPS)

QUANTITATIVE VEGETATION SAMPLE

STRATA	STRATA HEIGHT (1 only)	COVER CLASS	DOMINANT/DIAGNOSTIC SPECIES	Height scale (use tallest one for strata)	% cover for strata = top of cover class
Emergent – T1				< .5m	5%
Tree Canopy T2		60	(PLATOCC), LIQUSTY, CARYILL	.5-1m	10%
Understory T3			ACER NEG, QUERMICH	1-2m	20%
Tall shrub S1			LIGU ~~SIN~~ SIN	2-5m	30%
Short shrub S2			LIGU ~~SIN~~ SIN, LINDBENZ	5-10m	40%
Herbaceous			LONIJAP	10-15m	50%
Non-vascular				15-20m	60%
Vine/liana			VITIS	20-35m	70%
Other notable species (indicators of distinctive conditions, e.g. high pH soil, elevation, geographic region, other particularly abundant species): PLAT. OCC				35-50m	80%
				>50m	90%
					100%

T1: Emergent | T2: Tree Canopy | T3 Subcanopy | S1 Tall Shrub (> 1m; to 5m) | S2 Short Shrub (< 1m) | H Herbaceous | N Nonvascular | V Vines (lianas) | E Epiphytes

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM (enter cover values for each stratum AND for Total cover)

T1	T2	T3	S1	S2	H	N	V	E	Total Cover	Name (7 letter code or full name)	Collected? Spec #?	Discarded ?
	6								6	PLATOCC		
	6								6	LIQUSTY		
	7								7	CARYILL		
		(5)							5	QUERMICH		
		2							2	~~QUERALB~~ PRUNCAR		
		3							3	MORU RUB		
		5							5	ACER NEG		
		3	3						3	CELT LAEV		
				(2)					2	CARY COR		
		3	3						4	ULMUS AME		
		3	3						4	ULMU RUB		
		(3)							3	OSTY VIR		
		(3)							3	CARP CAR		
				3					3	DIOS VIR		
	6	3	3						6	QUER NIG		
	3								3	ULMU ALA		
	5								5	QUER PAG		

Cover cls
1 trace
2 0.1-1%
3 1-2%
4 2-5%
5 5-10%
6 10-25%
7 25-50%
8 50-75%
9 75-95%
10 >95%

THE LIGUSTRUM @ VICK appears to key to VULGARE, but most references indicate SINENSE should be there.

NPS GULF COAST PROJECT: Plot *Sampling Form* VICK. 70

County: WARR Park: NATR (VICK) Plot Code: V70 State: AL (MS) TN Location org: (NPS)

SPECIES COMPOSITION AND COVER/ABUNDANCE CLASS BY STRATUM

T1	T2	T3	S1	S2	H	N	V	E	Total cover	Name (7 letter acronym or full name)	Collected? Spec #?	Discarded?
				1					1	NAMS DAM		
					6				6	LONI JAP		
					3				3	VITI ROT		
			3				3		4	BERC SCA		
					1				1	~~FRIT~~ AMBR TRIF		
			6	5					6	LIGU [redacted] SIN		
			4						4	PONC TRIF		
				2					2	LIND BENZ		
					1				1	CAREX SP 1		
					1				1	SMIL BON		
					1				1	CAREX SP 2 (DEBINY)	C	
					1				1	" " 3	C	
					1				1	SONI CAN		
					2				2	AMPH BRA		
		3							3	JUNI VIR		
					1				1	CLEM VIR		
				2					2	RHAM CAR Frangula caroliniana		
				X	1				1	OPLI SET / HIRT		
				2					2	BIGN CAP		
			~~X~~	2					2	AMPE ARB		
				2					2	POLY VIR		
					4				4	TOXI RAD		
					1				1	SYMP DRUM		
					2				2	BOTR BIT	C	✓
					2				2	CYRT FORT		
					2				2	RHUS ARO		
					2				2	ELEP CAR		
				1					1	MAHONIA BEALEI		
					1				1	MICR VIM		
					1				1	~~BOTH~~ VIR		
					1				1	ASPL PLA		
		2	2	2					3	PRUN SER		
				2					2	PART QUE		
						3			3	VITIS VULP ?	C	
					1				1	SYMP. SP	C	

Cover classes
1. trace
2. 0.1-1%
3. 1-2%
4. 2-5%
5. 5-10%
6. 10-25%
7. 25-50%
8. 50-75%
9. 75-95%
10. >95%

T1: Emergent
T2: Tree Can
T3 Subcanopy
S1 Tall Shrub (>1m; to 5m)
S2 Short Shrub (< 1m)
H Herbaceous
N Nonvascular
V Vines (lianas)
E Epiphytes

Use bottom of this sheet or additional pages for other species in 1 ha plot