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US Army Corps of Engineers
Mississippi River Commission

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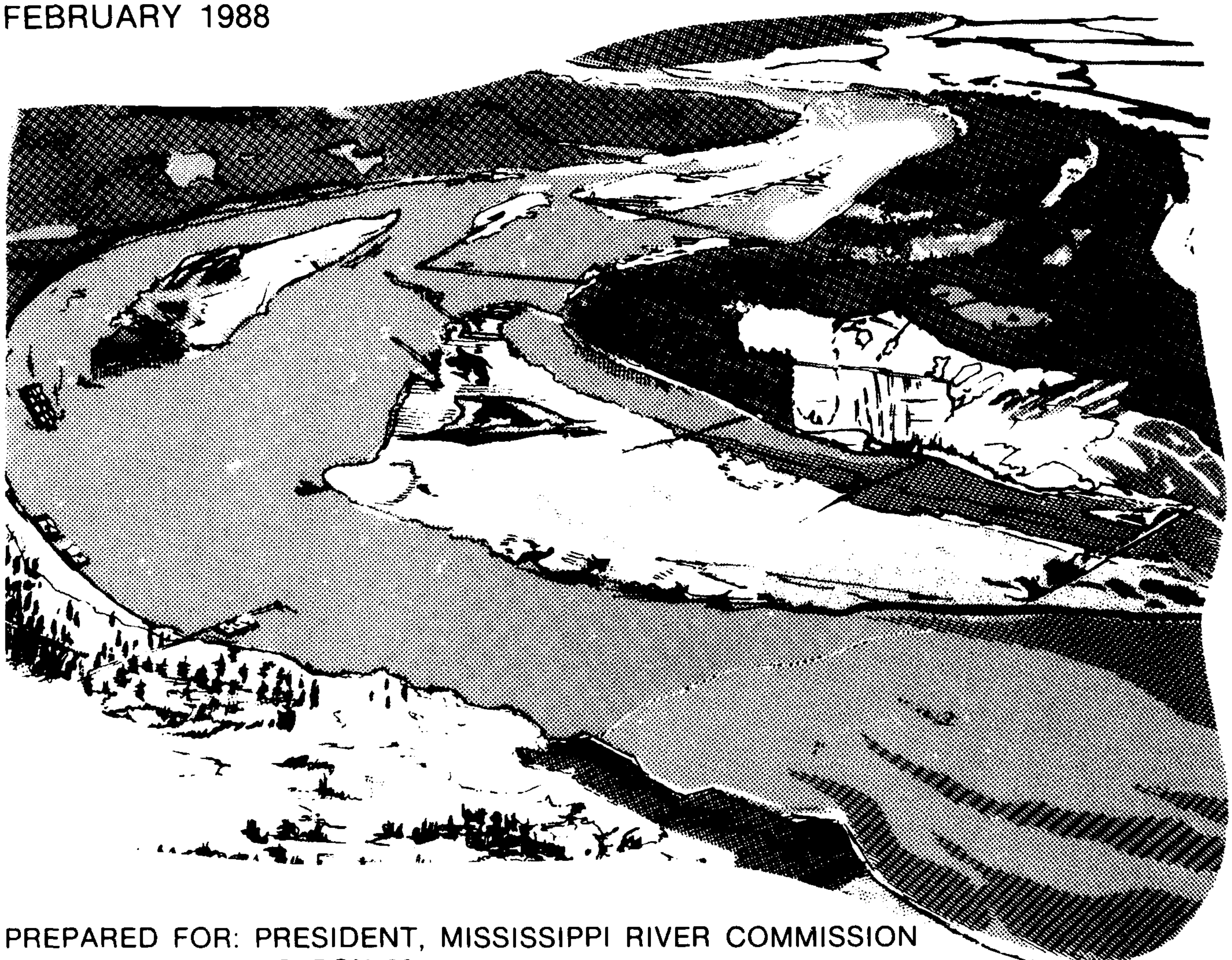
FOREST VEGETATION OF THE LEVEED FLOODPLAIN OF THE LOWER MISSISSIPPI RIVER

LOWER MISSISSIPPI RIVER ENVIRONMENTAL PROGRAM
REPORT 11
FEBRUARY 1988



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PO BOX 80
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Klimas, Charles V.

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The main stem levee system and loess bluffs of the Lower Mississippi River Valley (LMRV) confine 955 miles of river in an area about 600 miles long and up to 20 miles wide. The corridor of unprotected floodplain flanking the lower river supports over one-million acres of forest; about one-quarter of the total bottomland hardwood forest estimated to remain in the LMRV. In 1982, the US Army Corps of Engineers Mississippi River Commission initiated the Lower Mississippi River Environmental Program, which included development of a geographic information system and studies of selected ecosystem components within the confined floodplain. The research reported here was designed to provide a description of forest resources of the study area, with particular attention to forest attributes commonly considered in evaluations of wildlife habitat suitability.

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19. ABSTRACT (Continued).

Twenty-three forest cover types occur in the study area, but over one half of these are of very limited extent. More than 40 percent of the total forested area is classified as either Hackberry-Elm-Ash or Sycamore-Sweetgum-Elm, and more than 30 percent is Black Willow, Cottonwood, or Cottonwood-Willow. Distinct communities within these broad types are recognizable, but their identification requires knowledge of a variety of soil and site factors. Certain special habitats (bluff bases, tributary-influenced sites) are particularly conducive to the development of diverse plant communities of high wildlife value. Sites subjected to heavy sedimentation or repeated improper harvest procedures tend to remain in a low-quality condition indefinitely. A site classification procedure and associated vegetation models were developed to promote accurate estimation of current and future forest and wildlife habitat conditions on the majority of sites in the study area.

The factors that drive the vegetation models include geomorphic features that reflect site drainage, substrate age as indicated by periodic river surveys, river reach, and forest cover type as mapped from aerial photos. These site descriptors applied in a key format reference any given site in the study area to one of 51 forest subtypes, the sample characteristics of which are presented in detail. Application of the simple replacement sequences presented should assist managers and planners in developing realistic estimates of probable and potential future conditions. These functions of the system are demonstrated in limited tests of model performance.

PREFACE

The Lower Mississippi River Environmental Program (LMREP) is a comprehensive investigation of the Lower Mississippi River and its leveed floodplain being conducted by the US Army Corps of Engineers, Mississippi River Commission (MRC). The objectives of the LMREP are to obtain environmental inventory data on the project area and to develop environmental design considerations for navigation and flood control features of the Mississippi River and Tributaries Project.

This report presents results of one component of the environmental inventory task, the Terrestrial Vegetation Study. The study was designed to provide quantitative data on the forest vegetation of the project area, and to complement spatial data on plant communities contained in the Computerized Environmental Resources Data System geographic information system. The research was conducted by Mr. Charles V. Klimas, Environmental Laboratory (EL), US Army Engineer Waterways Experiment Station (WES). Dr. Mary Landin, WES, and Messrs. Stephen P. Cobb and James M. Sigrest, MRC, participated in designing the study. WES personnel involved in the field effort included Dr. Landin, and Mr. Larry Marcy; Dr. C. H. Pennington, and Mr. Richard Kasul provided other special assistance. Ms. Virginia Sotler, WES, designed and managed the database and did the programming required to support statistical analyses. Mr. Tom Heineke, US Army Engineer District, Memphis, served as plant systematist for this research and participated in most of the field sampling.

Drs. Roger Saucier and Lawson Smith, WES, assisted with the identification and interpretation of geomorphic data. Ms. Linda Wright and Dr. Frank Miller, Mississippi State University, provided specific information regarding the forest cover-typing protocols used in assembling land cover maps referred to herein. Dr. Robert Johnson, US Forest Service, and Dr. James Wiseman, Mississippi Museum of Natural Science, contributed information and permitted the use of their research data. Dr. Leigh Fredrickson, University of Missouri, Columbia, reviewed the original study design and the report manuscript and provided helpful comments.

Many landowners provided access to their properties for sampling. Particularly helpful in this regard were the Anderson-Tully, International Paper, Soterra, Westvaco, and US Gypsum Corporations. Mr. Bill Tomlinson, Anderson-Tully Co., greatly assisted with the identification of landowners and arranged for permission to sample extensive portions of the study area.

This research was managed by the Planning Division of the MRC and was sponsored by the Engineering Division. Mr. Cobb was the program manager for the LMREP. The investigation was conducted under the direction of the President of the Mississippi River Commission, BG Thomas A. Sands, CE.

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CONVERSION FACTORS, NON-SI TO SI (METRIC) UNITS OF MEASUREMENT

Non-SI units of measurement used in this report can be converted to metric (SI) units as follows:

Multiply	By	To Obtain
acres	0.4046873	hectares
feet	0.3048	metres
inches	2.54	centimetres
miles (US statute)	1.609347	kilometres
square feet	0.09290304	square metres
square feet per acre	0.229567471	square metres per hectare

FOREST VEGETATION OF THE LEVEED FLOODPLAIN OF THE LOWER MISSISSIPPI RIVER

PART I: INTRODUCTION

Background

Mississippi River and
Tributaries (MR&T) Project

1. The Mississippi River and Tributaries (MR&T) Project is a comprehensive flood control and navigation plan for the Lower Mississippi River and tributary streams. The MR&T was authorized under the Flood Control Act of 1928, and is the responsibility of the Mississippi River Commission (MRC). The project consists primarily of a system of levees, channel improvement works, and floodways.

Lower Mississippi River
Environmental Program (LMREP)

2. The Lower Mississippi River Environmental Program (LMREP) is a 7-yr inventory and research program initiated in 1981, under the direction of the MRC. The objectives of the LMREP are to assemble baseline data on environmental resources of the leveed floodplain of the lower river, and to develop environmental design considerations for levees, revetments, and other features of the MR&T project. The LMREP is made up of five work units: levee borrow pit investigations; dike system investigations; revetment investigations; environmental inventories, including development of a Computerized Environmental Resources Data System (CERDS); and formulation of environmental design considerations.

Terrestrial Vegetation Study

3. One of the LMREP habitat inventories, the Terrestrial Vegetation Study, was designed to provide quantitative information on forest structure and composition within the study area. Plant communities are of concern because they influence wildlife resources. Therefore, the objective of this study was to describe forest characteristics in a manner compatible with standard wildlife habitat suitability assessment procedures such as HES

(Habitat Evaluation System) (USAE Lower Mississippi Valley Division 1980) and HEP (Habitat Evaluation Procedures) (US Fish and Wildlife Service 1980).

4. Conducting this research in the context of the LMREP presented unusual opportunities. The availability of the geographic information system (CERDS) was a consideration in the design of the field studies. CERDS represented both a source of sample site information to assist in the vegetation analysis, and a means of extrapolating study results to unsampled portions of the study area. The research design also included an exploration of the potential for developing models of forest development patterns to assist in estimating future conditions.

Study Area

5. The Lower Mississippi River alluvial valley (Figure 1) comprises an area about 600 mi long* (from Cairo, Illinois, to the Gulf of Mexico) and from 30 to 125 mi wide encompassing some 24 million acres (Mississippi River Commission 1970). At the time of European settlement, this area was almost entirely forested, was subject to periodic flooding, and provided habitat for a diverse array of wildlife species. Since the first levee was constructed at New Orleans, Louisiana, in 1727 (Mississippi River Commission 1970) a continual effort to constrain the river has been underway. Currently, the river is entirely contained by either bluffs or levees from Cairo to a point 90 river miles below New Orleans, except where major tributaries are confluent (Figure 1). This effort has been extremely successful in reducing or eliminating flooding over most of the historic floodplain and contributing to agricultural and urban development. As a result of floodplain development, only an estimated 4.5 million acres of forest remained in 1985, which was less than 20 percent of the original forested acreage (Forsythe 1985). Over one million acres of this remnant bottomland forest lie within the leveed floodplain of the Lower Mississippi River where most sites are still subject to annual flooding. Peak river flows typically occur in March, April, and May.

Development of the Alluvial Valley

6. The current configuration and geomorphology of the alluvial valley of the Lower Mississippi River are regarded by Saucier (1974) as the products of

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* A table of factors for converting non-SI units of measurement to SI (metric) units is presented on page 6.

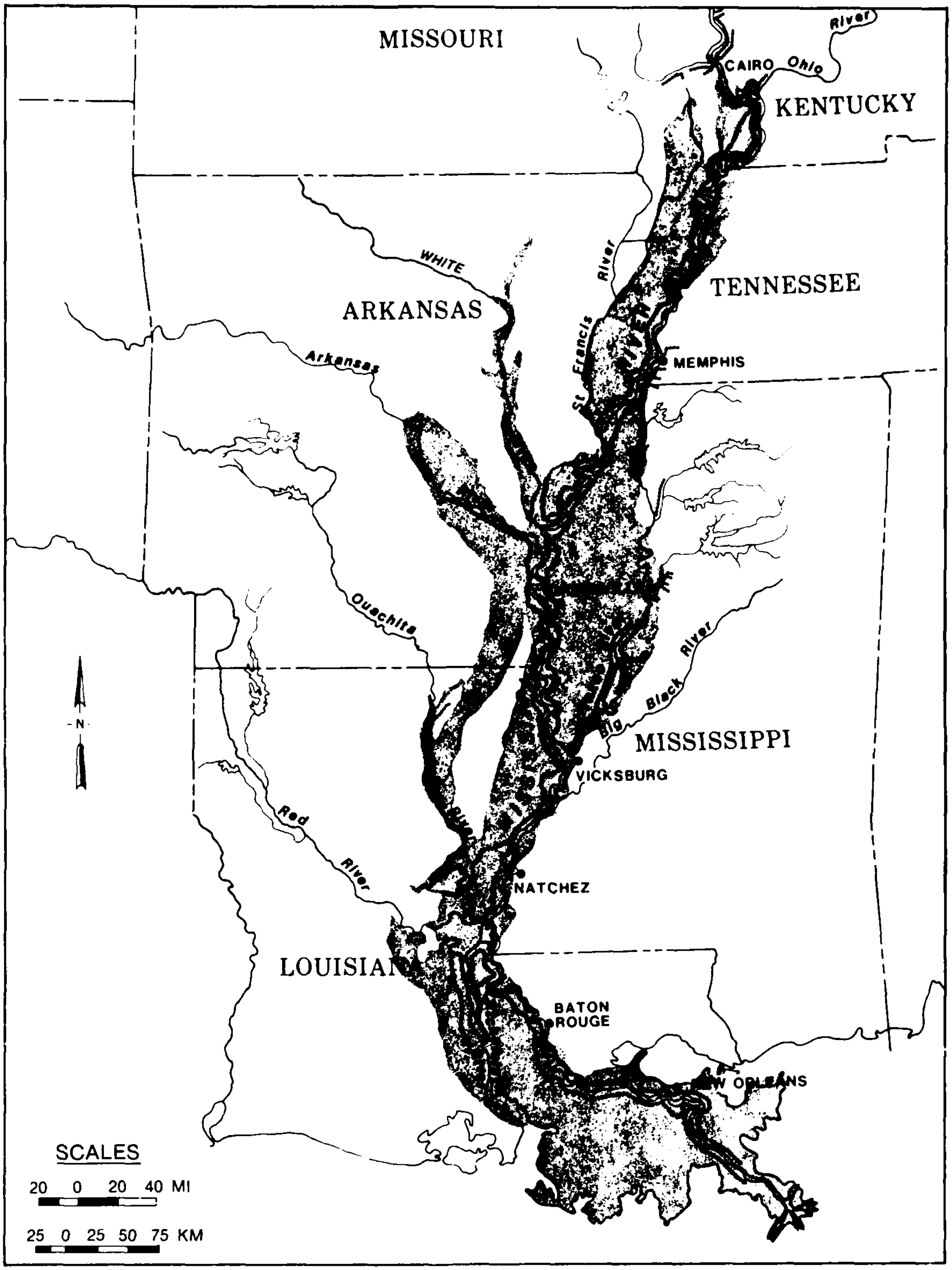

Figure 1. The Lower Mississippi River Valley, showing the approximate extent of historic flooding (shaded area), and the levee system confining the study area. Non-leveed areas east of the river are confined by bluffs

quaternary glacial cycles as they influenced stream discharges, sediment volumes, and sea levels. Although not directly impacted by continental ice sheets, the Lower Valley carried glacial meltwaters and outwash in a braided-stream pattern that concurrently widened and aggraded the valley during periods of waning glaciation. As each glacial cycle progressed and sediment load and stream discharge declined, the river abandoned its braided stream configuration in favor of a single-channel meandering pattern. This shift last occurred about 12,000 years ago south of Baton Rouge, Louisiana, but only about 6,000 years ago north of Memphis, Tennessee.

7. The influence of glaciation on sea levels further affected valley development near the mouth of the river. During periods of shoreline retreat in the Gulf of Mexico, the lower portion of the valley became deeply entrenched, but increasing sea levels reduced stream gradients and promoted the development of deltaic plains. In recent (Holocene) times, the meander behavior of the river has reworked the deposits along the current course to produce a landscape defined by patterns of channel migration and abandonment as well as continuing alluviation (Saucier 1974). Figure 2 illustrates some geomorphic features commonly recognized in the vicinity of the modern river channel.

8. Soils of the alluvial valley are highly variable due to the dynamic processes described above. Textures range from loamy sands to heavy clays, and the relatively flat topography often causes very poor drainage. Nevertheless, generally high nutrient status and organic matter content make Lower Mississippi Valley alluvium among the most productive agricultural soils in the United States (Brown et al. 1971).

Vegetation and wildlife

9. General ecological studies of Mississippi Valley floodplain forests (e.g. Shelford 1954, Robertson, Weaver, and Cavanaugh 1978) have been few, as most research has concerned sites capable of producing valuable hardwood stands. US Forest Service studies have generally focused on tree species autecology (Putnam and Bull 1932) and evaluations of site capability to support commercially important species (Putnam, Furnival, and McKnight 1960, Baker and Broadfoot 1979) or with stand management (Putnam, Furnival, and McKnight 1960, Johnson 1973, 1978).

10. Forest types traditionally regarded as being of the highest commercial and wildlife value (particularly Sweetgum-Oak) account for a relatively small percentage of the total forest cover within the leveed floodplain

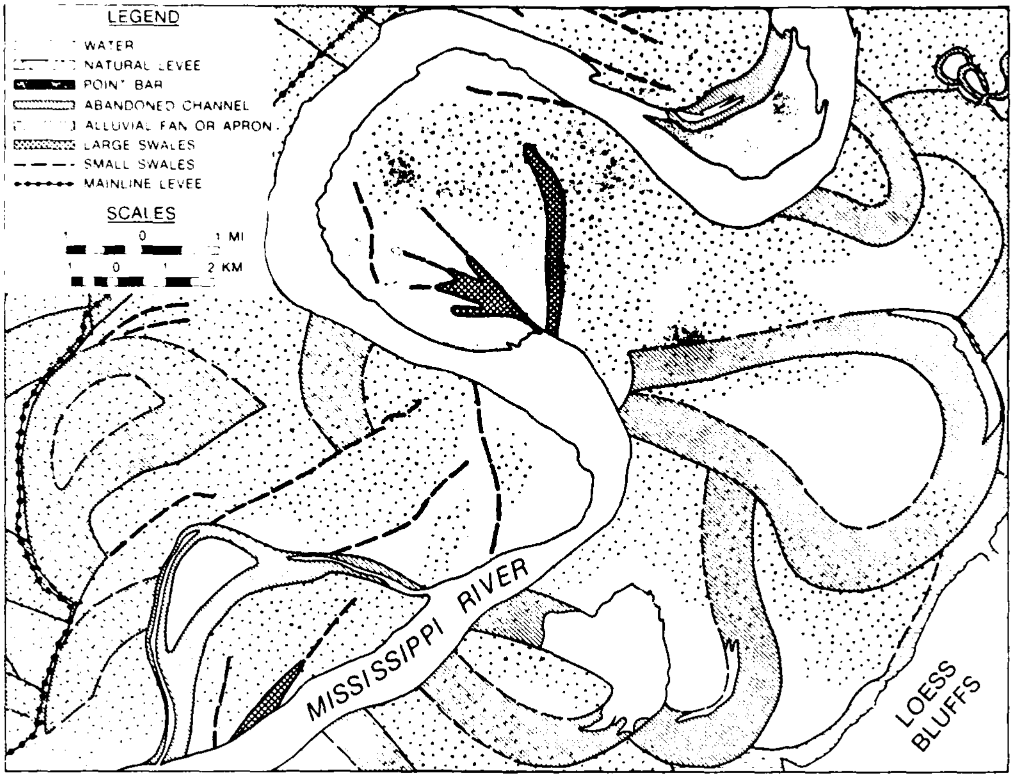

Figure 2. Geomorphology of the confined floodplain RM 800-820 (Tennessee-Arkansas), illustrating typical environments o deposition. Adapted from Kolb et al. (1968)

(Table 1). The majority of the area is occupied by forest cover types typically dismissed in the literature as short-lived successional stages or severely mismanaged types that are appropriate candidates for intensive management practices such as clearcutting and deadening of weed species (Putnam, Furnival, and McKnight 1960, Johnson 1973, 1978). Studies designed specifically to investigate the development and characteristics of these stands have been rare. Detailed investigations of specific leveed floodplain sites have been reported by Shelford (1954) and Wiseman (1982).

11. The leveed floodplain of the Lower Mississippi River is densely forested over much of its length. The significance of this resource has increased as extensive forest clearing has occurred in the valley on the land side of the levee system. The importance of the Lower Mississippi Valley as habitat for wintering waterfowl (Bellrose 1976), other game species (Glasgow and Noble 1971), and a great variety of non-game animals (Fredrickson 1978) suggests that the diminished habitat base is critical to wildlife populations. Habitat loss in the area has been an important factor in the

Table 1

Landcover Types of the Study Area, as Summarized by CERDS (50 m^2 Resolution)

CERDS Cover Type	Acreage by River Reach: South of Baton Rouge (RM 2-230)	Baton Rouge to Memphis (RM 230-735)	Memphis to Cairo (RM 735-954)	Total	Percent of Area
Forested					
Black Willow	12,572	110,367	25,404	148,343	14.34
Cottonwood-Willow	3,528	34,843	14,703	53,074	5.13
Cottonwood	1,378	105,572	34,757	141,707	13.70
Sycamore-Sweetgum-Elm	1,886	175,673	35,162	212,721	20.57
Sycamore	15	1,024	13	1,052	0.10
Sweetgum	170	1,743	112	2,025	0.20
Elm	0	6	0	6	0.00
Pecan	159	20,568	101	20,828	2.01
Sweetgum-Oak	59	39,788	14,286	54,133	5.23
Oak	0	206	27	233	0.02
Hackberry-Elm-Ash	3,367	198,459	37,192	239,018	23.11
Hackberry	24	5,037	198	5,259	0.51
Green Ash	46	4,310	87	4,443	0.43
Overcup Oak-Bitter Pecan	0	7,460	74	7,534	0.73
Overcup Oak	49	152	114	315	0.03
Cypress-Tupelo	0	24,502	7,526	32,028	3.10
Cypress	0	9,470	534	10,004	0.97
Tupelo	0	457	51	508	0.05
Scrub	2,703	36,645	5,794	45,142	4.36
Tree Plantation	14	43,832	6,632	50,478	4.88
Ridge-Slough Complex	0	4,242	0	4,242	0.41
Live Oak-Pecan-Sugarberry	1,083	58	0	1,141	0.11
Live Oak	0	24	0	24	0.0
Total	27,053	824,438	182,767	1,034,258	99.88
Non-Forested					
Cropland	191	184,952	235,723	420,875	38.82
Pasture-Old Field-Levee	4,250	45,095	9,144	58,489	5.39
Inert	3,473	56,310	10,547	70,330	6.48
Open Water	76,293	307,072	133,697	517,062	47.69
Non-Forested Wetland	1,819	12,665	2,917	17,401	1.60
Marsh	0	17	0	17	0.0
TOTAL	86,026	606,111	392,028	1,084,165	99.98
All SITES-TOTAL	113,079	1,430,549	574,795	2,118,423	

extirpation of several avian species and the sharply reduced distribution of a variety of birds and mammals (Fredrickson 1978). As bottomland forest tracts have been fragmented and reduced in size, spatial considerations such as corridor contiguity should be of increasing interest in habitat evaluations (Kroodsma 1978).

Land use

12. The first MRC comprehensive river survey maps (Mississippi River Commission 1881-1897) included very detailed depictions of land use in the immediate vicinity of the river. Plantation farming thrived adjacent to the river in the 1880's, and in many reaches agricultural fields were nearly continuous for miles along its banks. Many of these fields have since reverted to forest, and about a quarter of the confined floodplain is currently in rowcrops (Table 1). Other agricultural areas include cattle-grazed levees and pastures (nearly 60,000 acres) and tree plantations (about 50,000 acres) (Table 1).

13. Farming along the river has declined over the past century, but timber harvesting has continued. However, planned timber management has been employed only since the 1950's (Wiseman 1982), and most small holdings continue to be subject to simple high-grading operations without attention to residual stand quality (Johnson 1978). Most larger forested sites are leased for hunting. The value of such leases and the level of attention given to game species management has risen dramatically as forested bottomland acreage has declined.*

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* Personal Communication, 1-3-85, B. Tomlinson, Anderson-Tully Co., Vicksburg, MS.

PART II: METHODS

Forest Sampling

14. Field sampling was conducted from July through November 1984 and in June and July 1985. Sampling procedures were designed to detect and describe common forest community types as well as within-type variations related to latitude, site conditions, and stand management. A stratified sampling approach was adopted because certain forest cover types are extremely common within the study area, others are relatively localized or rare, and some are structurally and compositionally simple or consistent. Areas where special environmental conditions might influence forest communities were specifically targeted for sampling. Among these were islands, subject to high flood flow velocities and relatively isolated, sites near the confluence of tributary streams, where unusual soil and flooding characteristics may occur, severely disturbed soils in the vicinity of the mainline levee borrow pits, and floodplain areas near the base of the loess bluffs, where local colluvial and alluvial deposits may be markedly different from the Mississippi River deposited soils.

15. Potential sampling sites were designated at regular intervals (approximately every 10 miles) along the river. During the 1984 season, the full length of the study area was traversed twice, with samples taken at broad (30- to 60-mile) intervals, to provide two seasonal samples of ground cover vegetation. The 1985 field effort was based on a preliminary analysis of cover type, stand structure, and distributional data from the 1984 season and was largely devoted to filling gaps in the database. For example, in the 1984 sample the Black Willow* type was represented only by mature (sawtimber) stands in the reach between RM 555 and RM 855. In 1985 a special effort was made to sample younger (pole and sapling) Black Willow stands in that part of the river.

16. A systematic approach was employed to select stands and array sample

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* Forest cover type designations follow the general common-name format of the Society of American Foresters (1975), but certain specific variations were employed in CERDS that reflect prevailing community composition within the study area. Plant species are referred to in this report in scientific nomenclature, following Kartesz and Kartesz (1980), and a list of all species sampled is presented in Appendix A.

plots. The sampling design called for the establishment of east-west transects between the river and the floodplain boundary (levee or bluff line). At 150-ft intervals along each transect line, surrounding stands were examined and accepted or rejected as sampling sites depending on representation of similar stands in the dataset for that 50-mile river reach. Plots were established within selected stands at 150-ft intervals along or perpendicular to the transect, depending on stand configuration. Plot locations were rejected if they fell in areas judged transitional to other stands.

17. An effort was made to develop a variance criterion for determining the number of plots to be sampled in each stand. This was tested in a pilot study, but proved infeasible due to the large number of forest characteristics being sampled. For example, a criterion based on overstory tree variables may tend to result in under-sampling of the ground layer where the former is fairly uniform and the latter is complex. For this reason, sample adequacy was based on a subjective evaluation of overall stand variability. This approach resulted in stand samples consisting of up to 11 plots in complex and diverse stands, and a single plot in extremely small, but internally consistent stands. Average sampling intensity was 3.5 plots per stand. It was often necessary to deviate from the straight-line transect system described above due to inaccessibility of sites, discontinuity of forested areas, and the targeting of unique sites to be sampled. In all cases, however, sampling within stands was systematic. Detailed field notes were taken concerning bearings and paced distances from known points to each plot. A total of 1,110 plots were sampled, representing 316 stands.

18. Sampling locations designated through the process described above formed the center point for three nested, circular plots. The variables evaluated in each plot and the rationale for collecting these data are described below.

Stand data

19. Ownership. Stand ownership was ascertained wherever feasible to facilitate access and provide some basis for estimating probable management history and future exploitation patterns. Hardwood timber companies, paper companies, and large hunting clubs accounted for most large tracts. Smaller private holdings and levee-board-controlled lands were recorded as "private" and not otherwise differentiated. Local, state, and federal lands were noted as such, but accounted for very little of the study area.

20. Grazing. Direct evidence of current domestic livestock usage was noted on the assumption that understory and ground cover characteristics would be markedly influenced.

21. Special sites. Certain unusual site conditions were noted during field data collection. Plantations, recently harvested areas, sites affected by soil disturbance or water accumulation during or after borrow pit operations, stands directly influenced by tributary flows or directly adjacent to the base of bluffs, and stands subject to deep accumulations of sediments in recent (<15) years were identified on field data forms.

Plot data (1/10-acre circle)

22. Elevation. Plots were classified as higher, lower, or the same elevation relative to the surrounding terrain as an indicator of general drainage conditions.

23. Topography. In addition to the general drainage status of the site as a whole inferred from Elevation, significant small-scale variations were noted by classifying plot topography as either a ridge, depression, slope, or flat.

24. Overstory vegetation. This stratum was characterized based on the following field measurements.

a. Mean canopy height was estimated, and estimates were periodically checked with a clinometer.

b. Canopy cover was estimated using Daubenmire's (1968) standard cover-class system (percent cover intervals of 0 to 5, 5 to 25, 25 to 50, 50 to 75, 75 to 95, and 95 to 100). Cover-class midpoints were used for all subsequent analyses.

c. Trees with diameter-at-breast-height (dbh) of 2 in. or greater were measured to the nearest inch dbh and recorded by species.

25. Habitat structure. Specific components of habitat quality were evaluated using the following variables:

a. Understory height was estimated to the nearest foot as the average height of woody vegetation less than 2 in. dbh but greater than 4.5 ft tall. Certain persistent non-woody or semi-woody species that are structurally appropriate to the understory category (such as *Arundinaria gigantea* and *Sambucus canadensis*) were included in this evaluation.

b. Understory cover was estimated using the cover class system described above.

c. Average ground vegetation height was estimated and recorded to the nearest foot. A value of 0.5 ft was assigned to any plot having an average ground vegetation height greater than zero but less than 0.75 ft.

d. Ground vegetation cover was estimated using cover classes.

e. Debris piles, defined as accumulations of woody debris at least 1 ft deep over an area of at least 9 square feet (sq ft), were counted as an indication of cover available on the ground, other than standing vegetation.

f. Logs at least 7 in. in diameter over a length of at least 5 ft were counted as potential den sites, foraging substrates and cover.

g. Stumps at least 7 in. in diameter and 1 ft tall were counted both as habitat components and as indicators of recent logging activity.

h. Snags, defined as standing dead wood at least 7 in. dbh and 8 ft tall, were counted as foraging and nesting habitat for a variety of species.

i. Pool sites were counted as the number of depressions capable of ponding water with a surface area of at least 9 sq ft. Only pool sites on substrates with clay or silt-clay soils at or near the surface were used in subsequent analyses. Pool sites are highly productive following rains in the summer, and larger pool sites have been considered an important component of floodplain forest complexes used heavily by wintering mallards (*Anas platyrhynchos*) in southeastern Missouri (Heitmeyer 1985).

Plot data (1/100-acre circle)

26. Understory vegetation. Stem counts by species of all vegetation meeting the understory criteria described above were made to complement the general height and cover data tabulated in the larger plot.

27. Vines. Vines were classified as either "Canopy vines" (having leaves exposed to direct sunlight in the tree canopy) or "Subcanopy vines" (less than canopy height but with stems reaching at least 4.5 ft above ground level). The number of stems in each category were counted and recorded by species if they were rooted in the plot. Density estimates were employed instead of counts for extremely abundant subcanopy vines.

28. Soil texture. Soils were sampled at two points opposite one another on the perimeter of each 0.01-acre circular plot. A tube-sampler was used to obtain soil samples to a depth of 15 in. The texture of each distinct stratum encountered was recorded. The purpose of this procedure was to obtain an indication of soil permeability to complement other independently derived estimates of site drainage.

Plot data (1/1000-acre circle)

29. Ground vegetation. Ground cover was estimated using cover classes, by species, for all woody and herbaceous plants not included in understory-level evaluations.

30. Seedling density. All woody shrub and tree seedlings in the ground cover layer were counted, by species.

31. Detritus accumulation. Decomposing plant material on the forest floor (excluding freshly fallen leaves) was evaluated with respect to depth and distribution using a three-class rating system which indicated accumulation as sparse or none; deeper than 1/2 in. but patchy; and, deeper than 1/2 in. over the entire plot.

Database Assembly

32. Database construction proceeded in three phases consisting of the summarization of field data, the development of site or environmental variables to be linked with plot data, and the identification and rectification of errors. All raw biotic and site data were maintained in the database, but a working subset of synthesized information was also created for use in the primary analyses.

33. Forest overstory data were summarized on both a plot and stand basis in standard basal area and density terminology. Three size classes were designated that approximately correspond to typical forestry categories (sapling, pole, sawtimber) and that also can be applied to habitat analyses that are concerned with canopy layering or assumed maturity of mast species. The two larger size classes (including all trees / 5.5 in. dbh) were used to assign a cover-type designation to each stand based on the standards given by the Society of American Foresters (1975).

34. Plot and stand densities were calculated for understory trees and shrubs, seedlings, canopy and subcanopy vines and all other tally data (logs, snags, etc.). All ground cover, understory cover and canopy-cover estimates were taken as the midpoint of the assigned cover class. Categorical data (soils, detritus) were retained in raw form and accumulated at the stand level.

35. Plot locations were carefully mapped throughout the field effort. This was done because plot locations are precise enough and stand sampling intensity was adequate to regard the sampled stands as permanent reference areas for subsequent study, and referencing plot data to precise points on the ground provided access to a variety of site data developed from other sources.

36. Data on the alluvial soil type, vegetation association (forest cover type), and elevation of each plot were obtained from the CERDS geographic information system (Cobb and Williamson 1986). Site data derived from CERDS for each plot were checked against field data to identify gross errors, and final values were assigned to each plot. Sources of error (i.e., plot mapping errors versus photointerpretation errors) were identified.

37. In addition to the field data and CERDS information, certain database site factors were derived from other sources. Surface soil deposits were taken directly from the same maps (Kolb 1962, Kolb et al. 1968, (revised 1979-1985), Saucier 1964, 1967, 1969) that provided environments of deposition through CERDS. Another factor, referred to here as "site age", was inferred from information contained in a series of river survey maps covering the study area from Baton Rouge to Cairo (Mississippi River Commission 1938, 1941). These maps show the probable position of the river channel at intervals since 1765 (1765, 1820's, 1880's, 1930-32, 1940-41). Using the old surveys in conjunction with the environments of deposition maps and the current comprehensive hydrographic survey (US Army Engineer District, Memphis 1976, US Army Engineer District, New Orleans 1976, US Army Engineer District, Vicksburg 1977), it was possible to assign to each stand an estimate of the relative age of the deposit occupied. This was done categorically, where stands were designated as occupying sites that have been fastland throughout historic times (>200 years), that were river channel sometime between 1765 and 1893, that were river channel during the 1930-1932 survey, and that were river channel during the 1940-1941 survey. Included in these categories were sites that were reworked by river meandering during the time periods covered. Sites below Baton Rouge were not used in the site-age analyses because of the lack of meander activity in recent centuries (Saucier 1974).

38. Additional site data were added to the database as derived variables recalculated in useable terms from field data or other sources. The field observations of surface soil texture were converted to a simple permeability index, where permeable soils were those where sand predominated, impermeable soils were either predominantly clay or contained a distinct clay horizon, and moderately permeable soils were either silty or characterized by a mixture of thin deposits of varying textures.

39. Flood frequency (return period) was calculated for each stand using the National Geodetic Vertical Datum (NGVD) plot elevations and river mile

plot locations provided by CERDS in conjunction with flood frequency data for the river. Frequency profiles (or flow lines) were available for the Memphis and Vicksburg Districts, and allowed all stands in those areas to be assigned to either the 2-, 5-, 10-, 25-, 50-, or 100-year flood zones. Elevations below the 2-year flowline were designated as 1-year floodplain. For New Orleans District, only monthly mean, maximum, and minimum water level records were available. Using these records for the gauge nearest each sampled stand, plots were assigned to the 1-year flood zone if their elevations were at or below the average annual maximum (usually April) water levels, and to the 2-year flood zone if above that point.

40. A second indicator of flooding influence was also examined. Because of the broad and unequal intervals used to portray flood frequency data, Low Water Reference Plane (LWRP) elevations were used to standardize plot flooding throughout the study area in terms of a continuous variable. While subject to deviations related to variation in channel and floodplain shape, this "relative elevation" factor allows plots to be roughly compared to one another in terms of equivalent river stage elevations over the length of the study area; that is, a plot 20 ft above LWRP at Memphis should have a flooding regime generally similar to a plot 20 ft above LWRP at Vicksburg.

Classification Procedures

41. Analysis focused on the classification of recurring, recognizable vegetation community types in terms of their relation to mappable site factors. The first step in this process was identification of repeatedly occurring vegetation units. A variety of multivariate analysis techniques such as cluster and ordination analyses have been employed successfully in vegetation studies to recognize similar communities from spatially separated samples (Gauch 1982). These techniques group stands of similar composition and structure and were applied in this study as data reduction and pattern recognition tools.

42. All analyses in the classification phase were performed on stand basal area data (trees /2 in. dbh). The clustering procedure (Boesch 1977) used a flexible clustering strategy on a percent-similarity (standardized Bray-Curtis) data matrix. Cluster analysis was used to identify broad groups of stands with certain basic compositional similarities. The ordination

technique known as detrended correspondence analysis (Hill 1979, Hill and Gauch 1980) was employed to further subdivide clusters in a manner that reflected the effects of historic management practices and subtle differences in site moisture conditions. Certain special sites (plantations, borrow pit areas, and scrub stands) were deleted from the multivariate classification procedures because of their unique association with disturbed sites or with agricultural activities. Selective partitioning of the dataset was employed to facilitate sample classification and is described with examples in Part III.

Model Development

43. The objective of the model development process was to identify a group of site variables that, in appropriate combinations, were predictive of the potential occurrence of the forest communities. Forest communities were rated according to their frequency of occurrence in site factor categories (e.g. alluvial soils). Continuous site factors (e.g. elevation) were evaluated by plotting site-factor means and standard deviations for each forest community type and assessing the resulting distributions for distinct community separations.

44. A key was constructed for classification of any site in the study area based on a series of five or fewer site or stand characteristics identified as highly restrictive of forest communities. The estimation of future conditions is common to most water resource planning studies; therefore, generalized replacement sequences were developed for the site types identified in the key. These sequences were based on published literature and field observations, and reflect various levels of forest exploitation and management. To assess the feasibility of developing models predictive of forest conditions over time, a single site type, its associated cover types, and the replacement sequence developed for them were examined to assign relative time scales against which selected vegetation composition and structure factors were plotted. The resulting curves were used to evaluate the overall performance of the models. A limited test of the key and models and a demonstration application to wildlife habitat assessment was conducted for a small area on Huntington Point, Mississippi (RM 552) (see Part IV).

PART III: RESULTS

General Forest Characteristics

45. Of the 23 forest cover types represented in the CERDS database, 17 were encountered in the field sampling effort. Those not sampled were three "pure stand" (single-species dominance) types (Elm, Tupelo, and Live Oak), two multiple-species dominance types (Oak, Live Oak-Pecan-Sugarberry), and one type devised as a mapping convenience where site and stand variability were high (Ridge-Slough Complex). The two types that had live oak (*Quercus virginiana*) as an important component were not represented outside the extreme southern end of the study area, and the field sampling procedure failed to detect them. Also, stands appropriate to the Ridge-Slough Complex were not encountered in the field effort or were typed at a finer level of resolution. The Elm, Tupelo, and Oak types were not sampled but are closely allied with the sampled types Hackberry-Elm-Ash, Cypress-Tupelo, and Sweetgum-Oak.

46. The 17 cover types that were recognized in the field included six single-species types that might also be regarded as variants of more complex or common cover types. These six types (Baldcypress, Overcup Oak, Green Ash, Pecan, Hackberry, and Sycamore) each accounted for less than one percent of forests in the study area (Table 1) and were represented by relatively small samples that were inconsistently treated in the type mapping process, being noted as pure stands in some cases and as more complex types in others. For the purposes of this analysis, these samples were included under their more common and generalized parent cover types. One other type (Cottonwood-Willow) tended to be mapped where a mosaic of interspersed pure stands of each species existed, and did not often represent within-stand codominance. As with the Ridge-Slough Complex, this type was not distinguished in the field samples, which were based on within-stand compositional and structural integrity. Therefore, Cottonwood-Willow also was not recognized as a type in the descriptive phase of this research.

47. Ten of the 23 CERDS cover types were recognized as being common and consistently classified within the study area, based on the exclusions described above (see Table 2). Of these, two types (Hackberry-Elm-Ash and Sycamore-Sweetgum-Elm) accounted for over one-half of the forested area represented in CERDS (Table 1) and sampled in the field. These two forest types

Table 2

Cover-Type Classification of Sampled Stands

Cover Type	Number of Stands	Percent of Sample	Percent of Forested Acreage*
Tree Plantation	7	2.2	4.4
Black Willow	56	17.7	16.9
Cottonwood	47	14.9	16.3
Sycamore-Sweetgum-Elm	89	28.1	20.6
Sweetgum	8	2.5	0.1
Sweetgum-Oak	20	6.3	5.2
Hackberry-Elm-Ash	74	23.4	23.1
Overcup Oak-Bitter Pecan	2	0.6	0.4
Cypress-Tupelo	8	2.5	3.1
Scrub	5	1.6	4.4
	316	99.8	94.5

* From Table 1. In this category, the Cottonwood-Willow type is evenly apportioned to the two parent types. CERDS forest cover types not represented here each account for less than 1 percent of forest cover in the study area and were inconsistently typed or not sampled.

were highly variable in structure and composition and contained all stands not strongly dominated by one or two species (e.g. Cypress-Tupelo, Black Willow, and Overcup Oak-Bitter Pecan types) as well as most transitional areas. The "Scrub" cover type was strictly a structural classification that included developing new stands, regenerating clearcut stands, or shrub-dominated sites. Similarly, the "plantation" designation was applied to any recognizably planted forest, regardless of composition. Of the various species that may occur in plantation culture, only Populus deltoides and Platanus occidentalis represented the plantation type in this study.

48. Most of the tree species that define the common cover types (e.g. Sycamore-Sweetgum-Elm, Cottonwood-Willow, etc) are distributed over the entire length of the study area. Latitudinal restrictions occur for a variety of

secondary species, however. Quercus virginiana is restricted to sites downstream of Baton Rouge. Tree species characteristic of the leveed floodplain segment between Baton Rouge and Memphis include Quercus nuttallii and Ulmus crassifolia. Acer saccharinum, Carya cordiformis, Carya laciniosa, and Juglans nigra are largely restricted to sites north of Memphis.

49. Shrub species show less latitudinal restriction than trees, although few native species occur south of Baton Rouge. Shrub density and diversity vary primarily with soil moisture (few shrubs occur in Cypress-Tupelo or Overcup Oak-Bitter Pecan forest types or in swales) and soil age or lack of disturbance (new bar deposits and heavily sedimented areas rarely support shrubs). The richest shrub communities are found in late-successional Sweetgum-Oak stands where species such as Lindera benzoin, Ilex decidua and Asimina triloba are common understory components.

50. Vine abundance and diversity tend to be greatest at mid-successional stages (Sycamore-Sweetgum-Elm and Hackberry-Elm-Ash). Most Black Willow and Cypress-Tupelo stands have few vines. Many vine species considered valuable for wildlife (Smilax spp. and Vitis spp.) are largely restricted to the central and northern portions of the study area, although Toxicodendron radicans is ubiquitous, occurring in nearly all habitats.

51. Ground-cover vegetation varies seasonally as well as with successional stage, soil moisture, and latitude. Many sites support an early-summer flora dominated by one or several herbaceous species such as Galium aparine, Laportea canadensis, Sicyos angulatus, or Commelina spp. By late summer most areas have a much more diverse ground cover, often including widespread species such as Polygonum virginanum, Aster spp., Carex spp., and a wide variety of vines. Total ground cover tends to be lowest in Cypress-Tupelo, Overcup Oak-Bitter Pecan, and Sweetgum-Oak stands, probably because of restrictive moisture conditions in the first two and a lack of light due to understory development in the latter. Mid-successional stages (Sycamore-Sweetgum-Elm, Hackberry-Elm-Ash) and Cottonwood-Willow types often have a very dense ground cover, except where a dense subcanopy (usually of Celtis laevigata) has developed. Plantations, riverfront stands, most stands downriver of Baton Rouge, and other sites where a great deal of light reaches the forest floor have consistently dense ground cover.

52. Certain special habitats tend to show consistent patterns of forest community structure and diversity. Overall species richness is often high

near the confluence of tributary streams and the Mississippi River. Quercus lyrata and Taxodium distichum are commonly associated with oxbow lakes, and other Quercus species are often present. Similarly, floodplain stands near bluffs frequently have a diverse tree flora; such sites are the only habitats that support Quercus michauxii, and are the primary locations for Quercus pagoda, Carya cordiformis, Carya laciniosa, and Juglans nigra. Diversity is particularly high on tributary- and bluff-associated sites that show no evidence of having been cleared for agriculture. Where farming has occurred in the past, these areas frequently include Quercus nigra and Liquidambar styraciflua as major components.

53. River islands are unique habitats in several respects. They show the direct influence of the river in that they are geomorphically dynamic. Accretion zones on the downstream end of islands show classic patterns of forest community zonation. New deposits often support dense stands of Salix interior, Salix nigra, and Populus deltoides. Interior to these pioneer stands are even-aged Salix nigra stands, and on older, higher sites, Populus deltoides is found.

54. Mid-successional island stands are similar to those found in the floodplain, but often appear to have been less frequently harvested than more accessible sites. One tree species, Gymnocladus dioica was almost exclusively associated with island sites. Islands tend to be subjected to regular, sometimes severe sedimentation and erosion along their banks. Where deep, recent sediment deposits are found, disturbed-site species such as Acer negundo and Celtis laevigata are favored, and ground cover consists almost entirely of vines. Sediment accumulation frequently blocks internal drainage on islands, creating small sumps and wet flats dominated by even-aged stands of Acer saccharinum or Fraxinus pennsylvanica.

55. It is difficult to make general statements beyond the distributional limits and special habitats described above. The forests of the leveed floodplain are a complex mosaic of plant communities not easily summarized by general habitat or cover-type designations. The approach presented below provides a system for estimating forest community characteristics over a wide range of sites.

Sample Classification

56. Cluster analysis was initially ineffective in separating meaningful subgroups within cover-types. Examination of early results indicated that the technique was highly sensitive to the importance of two ubiquitous species: Celtis laevigata and Acer negundo. One or both of these species were present in the majority of stands sampled, and the clustering technique was more responsive to dominance values of these species than to overall stand structure and composition. Application of various data manipulation procedures did not improve results significantly and tended to obscure other stand structural information of interest in this study.

57. Because stand composition and structure were often masked by the prevalence of C. laevigata and A. negundo, these species were removed from the data set to allow species of secondary importance to be the focus of the cluster analysis. For example, two stands strongly dominated by C. laevigata, and having similar basal area values for that species, tended to cluster together, regardless of the secondary species present. Removal of C. laevigata would shift the emphasis to the secondary species and might completely separate the same two stands if their secondary species were, for example, remnant scattered Salix nigra in one case and dense, pole-sized Liquidambar styraciflua in the other. This modified approach produced a more ecologically meaningful classification of stands, up to the point of identifying broad groups defined by the presence of certain unifying "character" (but not necessarily dominant) species (Figure 3). Beyond the "character species" level, the cluster analysis tended to focus on total basal area rather than compositional factors.

58. To further subdivide the broad cluster groups, and reintroduce Celtis laevigata and Acer negundo to the analysis, detrended correspondence analysis was employed on the smaller data sets represented by each cluster grouping. This technique provided a multidimensional array that allowed identification of subclusters based on ecologically meaningful variations in composition and structure. For the example given earlier, the C. laevigata-dominated stand with some Liquidambar styraciflua would be classified with other stands having the same strong C. laevigata dominance, but only within the L. styraciflua cluster group. A simple, two-dimensional example of the subcluster designation procedure is given in Figure 4.

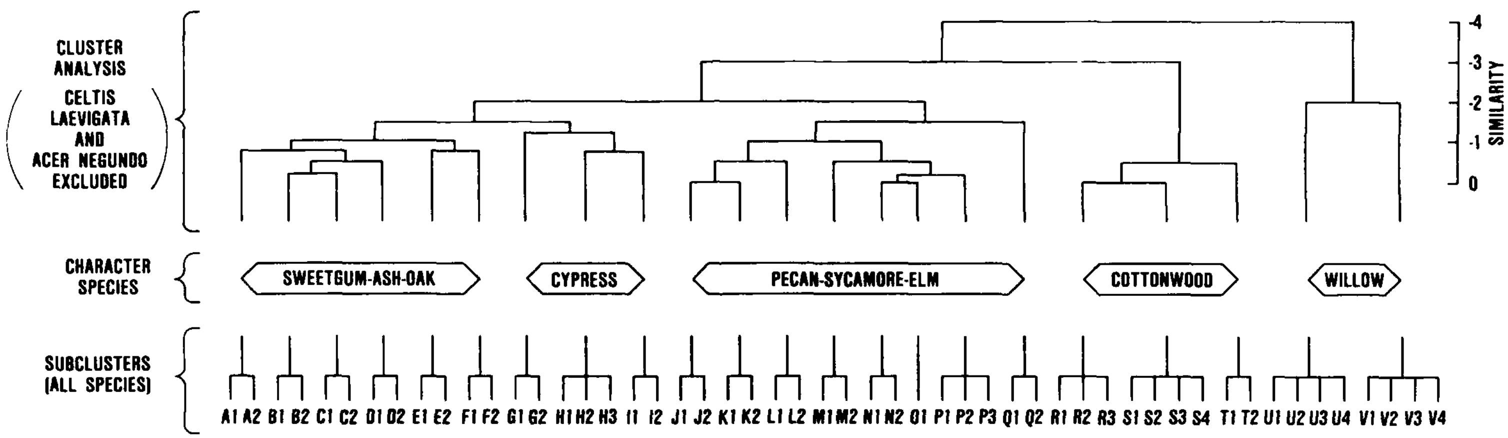

Figure 3. Classification of sampled stands using cluster analysis with ubiquitous species deleted to identify basic compositional groupings (character species level). Final subclusters were designated with an ordination approach applied to the full species complement

Figure 4. Ordination of Cluster H with three subclusters identified and one outlier isolated

59. Extracting cluster H from the overall ordination array (Figure 4) allowed recognition of three discreet subclusters and an outlier stand. Subcluster H1 contains stands strongly dominated by Acer negundo, Celtis laevigata, Fraxinus pennsylvanica, and Ulmus americana. These were cover-typed as Hackberry-Elm-Ash, and their secondary species tend to have an early-successional character (e.g. Platanus occidentalis and Populus deltoides), although a very minor but consistent Quercus spp. component suggests that site potential is good. It was the Quercus spp. and Fraxinus pennsylvanica that originally caused this subcluster to be included in the overall set of stands assigned to the Cypress character species group, even though Taxodium distichum was nearly absent from these samples.

60. Subcluster H2 also had a large Fraxinus pennsylvanica component, but had less of a Hackberry-Elm-Ash character than H1. A variety of species typical of very wet sites were common in this group of stands, including Taxodium distichum, Carya aquatica, Nyssa aquatica, Acer rubrum, Planera aquatica, and Gleditsia aquatica.

61. Subcluster H3 was neither as wet as H2 nor does it have the early

successional characteristics of H1. _F. pennsylvanica_ was again very common, but oaks (_Q. lyrata_ and _Q. nuttallii_) were important as was _Liquidambar styraciflua_. The outlier stand was evidently included in cluster H due to the strong presence of _Forestiera acuminata_, which occurred in nearly all of the H stands; however, the outlier also included a large amount of _Salix nigra_, which accounted for its distinct separation in the ordination analysis.

62. The process used to divide cluster H into meaningful subclusters was applied to all of the cluster groups to define the 52 subclusters illustrated in Figure 3. Outlier stands identified in this process were reserved (along with plantations, borrow areas, and scrub stands set aside earlier) for use in devising the final subtype descriptions, but were not employed in the site affinity analyses, below.

Site Affinities

63. The site condition variables associated with each stand in the dataset were evaluated as potential indicators of the occurrence of the individual subclusters. Of the 52 subclusters recognized, 11 were not used in this phase of the analysis because of their occurrence exclusively below Baton Rouge or on heavily sedimented sites, and one was deleted because it contained only highly disturbed stands associated with old home sites (cluster "O").

64. Flood frequency and duration are commonly employed as indicators of anaerobic conditions and forest species distributions in southern bottomlands (Wharton et al. 1982). The available site factors indicative of flooding included flood frequency and elevation above the LWRP, referred to here as relative elevation. Of 40 subclusters evaluated, only one was restricted to a zone flooded at a frequency of less than once every 2 years. All other subclusters included stands that occurred within the 2-year floodplain although they often contained stands that ranged as high as the 100-year floodplain. Flood frequency, then, was a very poor discriminator of subcluster distributions. The standard flood frequency zones are broad and unequal categories, each of which may represent a considerable range of flood durations and depths.

65. A more direct, equal-interval descriptor of the flooding gradient is relative elevation (elevation above LWRP). Plotting cluster distribution against relative elevation (Figure 5) illustrates that this approach did not

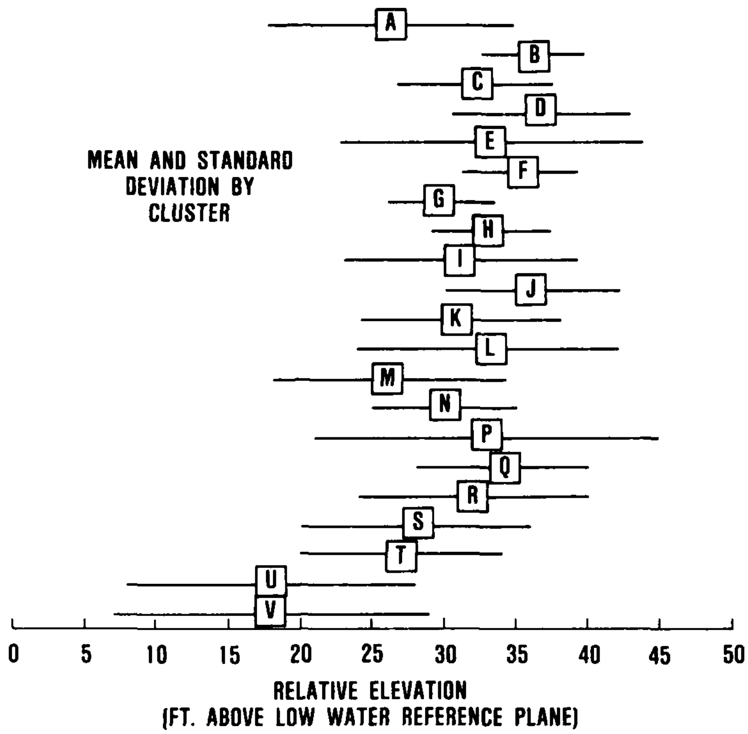

Figure 5. The distribution of parent cluster groups (see Figure 3) along an elevation gradient standardized to the LWRP

significantly improve cluster separation. An effort was made to further refine the flooding gradient by adjusting relative elevation slightly where microrelief data (field observations) suggested that CERDS-derived elevations may not have reflected the local conditions. These procedures did not improve cluster separations to any marked degree.

66. The failure of the elevation data to be predictive of cluster distributions was not anticipated. Possible reasons for these results included a basic error in the cluster designations, errors in the elevation database, or a weakness in the rationale behind the entire analytic approach. Further analyses, however, suggested that none of these explanations were appropriate; rather, the problem was that elevation data insufficiently reflected the importance of localized drainage in addition to flooding as a part of the overall water regime on these sites. Since much of the study area is flooded nearly every year, and all of it is subject to high annual rainfall (US Army Engineer District, Vicksburg 1976), soil moisture differences between sites derive largely from drainage rates. While the overall topography is

relatively flat in most areas, low sandy ridges, broad sumps, gentle slopes at the base of bluffs and other minor topographic features strongly influence site drainage (Putnam, Furnival, and McKnight 1960).

67. The geomorphology (environments of deposition) maps represent landscape features in a manner that reflects site drainage characteristics. Abandoned channels, backswamps, and large swales are sizeable depressions, usually partly filled with clay deposits, that tend to gather and hold water. Point bar sites generally have less fine-textured soils and are better drained. Superimposed on these gross patterns are a variety of surface deposits that may moderate the basic drainage characteristics of a site. Natural levee deposits are extensive in the study area, and may blanket large complexes of point bars, abandoned channels, and other features. The relatively well- drained character of this type of surface deposit tends to make any particular site somewhat drier than the basic environment of deposition would indicate. Alluvial apron deposits also have a moderating effect on moisture conditions as well as improved fertility and a loamy soil texture. Other surface deposits similarly modify site drainage predictably.

68. The utility of floodplain geomorphology in accounting for forest community distribution was investigated by evaluating the tendency for clusters to be restricted to specific depositional environments or combinations of environments. In general, the basic depositional environments were predictive of cluster occurrence ($\geq$50 percent fidelity) when divided into point bar (well to moderately well drained) versus all other types, such as abandoned channel, backswamp, and large swales (poorly drained) (Figure 6). The presence or absence of surface deposits was also effective in isolating a large proportion of the clusters.

69. The site-age information, derived from the periodic surveys since 1765, was useful in two applications. Oak-dominated forests do not develop on new alluvium for 150 to 200 yrs (Shelford 1954, Wiseman 1982), a limitation at least partly related to the high pH usually associated with recent deposits.* The site-age analysis, indicated almost complete restriction of oak-containing clusters to sites that have not been occupied by the river in historic times (Figure 6). Recognition of this relationship is important in estimating the progress of stand development over time; that is, successional rates are

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* Personal Communication, 20-9-86, Dr. Robert Johnson, US Forest Service, Stoneville, MS.

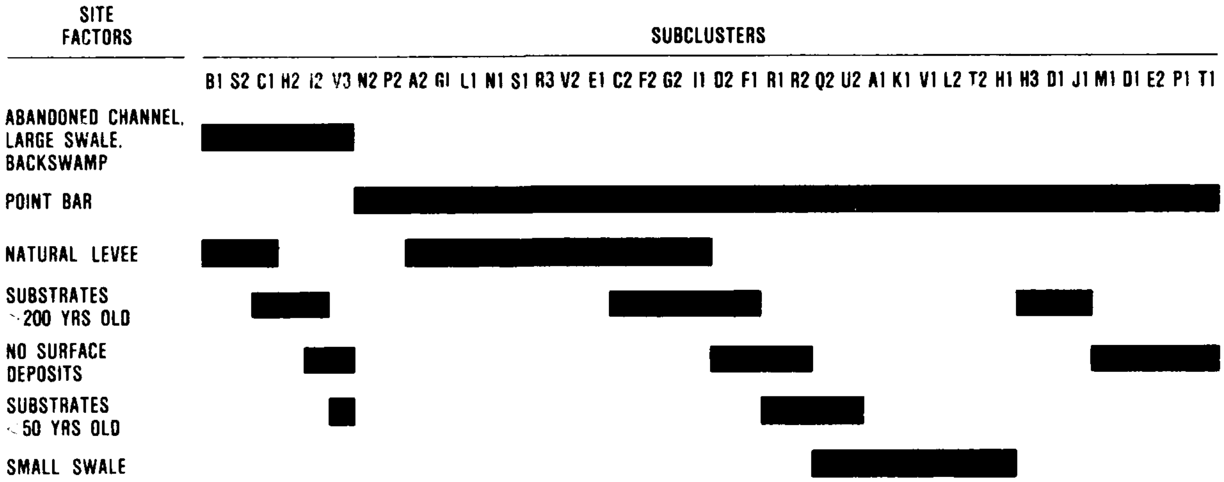

Figure 6. Subcluster fidelity (50 percent or greater) to selected geomorphic and site-age factors

limited by soil maturity. Another application of the site age factor concerns early-successional communitics. Where sites are less than 50 years old, they usually are occupied by the pioneer Black Willow or Cottonwood communities. Where these pioneer types occur on older substrates, they are either very mature stands, or are invaders on abandoned farmland, and are distinctly different from the stands invading new lands. Site age is useful, therefore, both in estimating rates of change over time, and in discriminating superficially similar but functionally and compositionally different stands within the early successional forest types.

70. A similar process of grouping variables and assessing cluster restriction was applied to the other categorical site factors in the database. Some of these did not discriminate clusters (e.g. flood frequency and microrelief), while others accounted for cluster distribution to some extent, but reflected relationships that were more clearly defined by other site factors. For example, soils classified in the field as permeable or moderately permeable tended to be associated with clusters found primarily on natural levee, alluvial apron, or point bar deposits. Similarly, 75 percent of the clusters with impermeable soils were associated with swales, abandoned channels, or deposits over 200 years old. In such cases the mapped site factor (environment of deposition or surface deposit) was preferable to the field observation in meeting the objectives of this research.

71. One group of variables was not particularly helpful in assessing site

affinites, but was useful in identifying certain trends or special circumstances that were considered in subsequent data evaluation and discussions. Stand ownership, for example, did not usefully discriminate among clusters, since there is a tendency for large tracts on older soils to be owned by hardwood timber companies. That is, sites capable of supporting extensive oak stands were recognized and purchased based on the same site-quality factors already represented in the geomorphology and site-age factors identified in this study. However, ownership remains useful in estimating probable future stand development trends if it is taken as an indicator of long-term management strategies. Certain other factors were similarly useful for limited generalizations regarding special sites (e.g. association with permanent water bodies, borrow pits, and stands subject to heavy sedimentation).

Key Structure

72. The cluster-site affinity evaluation process resulted in identification of a set of site and stand descriptors that, taken together, are predictive of community composition and structure at a more detailed level than the CERDS cover-type designations. Figure 7 is the final key to forest subtypes constructed through this process. The subtype key is inclusive of all sites within the study area. This structure unavoidably introduces some random variation to the final subtype descriptions, and requires qualification of the elements that make up the key.

73. The key consists of a series of site or cover-type categories (levels) that are considered to arrive at one of the 51 subtypes. Appendix B contains descriptions of each subtype in terms of overstory, understory, ground cover and site characteristics indicative of community structure and habitat quality. The subtype descriptions are presented as mean or frequency (constancy) values for all plots in the sample that meet the key criteria, except for three extreme outlier stands identified as associated with old home sites, and a set of 28 stands classified as heavily sedimented and described outside the key context (see Part IV). Appendix B also reports standard deviations associated with each mean value, or maximum and minimum values. These provide an indication of the variability associated with each subtype element, but they should be interpreted with reference to the temporal considerations discussed later in this section.

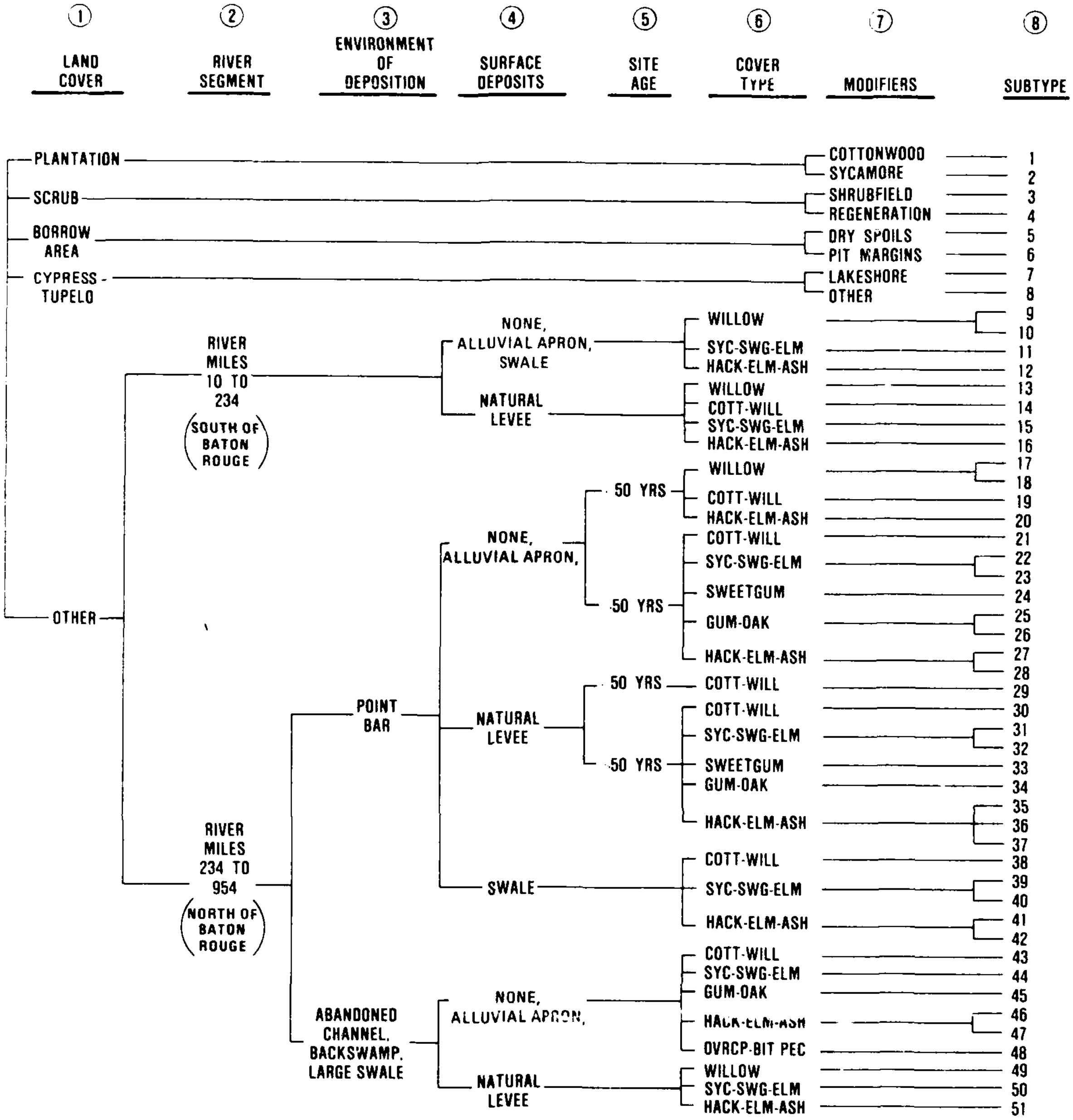

Figure 7. Key to forest subtypes. Key elements are recoverable from CERDS and topographic maps. Subtype summaries are presented in Appendix B.

74. The key element descriptions below contain qualifications essential to proper application of the system. Certain special considerations are discussed that may improve estimates where more detailed site data are available.

Level 1: Land cover

75. This includes four elements recoverable through CERDS, and one element estimable from existing maps. The first four elements encountered in the

key are special sites described in detail under the subtype descriptions below. The fifth element ("other") includes all remaining CERDS forest land cover categories.

Level 2: River segment

76. The key requires identification of the position along the river which is recoverable through CERDS as the River Mile (distance above Head of Passes, LA). This is because of a basic dichotomy between sites upstream and downstream of Baton Rouge (RM 234). The downriver quarter of the study area differs strikingly from the rest in several respects. The floodplain between the levees is very narrow; the levees are located within a few hundred yards of the top bank through most of this reach. Overbank flows affect nearly all lands on the leveed floodplain downstream of Baton Rouge on an annual basis. This drastically limits forest development as discussed later, and requires that sites in the area be divorced from sites to the north, if meaningful data are to be developed regarding succession in both areas. The lower river also differs geomorphically, in that the features produced by recent river meandering are only present on a small fraction of the floodplain. The geomorphic data stored in CERDS reflect this fact; most of the area below Baton Rouge is mapped only with respect to flood-deposited surface alluvium, while more complex overlapping alluvial features are mapped north of Baton Rouge. The dichotomous key structure was adopted in this instance to reflect both the ecological differences between the two areas as well as the inconsistent mapping conventions used in defining environments of deposition.

77. Another logical geographic split in the key could be established at about Memphis (RM 735), for reasons similar to those that dictate the Baton Rouge division. Above Memphis, bluffs and small tributaries have a greater influence on the floodplain than below that point, particularly the reach between Memphis and Vicksburg. The vegetation changes distinctly north of Memphis, where *Acer saccharinum* is a common, and often dominant, component in several forest types. South of Memphis other species replace *A. saccharinum* almost entirely. This is not reflected in the key because no Silver Maple-American Elm type or any Silver Maple variant of other types were included in the CERDS cover types. Key users must be aware of this major difference in interpreting the subtype descriptions, as discussed later.

Level 3: Environment of deposition

78. This factor applies only above Baton Rouge, where relatively recent

river meandering has defined the basic geomorphology of the floodplain. Based on the affinity analyses reported earlier, a simple dichotomy is recognized between poorly drained sites (abandoned channels, backswamps, large swales) and the more variable point bar deposits.

Level 4: Surface deposits

79. Below Baton Rouge, the key recognizes a distinction between relatively well-drained natural levee deposits, and the moderately to poorly drained coastal plain and alluvial apron deposits together with the small swale formations that temporarily impound flood and rain waters. Above Baton Rouge these same distinctions apply, but small swales are sufficiently common to merit separate treatment in the key.

Level 5: Site age

80. This factor is not incorporated in CERDS but can be estimated either from the survey maps from which it was derived, or indirectly from topographic maps which usually indicate past bank line positions. The principal value of site age as a key factor derives from its usefulness in distinguishing pioneer (new substrate) plant communities from older stands or superficially similar stands that have invaded abandoned fields (older substrates). For this reason, the key deals with site age only as a modifier of point bar deposits, which continue to accrete in some areas along the river upstream of Baton Rouge. Below Baton Rouge and on abandoned channel and similar sites this factor is not used, since these areas have essentially been stabilized since the 1940's (Tuttle and Pinner 1982); that is, no new abandoned channels are being formed, and lateral accretion is minimal in the downstream one-quarter of the river. Site age is also useful in estimating limits to succession rates, but this is dealt with in later discussions rather than in the key.

Level 6: Cover type

81. The cover type categories used in the key are a subset of those employed in CERDS. Due to classification inconsistencies and analytic protocols discussed earlier, the general types used in the key often represent a complex of possible CERDS types. For example, pure *Populus deltoides* stands identified through CERDS are assumed to be part of the Cottonwood-Willow type in the key, although extensive pure *Salix nigra* stands are common and are handled separately as the Black Willow type in some sections of the key. In general, single species dominance-types (e.g. Green Ash, Sycamore) can be assumed to be similar to their parent type (Hackberry-Elm-Ash, Sycamore-Sweetgum-Elm)

in general composition, but overstory diversity will be lower than average and a more even-aged structure can be assumed. The Ridge-Swale Complex type in CERDS represents the later-successional key types in a mosaic pattern on undulating (usually point bar) topography, and must be evaluated by the key user depending on site (KEY LEVELS 3, 4, 5). As noted earlier, the CERDS types characterized by Quercus virginiana were not sampled in this effort; therefore, their structural and compositional characteristics cannot be recovered through this key or the subtype descriptions. Such areas are of very limited distribution within the study area, however.

Level 7: Modifiers

82. These are specific to the four special "Land Cover" categories, (Level 1), and are referenced in the subtype descriptions below. Resolution of key divisions below the modifier level require reference to the subtype replacement sequences below.

Level 8: Subtype

83. Fifty-one subtypes are identified as possible endpoints from the application of the key. They are summarized in Appendix B in terms judged to be convenient to key users seeking general ecological characteristics as well as estimates of wildlife habitat suitability evaluation factors. The sample data stored in the CERDS database are available for development of summary statistics other than those provided in Appendix B.

Subtype Descriptions

84. To employ the key and subtype descriptions profitably, the user must be aware of certain limitations and characteristics of the system. Pure cover types and the Ridge-Swale Complex must be regarded as variants of other types, as discussed earlier. There is also a subset of sites that were excluded from the basic subtypes because of the dramatic impact of sedimentation. These sites occur directly adjacent to the riverbank, often in association with revetments, and extend up to 500 ft from the river. They occur particularly on the outside of bends, at the head of islands, and where the river is sharply constricted by levees and bluffs (Klimas 1987a). Where this burial phenomenon is anticipated, the key is applied as usual, but severe retardation of succession, mortality among older trees, and an element of "weediness" (e.g. increased importance of Acer negundo) can be assumed on most sites.

85. One weakness in the subtype summaries is the lack of a mechanism to show variation within cover types over time. Consequently, most summary statistics in Appendix B are associated with large sample variations (reported as standard deviations). In the absence of more specific site data than those stored in CERDS, the user should assume that the mean values reported in Appendix B represent the best available estimates. However, where there is some basis for estimating the position of a target stand on a temporal scale (early-to-late in the development of a particular cover type) the mean values may be adjusted in a systematic way. One site type (abandoned channel, no surface deposits) is used to develop an example of this process later in this section.

86. Temporal scales also are not available to indicate changes in cover type within a site type. However, the following subtype descriptions are accompanied by a general replacement sequence developed for each site type in the key (excluding special sites: subtypes 1 through 8). Summary data are presented in Appendix B.

Subtypes 1 through 8

87. Plantations. Tree plantations are common in the study area. They are primarily monocultures of *Populus deltoides* (Subtype 1) and to a much lesser extent, *Platanus occidentalis* (Subtype 2). Sites planted with *Liquidambar styraciflua*, *Fraxinus pennsylvanica*, *Carya illinoensis* and *Quercus* sp. may occur but are rare and were not sampled in this study.

88. The subtype descriptions represent mean values for a sample of plantations. Since plantations are intensively managed systems, most of the structural information of interest can be better inferred from published descriptions of stand growth and harvest practices. For example, unthinned stands in a 20-yr-old plantation within the levee system near Fitler, Mississippi (Krinard and Johnson 1984) showed the development patterns illustrated in Figure 8. The plantation subtype descriptions are of particular interest with respect to the ground cover, vine, and site factor data not usually evaluated in studies concerned with maximizing wood production. These features are highly variable depending on weed control practices and thinning schedules; therefore, the mean values in Appendix B are the best available estimates for a particular site without specific stand structural and management data. Where plantations might be expected to be abandoned after the final harvest, the understory data (Appendix B) suggest the probable residual stand

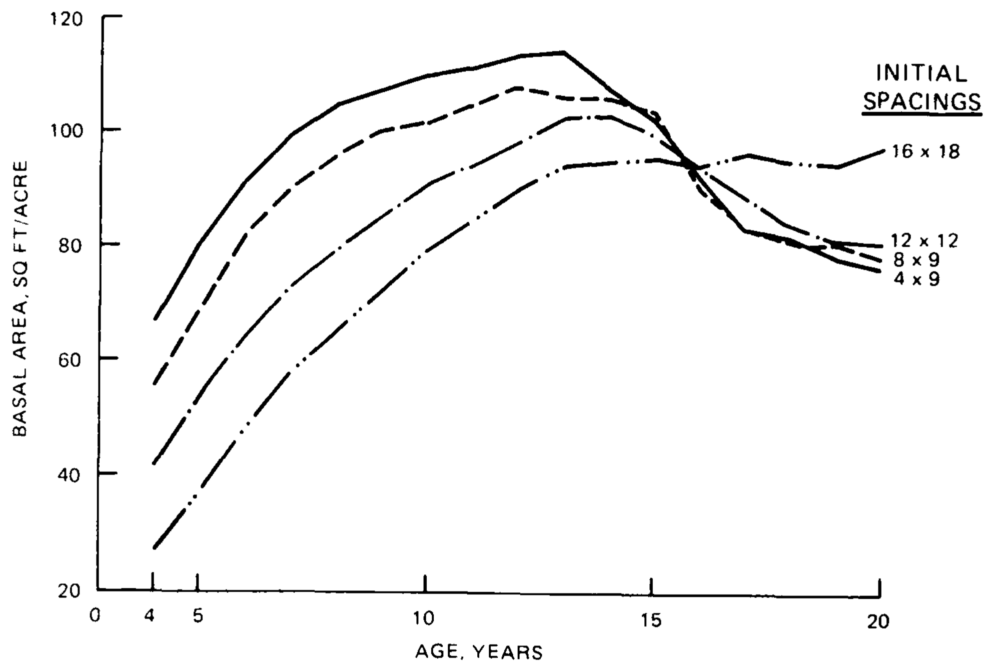

Figure 8. Cottonwood plantation basal area at various spacings over a 20-yr period, from a leveed floodplain site in central Mississippi. Adapted from Krinard and Johnson (1984)

and establish stand position on the replacement sequences described later in this section.

89. Scrub. This CERDS category includes all sites having woody vegetation of a subcanopy stature or less. These can be categorized as either shrubfield (subtype 3) or regeneration (subtype 4). Shrubfields occur in very limited areas (generally less than an acre) on lands disturbed by agriculture, sedimentation, or construction activities, and on low bars. They are most common in the vicinity of levees, where cattle grazing has arrested the development of overstory species to the benefit of subcanopy or shrub species such as *Cornus drummondii* and *Forestiera accuminata*, or on riverfront sites where dense young *Salix interior* thickets occur. This community structure may persist indefinitely under continual grazing pressure, long-duration flooding, or the impact of high-velocity river flows. Ground cover is usually minimal and other habitat structure components (snags, logs, etc.) tend to be absent or rare.

90. The regeneration category (subtype 4) includes a wide variety of potential dominant species, most of which actually occur in two or three-species combinations on any particular site. Heavily cut stands, abandoned

fields, and some pioneer riverfront sites are included within this subtype. Subtype 4 differs from subtype 3 primarily with respect to development potential. For the purposes of estimating replacement sequence position, "scrub" considered to be regeneration should generally be regarded as equivalent to very early stages of the Hackberry-Elm-Ash or Sycamore-Sweetgum-Elm types.

91. Borrow areas. The immediate vicinity of water bodies resulting from levee construction (borrow pits, subtype 6) can be identified with CERDS, and the uneven terrain of non-ponded areas disturbed by borrow operations (subtype 5) is usually discernible from mapped elevation contours. These areas are discriminated in the key because the severe soil disturbance associated with construction activities and levee grazing practices appear to have an effect similar to periodic sedimentation in stalling the development of forests. These sites should be considered to be similar to oxbow perimeters or new bars in estimating future rates of compositional change.

92. Cypress-Tupelo. This land cover type is summarized separately from others because of its longevity and association with extreme flood durations. It is intended to incorporate both pure *Taxodium distichum* and pure *Nyssa aquatica* stands as well as intermediate mixed types. In general, the lakeshore stands (subtype 7) can be regarded as arrested; near-permanent annual flooding limits regeneration of other species. Gradual filling of the deep swales and abandoned channels that impound water bodies may result in a shift in the Cypress-Tupelo zone lakeward, but the magnitude and rate of invasion are dependent on a variety of factors, including lake bottom morphology and the type and amount of river-borne or locally eroded sediments that are deposited on the site, as they influence substrate exposure frequency (Klimas 1987b).

93. Another Cypress-Tupelo site that occurs regularly is on substrates that are flooded infrequently enough to permit invasion by other species (subtype 8). These are primarily sites that have filled with sediments or have improved drainage since the original Cypress-Tupelo stand established. Although the long-lived *Taxodium distichum* may dictate stand character for decades (or centuries in the absence of harvest), the relative importance of species such as *Quercus lyrata* suggests the future composition of the stand. Ground cover and understory vegetation also reflect the shifting nature of the site.

Subtypes 9 through 12

94. As noted earlier, the narrow floodplain downstream of Baton Rouge is subject to frequent flooding as well as a high level of human disturbance. Subtypes 9 through 12 occupy sites where natural levee deposits have not accumulated, but they are still subject to harsh environmental conditions in most cases.

95. The Black Willow type on these sites is treated as two subtypes in the key. Subtype 10 is typical of fairly young, pioneer stands where trees are small and density is high. The riverfront character of these stands is illustrated by the occurrence of Salix interior, a very short-lived, strictly pioneer species (Noble 1979). Other riverfront species (e.g. Amorpha fruticosa) also are common. This subtype (rather than subtype 9) can be assumed to be appropriate on most riverfront sites, particularly in bank zones with elevations generally <+15 ft LWRP. As Figure 5 suggests, sites below that level are unlikely to support other vegetation types unless protected or isolated from the river. In the absence of any land building (which is limited in the canal-like lower river) these low-elevation riverfront sites may be assumed to be permanently stagnated in subtype 10, which simply replaces itself as portions of the stand mature and collapse. On sites where substrate elevations are increasing due to trapping of sediments, or on off-river sites, subtype 10 will progress to resemble the stands summarized in subtype 9 (Figure 9). These are older stands with mature Salix nigra dominating, but with elements of later forest types present. On higher elevation riverfront sites, subtype 9 may be replaced by stands similar to

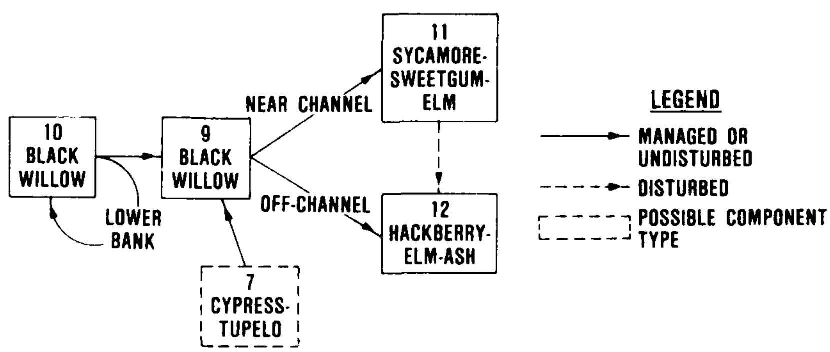

Figure 9. Common replacement sequences for forest subtypes on sites without natural levee deposits (south of Baton Rouge)

those in subtype 11. This type also tends to stagnate where it is exposed to high velocity flows. However, where sites are protected from direct impacts of river flows or are far enough from the channel that flood velocities are moderated, subtype 12 may develop, either subsequent to disturbance in subtype 11, or, on wet flats, directly following subtype 9. Subtype 12 contains some elements (Quercus nigra and Q. virginiana) of later types on particularly protected sites, but repeated disturbance and high flow velocities are probably sufficient to preclude progression beyond the Sycamore-Sweetgum-Elm and Hackberry-Elm-Ash types. Remnant Taxodium distichum stands in the area are consistent with subtype 7, but appear more likely to eventually convert to a Black Willow type (subtype 9) than a mixed-species stand such as subtype 8.

Subtypes 13 through 16

96. Where natural levee deposits have accumulated, forest development (Figure 10) is similar to that described in Figure 9, but species composition

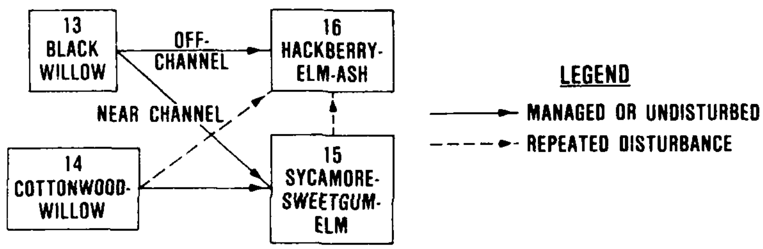

Figure 10. Common replacement sequences for forest subtypes on natural levee sites (south of Baton Rouge)

shifts significantly. The Black Willow type (subtype 13) is similar to those described above, but sedimentation promotes development of other riverfront species such as Populus deltoides and Platanus occidentalis. These two species, which are unimportant in subtypes 9 through 12, are characteristic of the better-drained natural levee sites. A Cottonwood-Willow type (subtype 14) is recognized on these sites, where it occurs as a mosaic of stands dominated by either of these species, depending on substrate. These stands progress to a Sycamore-Sweetgum-Elm cover type (subtype 15) on most natural levee sites, with P. occidentalis a common dominant. On wetter sites, or where subtypes 14 or 15 have been disturbed, composition and structure more closely resemble subtype 16. Again, occasional elements typical of later successional stages occur (e.g. Quercus nigra), but overall composition does not progress beyond the Hackberry-Elm-Ash or Sycamore-Sweetgum-Elm cover types.

Subtypes 17 through 28

97. In this group, riverfront stands typed as Black Willow (subtype 18) typically include _Salix interior_ as a common associate, and they tend to accrete sediments unlike most of the similar low-elevation stands south of Baton Rouge. As stands mature and sediments accrete (Figure 11), the Black

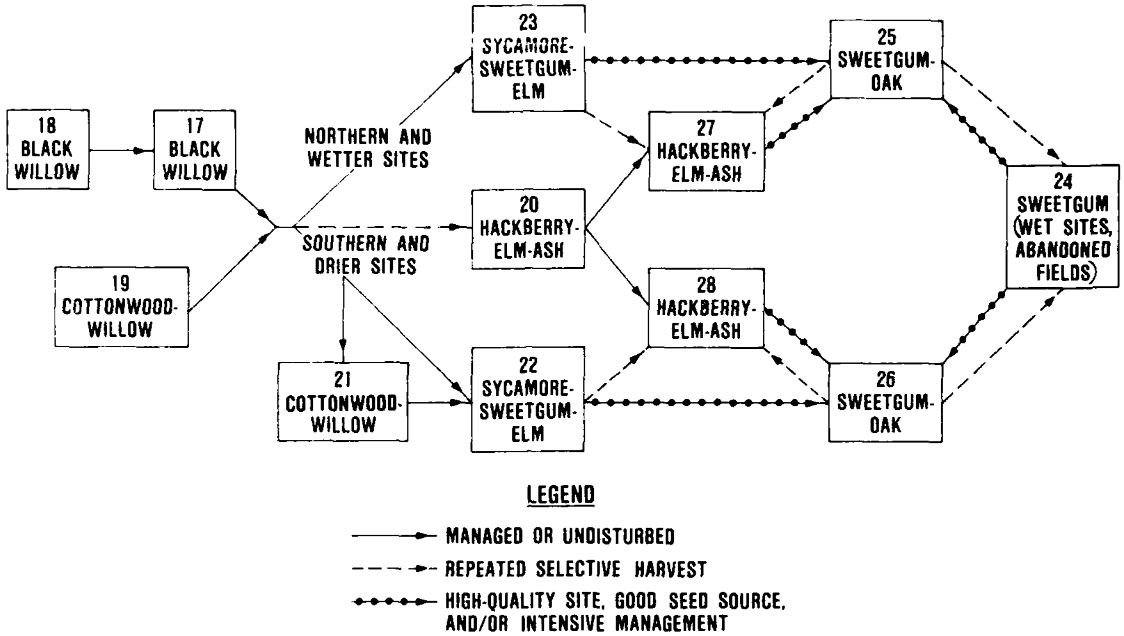

Figure 11. Common replacement sequences for forest subtypes on point bars without surface deposits or with alluvial apron deposits (north of Baton Rouge)

Willow type more closely resembles subtype 17, with _S. interior_ becoming less important and other species (e.g. _Celtis laevigata_, _Platanus occidentalis_) occurring in the subcanopy. The collapse or harvest of the _S. nigra_ overstory creates canopy openings and composition shifts to more shade-tolerant types.

98. These open _S. nigra_ stands as well as _S. nigra_ stands intermixed with _Populus deltoides_ stands, are often mapped as Cottonwood-Willow (subtypes 19 and 21). Subtype 19 is replaced by a Sycamore-Sweetgum-Elm type on most sites, but this subtype (23) should be interpreted carefully. The summary (Appendix B) indicates a high percentage of _Acer saccharinum_ in subtype 23, but this applies primarily to interior (non-riverfront) sites north of Memphis. On such sites _A. saccharinum_ often occurs as a dominant in fairly even-aged stands, and other species are less important than indicated in

Appendix B. On riverfront sites and south of Memphis, stands typed as Sycamore-Sweetgum-Elm are similar to subtype 23, but without A. saccharinum as a common dominant and with a reciprocal increase in the importance of other species (subtype 22). Subtype 20 may develop directly from subtype 19 in certain very wet or disturbed sites. Both subtypes 23 and 20 have the potential under very favorable circumstances (see Part V) to progress to the point of being mapped as the Sweetgum-Oak type (subtype 25) on wetter sites. Early or mismanaged stages of this type may be mapped as Hackberry-Elm-Ash (subtype 27), which generally includes enough of a Quercus spp. component to indicate that it could be managed to eventually be regarded as subtype 25. Certain conditions discussed later in this section may promote development of nearly pure Liquidambar styraciflua stands on these sites (subtype 24). Associated species in subtype 24 stands usually indicate a potential to progress to subtype 25.

99. Relatively dry sites tend to progress similarly to the sequence described above, but species such as Populus deltoides and Platanus occidentalis are more important and Liquidambar styraciflua and Fraxinus pennsylvanica less so. The progression from subtypes 17 through 21 and 22 occurs commonly, but further development again requires special conditions (see Part V). Where those conditions exist, subtypes 26 and 28 may be present. subtype 24 (pure Liquidambar styraciflua) may also occur on these sites, particularly on abandoned fields.

Subtypes 29 through 37

100. In most cases, point bar-natural levee sites have accumulated sufficient coarse-grained sediments to shift pioneer stands to a predominantly Populus deltoides composition, with Salix nigra in a subordinate position (subtype 29). A later phase (Figure 12) of the Cottonwood-Willow type (subtype 30) shows further decline of S. nigra. Generally, this type is harvested for P. deltoides and the residual stand progresses to other cover types; in some cases, however, the P. deltoides overstory persists and assumes a "supercanopy" status, with a subcanopy dominated strongly by Celtis laevigata (subtype 37). In these instances, the replacement stands have a strong C. laevigata character (subtype 36 on most sites, subtype 35 on wetter or non-riverfront sites north of Memphis). In most cases, however, the P. deltoides overstory is removed before a closed subcanopy develops, and a progression to stands with greater A. saccharinum (subtype 31) or Carya

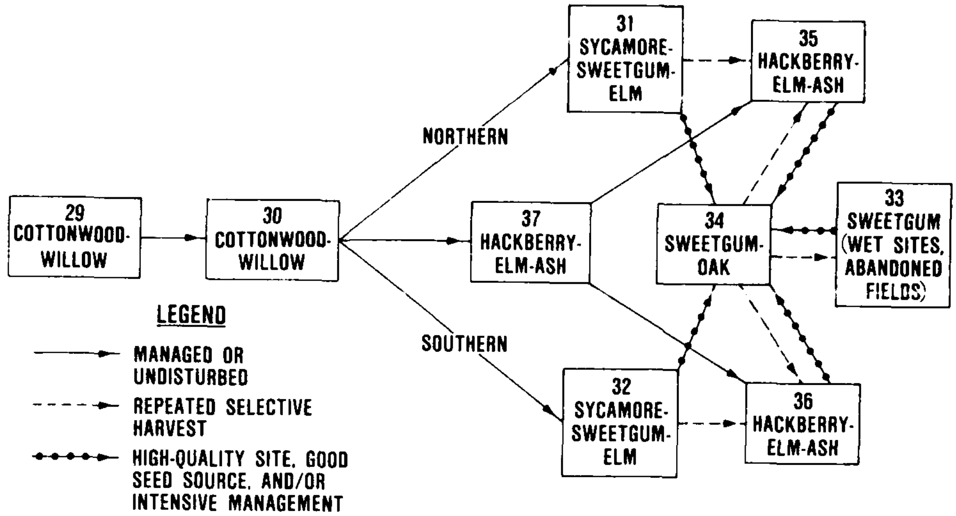

Figure 12. Common replacement sequences for forest subtypes on point bars with natural levee deposits (north of Baton Rouge)

illinoensis (subtype 32) components occurs. These in turn may be degraded to subtypes 35 or 36. Under favorable conditions a Sweetgum-Oak type (subtype 34) or a pure Sweetgum type (subtype 33) may develop on these sites.

Subtypes 38 through 42

101. The subtypes associated with swales on point bars are compositionally similar to other point bar stands, but are slightly "wetter" in character. As indicated in Figure 13, replacement sequences proceed from a Cottonwood-Willow complex (Subtype 38) to Hackberry-Elm-Ash and Sycamore-Sweetgum-Elm types

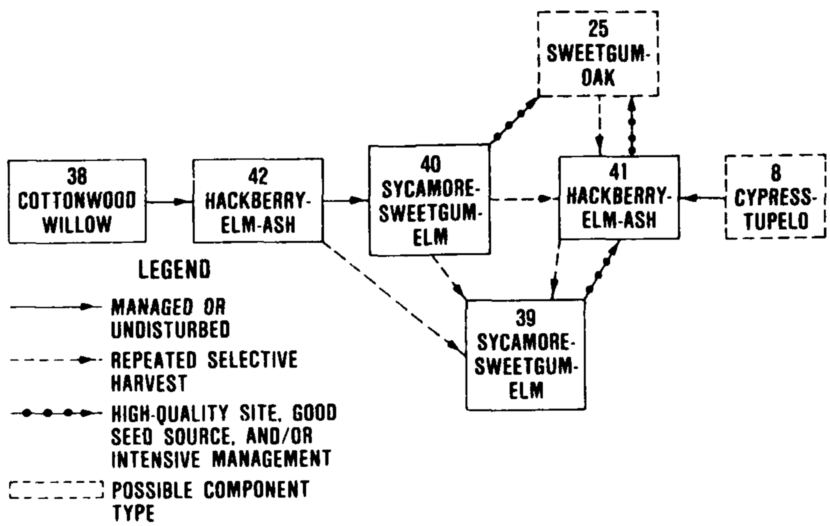

Figure 13. Common replacement sequences for forest subtypes in point bar swales (north of Baton Rouge)

(subtypes 42 and 40), again with a strong Acer saccharinum component north of Memphis. Selective harvests have promoted development of a persistent Sycamore-Sweetgum-Elm type (subtype 39) (actually a consistently mis-mapped Hackberry-Elm-Ash type) on many sites. In some cases, a more advanced Hackberry-Elm-Ash type has developed (subtype 41) with a good representation of Quercus species suggesting that, under ideal conditions, a Sweetgum-Oak type similar to subtype 25 may occur. In nearly all cases, the swale sites are differentiated from other point bar sites by an increased importance of species such as Acer negundo, Diospyros virginiana, and Fraxinus pennsylvanica. In rare instances, swales are configured to hold sufficient water to support a Cypress-Tupelo stand, but these are not self-reproducing, and associated species suggest subtype 41 as a probable replacement type.

Subtypes 43 through 48

102. The poorly drained, non-point bar sites (Figure 14) show a

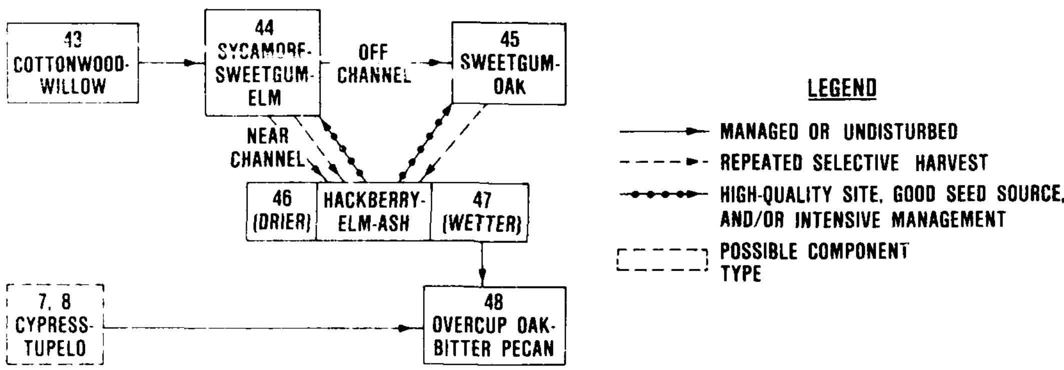

Figure 14. Common replacement sequences for forest subtypes in abandoned channels, backswamps, and large swales, without natural levee deposits (north of Baton Rouge)

progression of forest types similar to that described above, but have a decidedly "wetter" character, with species such as Carya aquatica, Forestiera accuminata, Fraxinus pennsylvanica, and F. profunda occurring regularly. The Cottonwood-Willow type (subtype 43) includes remnant swamp species and elements of drier types, suggesting sediment accretion or complex microrelief. This type develops to resemble subtype 44 and, eventually, subtype 45 under good conditions. However, poor management often results in degradation to stands strongly dominated by Celtis laevigata. Heavy selective harvest during early successional development tends to produce stands similar to subtype 46; during late stages subtype 47, with some Quercus and Carya species present, is a more typical product of poor management. Both of these Hackberry-Elm-Ash subtypes can potentially be managed back to Sweetgum-Oak (subtype 45) but in most cases they are likely to remain dominated by _C. laevigata_ indefinitely.

103. One plant community often present in abandoned channels is the Cypress-Tupelo type or pure stands of either character species. Where a channel ponds water year-round, these resemble subtype 7, but as the channel fills with sediment, the mixed-species subtype 8 develops. Both of these types may occur on other sites, but in abandoned channels subtype 8 often progresses, through either sediment accretion and/or harvest, to an Overcup Oak-Bitter Pecan type (subtype 48). On some very wet sites, subtype 48 also develops from the Hackberry-Elm-Ash subtype 47.

Subtypes 49 through 51

104. As indicated above, some sediment accretion occurs in nearly all abandoned channels. Where these sediments are deep natural levee deposits, they influence vegetation composition by favoring drier-site species. Subtype 49 has little of the remnant swamp character of subtype 43 and the later stages (subtypes 50 and 51) (Figure 15) more closely resemble point bar

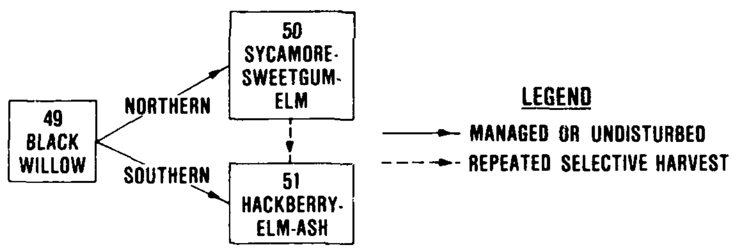

Figure 15. Common replacement sequences for forest subtypes in abandoned channels, backswamps, and large swales with natural levee deposits (north of Baton Rouge)

communities than abandoned channel types. Although the high rate of sediment accretion in near-river abandoned channels probably prevents development of Sweetgum-Oak stands, these types may develop on older natural levee soils. Minor species found in subtypes 50 and 51 suggest that eventual _Quercus_ dominated stands may resemble those on either point bars or abandoned channels, depending on relative drainage and site management.

PART IV: SYSTEM APPLICATION AND PERFORMANCE

Sequence Selection

105. The replacement sequences described in the Results section of this report (Part III) require that decisions be made regarding the proper choice of pathways, and whether or not a given developmental stage is relatively permanent. The choice of appropriate replacement pathways is largely a matter of identifying drainage characteristics within the broad geomorphological categories provided by CERDS. Elevation relative to surrounding sites is suggestive of moisture status, and CERDS can provide an overview of topography for any given river reach.

106. Another pathway choice that commonly must be made concerns the distribution of Acer saccharinum, which is a common dominant only above Memphis. Subtypes on the "north" pathways are segregated to reflect the temporary importance of A. saccharinum on certain sites. Since these subtypes could not be formally separated in the key, however, (because A. saccharinum-dominated stands are not differentiated in CERDS from stands of otherwise similar composition) they include southern stands with little or no A. saccharinum. Sites dominated by this species in the north tend to be somewhat less well-drained than other intermediate-aged sites; therefore, the "wet" pathway for southern sites should probably include a brief stage similar to the A. saccharinum stands, but with other species (notably A. negundo) assuming the dominant role.

107. The replacement sequences illustrate site potential, but the direction and degree of probable changes must be estimated for any given site based on a variety of ecological considerations. The following generalizations are intended as a guide to the common constraints on stand development.

108. Sites subjected to prolonged annual inundation may be arrested in very early developmental stages. This applies most commonly to Cypress-Tupelo and related cover types and certain low elevation Black Willow type stands, particularly downriver of Baton Rouge. Stand development also may be repeatedly set back by severe sedimentation, as often occurs in the vicinity of stabilized (revetted) riverbanks, and frequent deposition of high pH sediments may prevent many later-successional species (particularly Quercus spp.) from establishing on a site. Similarly, soil disturbance associated with

levee borrow areas appears to be unfavorable to late-successional species. Both new and severely disturbed soils probably require at least 200 years of soil development before conditions are appropriate for the establishment of Sweetgum-Oak and related cover types (see Part III). However, moderate soil disturbance from farming operations may produce site conditions that favor species such as Quercus nigra and Liquidambar styraciflua. While abandoned farmland often is invaded by light-seeded pioneer species, it may be immediately occupied by later-successional species if seed or viable sprout material is present on the site.

109. Within these general constraints, forest stands of the study area might be expected to progress in an orderly fashion from pioneer to climax composition as substrate elevations rise, soils mature, and gradual replacement by heavier-seeded, longer-lived tree species proceeds. However, this pattern is almost universally disrupted by land use and timber harvesting practices that complicate prediction of forest development. Most forests of the study area are repeatedly impacted by activities that discourage development or persistence of late-successional stages (Sweetgum-Oak and similar types) and tend to promote types (such as Hackberry-Elm-Ash) that are composed of species of less commercial value.

Interpretation of Summary Data

110. One site type (abandoned channel, no surface deposits) was examined in detail to provide an independent evaluation of the vegetation models. This tested the efficacy of the site type as a recognizable unit and the logic of the replacement sequence devised for that type, demonstrated the feasibility of using the vegetation models to predict future conditions, and provided an explanation for much of the variation associated with the mean values for vegetation variables reported in Appendix B.

111. Ordination of stand data from subtypes 43 through 48 resulted in the array presented in Figure 16. Superimposing the subtype and cover-type designations from the key on the ordination array shows little overlap between types. Although clusters were originally designated partly through this approach, cover types (and therefore subtypes) were not; therefore, this pattern is taken as verification of the integrity (internal cohesion) of the subtype designations.

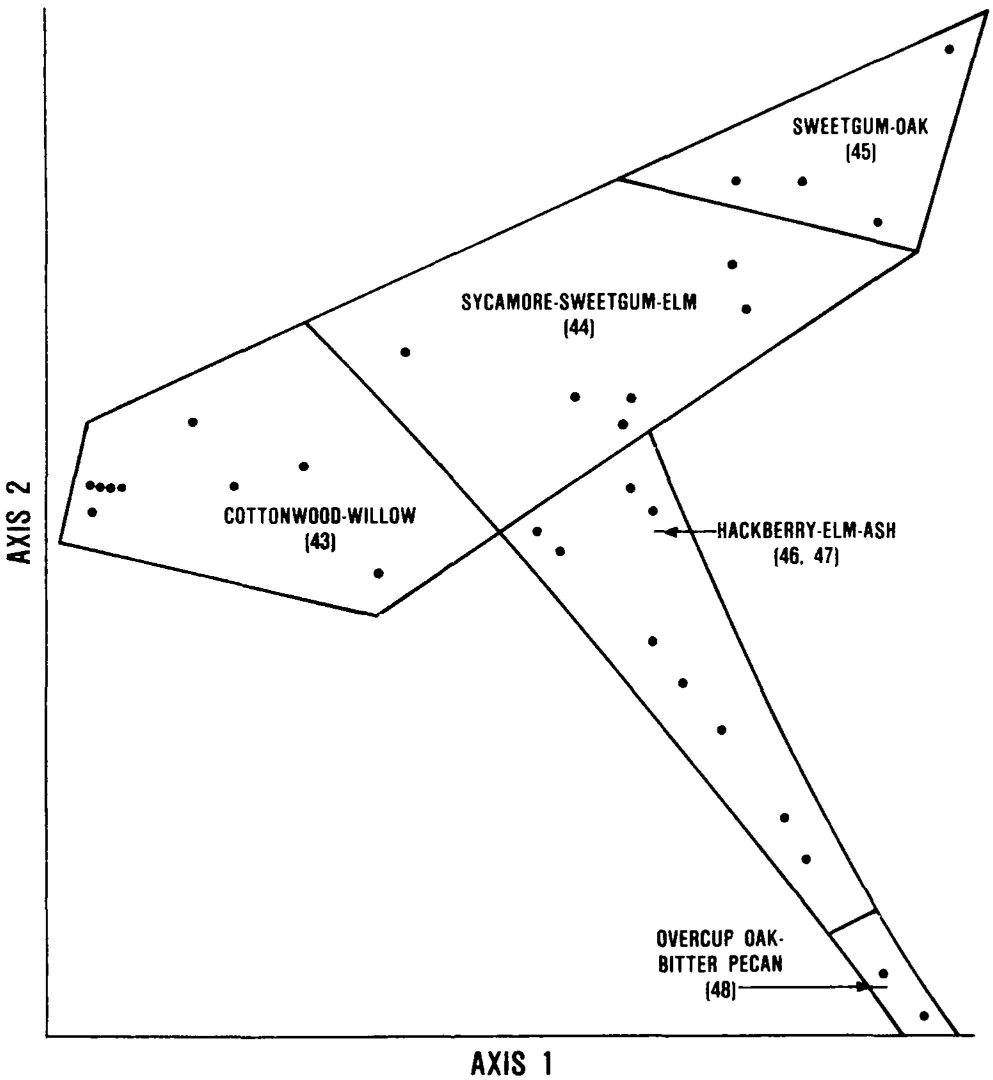

Figure 16. Ordination array for stands in abandoned channels (subtypes 43 through 48), with subtype distribution limits indicated

112. The replacement sequence for this site also appears to be verified by the ordination. Taking Axis 1 of the ordination as generally representing successional development (Salix T Quercus) and Axis 2 as a stress gradient (flooding and abusive management) the replacement sequence developed from literature sources and field observations parallels the ordination results closely.

113. Just as the proximity and arrangement of subtypes may be regarded as indicative of developmental sequences and trends, the arrangement of particular stands can be taken as an indication of "ecological distance" (Gauch 1982). Since the ordination Axis 1 appears to represent a successional

gradient, the spread of stands along that axis represents a relative time scale. Projecting stand position onto Axis 1 and interpreting distance from the origin as successional time allows particular stand characteristics to be examined as site conditions and vegetation change over time. This approach is used here to further evaluate the vegetation model developed earlier, to demonstrate the feasibility of predicting future conditions, and to illustrate the source of much of the variation associated with the subtype summaries in Appendix B.

114. To simplify this analysis, it was limited to the subtypes forming the strong horizontal axis of the ordination. The model and the ordination indicate that these subtypes (43 through 45) represent a relatively undisturbed (or well-managed) sequence of stand development; the excluded stands (subtypes 46, 47, 48) are strongly related to extreme exploitation and/or flooding effects. Projecting the position of each stand (subtypes 43-45) to this axis provides a basis for plotting stand structure and composition data as they vary through time.

115. Figure 17 presents such a plot for stand canopy cover, with a hand-fitted curve imposed that reflects the probable events and patterns that produced this array. Canopy cover varies as the Cottonwood-Willow type progresses, reflecting the break up of the even-aged Salix nigra stands, and the harvest of that species on some sites and Populus deltoides in nearly all cases. Canopy cover of the resulting Sycamore-Sweetgum-Elm type increases rapidly following harvest of the P. deltoides, but does not close completely due to occasional removal of timber and natural mortality. Subsequent variations in canopy cover also occur, possibly in response to stand management using small-patch clearcuts, as is generally recommended for Quercus reproduction (Kennedy and Johnson 1984).

116. A similar pattern can be derived from the ordination analysis for other stand structure and composition factors. Snag density and mast tree density (Figure 17), for example, show interpretable patterns over time. The collapse of the Salix nigra stands generates a large snag population that is eventually eliminated in the Populus deltoides harvest operation. The number of snags increases as the Sycamore-Sweetgum-Elm type develops and intermediate-sized trees die because of normal thinning processes. The increasing interest in timber recovery during the latter Sycamore-Sweetgum-Elm stages and the subsequent Sweetgum-Oak type tends to prevent snag development

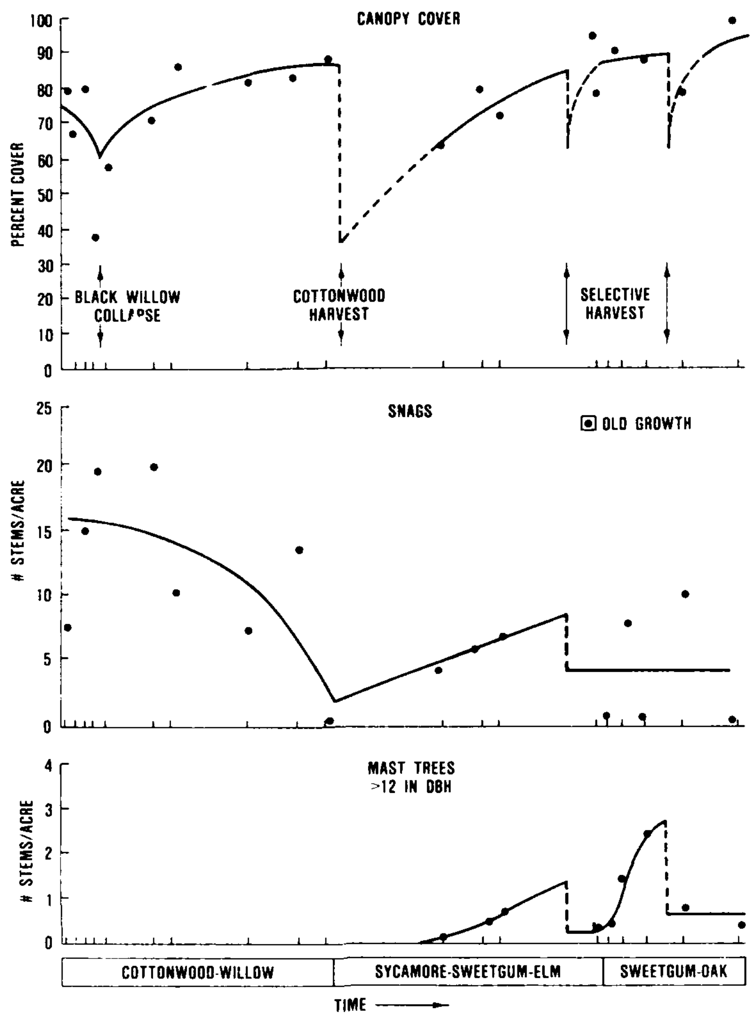

Figure 17. Canopy cover, snag density, and mast tree density plotted against time as represented by ordination Axis 1 (see Figure 16) for subtypes 43 through 45. Hand-fitted curves include common harvest practices

(because of cull removal and heavy equipment operation). The exception (the aberrant stand in the snag graph) tends to verify this interpretation; this stand was on a small remnant of government-owned property where the usual *Populus deltoides* harvest did not occur. The large number of snags persisting into later developmental stages were remnants of the *P. deltoides* and later stands that were never removed.

117. The final example concerns the predictability of mast-producing trees, (Figure 17) which are important in many wildlife habitat evaluations. As expected, these species (*Carya* sp. and *Quercus* sp. other than *Q. lyrata*)

begin to enter the canopy in the mid-Sycamore-Sweetgum-Elm stage, and vary in density with subsequent management activities. Despite the designation of later stages as Sweetgum-Oak, mast tree density remains fairly low. This illustrates the utility of the subtype and key system devised in this study: although these stands are typed as Sweetgum-Oak, they are different from similarly-typed stands outside abandoned channels in that species such as *Q. lyrata* and *Liquidambar styraciflua* dominate rather than the preferred mast-producing species of *Quercus* and *Carya*.

118. These three examples derived from the ordination analysis are informative in several respects. They produce patterns that are interpretable in terms of ecological and management trends already described as important, and thereby constitute an independent verification of the utility of the classification approach that forms the basis of the subtype key. Further, they illustrate that the variation associated with the subtype means (Appendix B) is attributable largely to temporal changes within subtypes. For example, the wide variation in canopy cover for subtype 44 (37.5 to 97.5 percent) can be seen as arising from a predictable process of recovery from disturbance (Figure 17). Finally, the demonstration that a relative temporal scale can be devised verifies that the vegetation models can be used in a predictive mode.

Model Test: Overstory Composition

119. Wiseman (1982) sampled stands on Huntington Point, Mississippi (RM 552) where river accretion rates and stand management were documented. Three zones of accretion were identified (1830-1880, 1880-1930, and post-1930) and sampled for soil and vegetation characteristics. He found significant soil differences between the oldest and youngest sites. Percent sand and pH decreased with age, while percent clay, organic matter, and potassium, magnesium, and calcium concentrations all increased over time. These patterns tend to verify the general soil maturity processes noted elsewhere in this report. Vegetation changes across these zones were taken as indicative of classical succession patterns, with identifiable historic management influences.

120. Applying CERDS to Wiseman's study sites indicates that the stands in question are on a point bar without additional surface deposits (Figure 18). The land cover maps in CERDS (Figure 19) (with pure stands reincorporated into parent types to conform with the key structure) indicate that Wiseman's

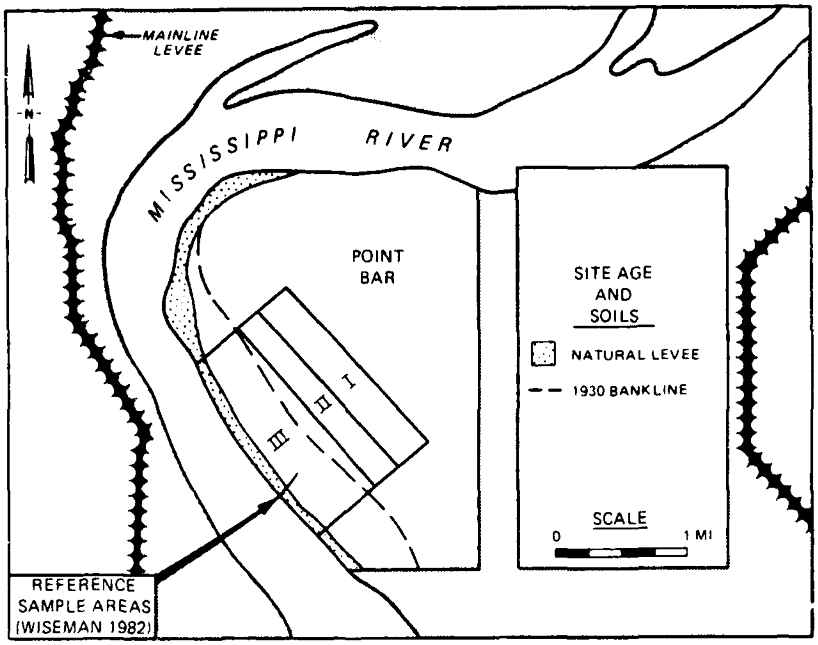

Figure 18. Environment of deposition, surface deposits, and site age at Huntington Point. Wiseman's (1982) sample areas are indicated

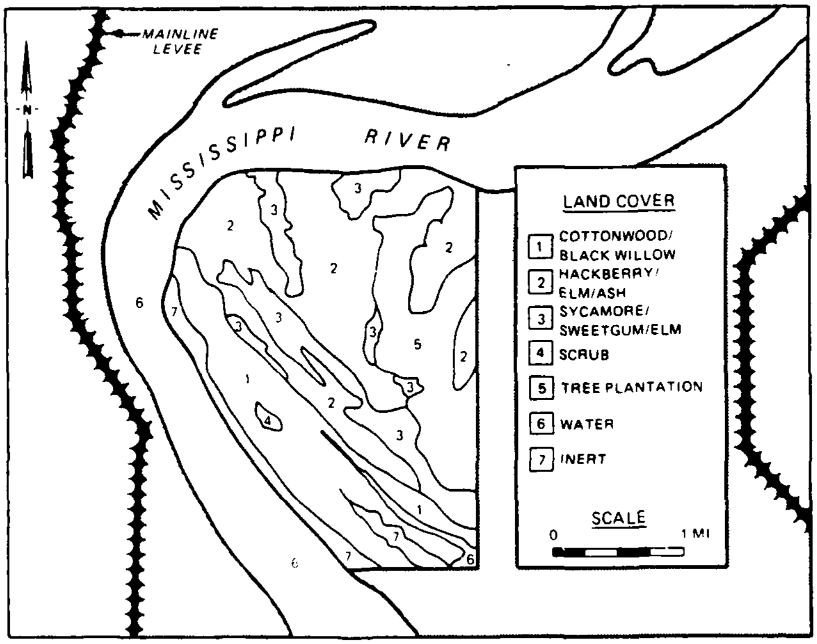

Figure 19. Land cover at Huntington Point. Forest types and boundaries were generated using CERDS, with pure stands incorporated into parent types to conform with the subtype key format

Huntington Point zone III (HPIII) is predominantly Cottonwood-Willow, HPII is predominantly Hackberry-Elm-Ash, and HPI is mapped as a combination of Hackberry-Elm-Ash and Sycamore-Sweetgum-Elm. Since the latter type was dominant in HPI, it was selected to represent that zone for the purposes of this exercise. Two other site factors required for application of the key were taken directly from topographic maps; the position of the bank in 1930 (Figure 18) and the generally well-drained terrain of the area are apparent on river navigation maps (Mississippi River Commission 1983).

121. The CERDS and map-derived data suggest that HPIII should be best represented by subtype 19 (substrates mostly less than 50 years old), HPII should be similar to subtype 28 (dry rather than wet pathway) and HPI should resemble subtype 22 for the most part. Figures 20 through 22 illustrate the results of these comparisons.* In two cases (HPII and HPIII), the basic species complement and relative importance of species predicted by the models were in good agreement with the actual values reported by Wiseman. (Note:

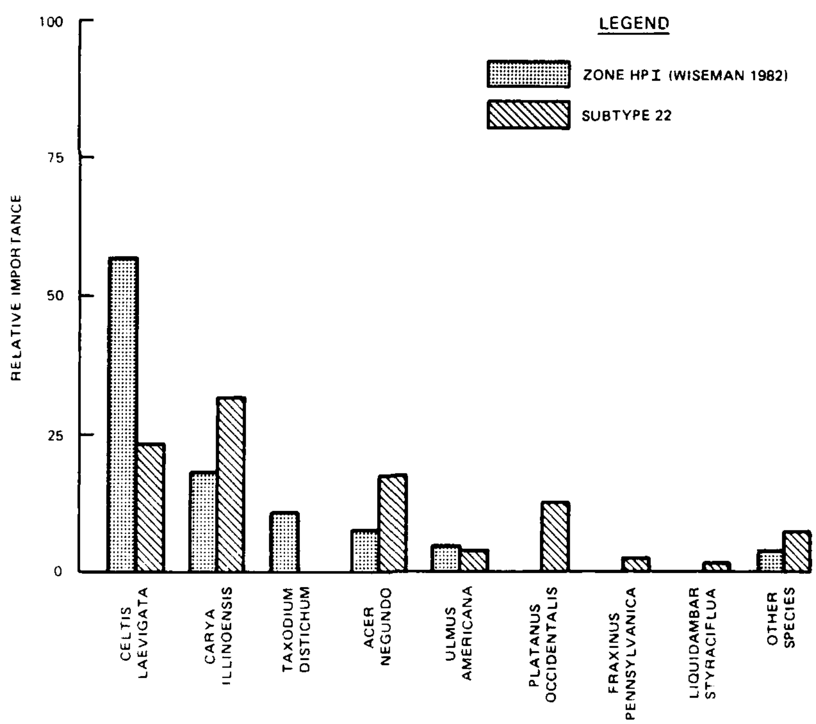

Figure 20. Comparison of sample data (Wiseman 1982) and predicted values for overstory trees at Huntington Point (Zone HPI)

* Huntington Point sample data are taken from Wiseman (1982) by permission of the author.

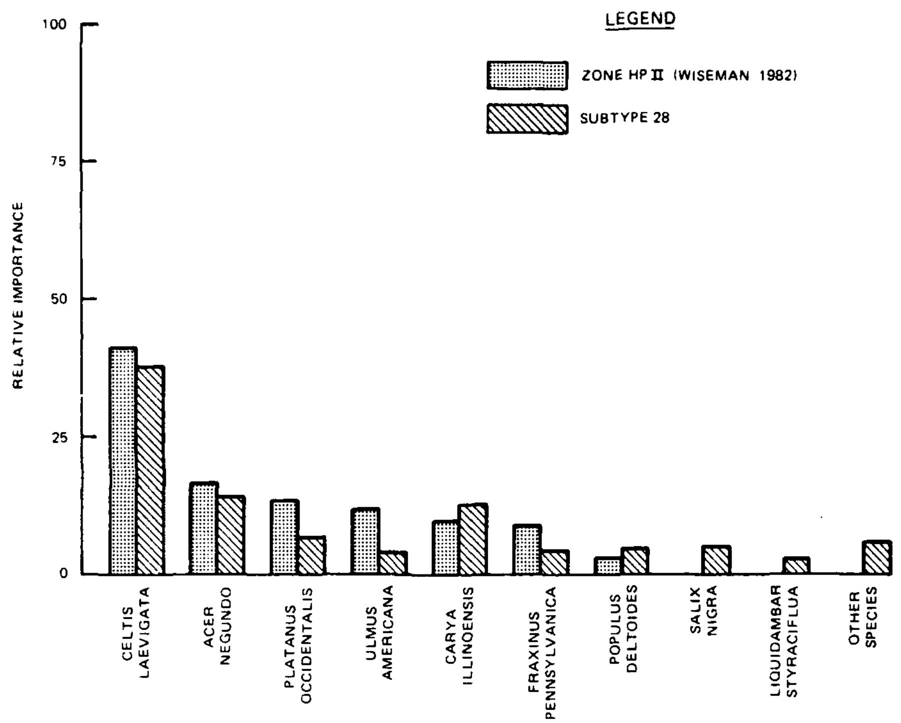

Figure 21. Comparison of sample data (Wiseman 1982) and predicted values for overstory trees at Huntington Point (Zone HPII)

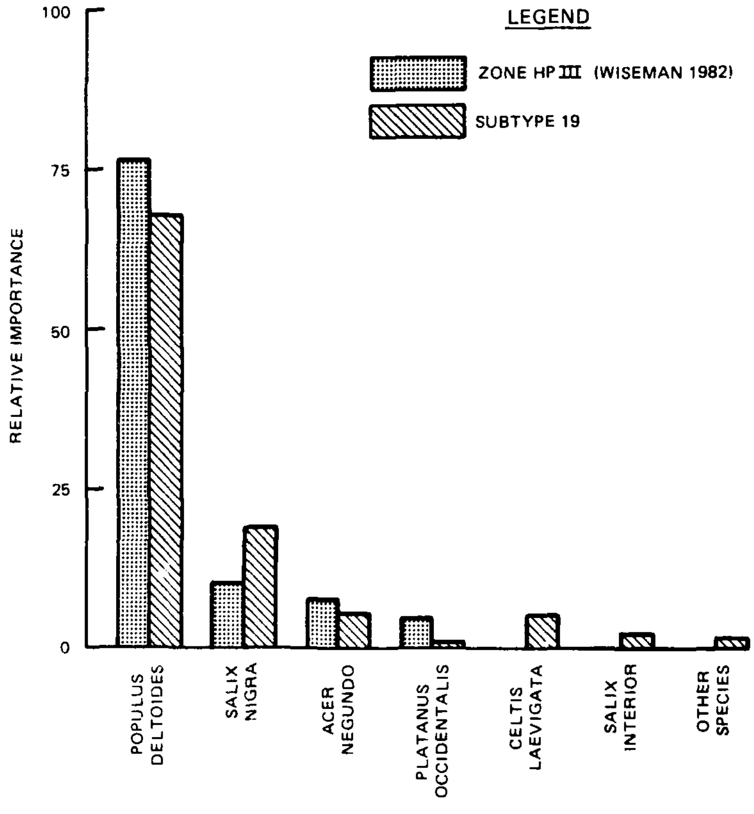

Figure 22. Comparison of sample data (Wiseman 1982) and predicted values for overstory trees at Huntington Point (Zone HPIII)

Acer saccharinum was deleted from the Appendix B dataset prior to relativization to reflect its distributional limitations). The HPI zone showed the only distinct difference between modelled and measured importance of dominant species; however, as noted earlier, Wiseman's summary data probably include samples from the Hackberry-Elm-Ash cover type not included in the model prediction for HPI. The comparisons also illustrate a characteristic of the subtype summaries that should be kept in mind in other applications; due to the relatively large sample contributing to the subtype summaries, the total species complement is likely to be predicted as larger than will be encountered on most specific sites. That is, relatively rare species are accumulated in the summaries but are infrequently seen in the field. In general, application of CERDS, the subtype key, and the replacement sequences recovered information similar to that reported by Wiseman for his study sites on the Mississippi Delta.

Example Application: Habitat Quality Estimation

122. A simple example application of this system to the decision-making process is developed here from the modelled Huntington Point (HP) data. The Habitat Evaluation System (HES) (US Army Engineer Division, Lower Mississippi Valley 1980) is employed to estimate current and future habitat quality, generalized for a variety of wildlife species. For floodplain forests, HES requires estimation of values for a set of seven key variables, weighted and summarized to produce an overall Habitat Quality Index (HQI) ranging from 0.0 to 1.0. Multiplied by the acreage of the assessment area, the HQI yields the number of Habitat Units (HU) represented. The US Fish and Wildlife Service (1980) Habitat Evaluation Procedures (HEP) follow a similar process for single-species assessments. Reference to Appendix B and the CERDS database allows development of HQI scores (Table 3) for current and potential forest subtypes (derived from Figure 11) at Huntington Point. The Sweetgum type (subtype 24) is not included as a potential type since more site-specific information is required to justify its recognition or prediction (see Part III).

123. The estimated HQI scores for current and potential conditions can be compared in a simple matrix (Table 4) for estimation of future habitat value under various levels of management, which has application to both impact

Table 3

Example Model Application: Habitat Quality

HES Variable	Cottonwood-Willow (Subtype 19)	Sycamore-Sweetgum-Elm (Subtype 22)	Hackberry-Elm-Ash (Subtype 28)	Sweetgum-Oak (Subtype 26)
Species association	0.075	0.170	0.163	0.170
Mast trees	0.00	0.144	0.112	0.160
Understory	0.014	0.056	0.028	0.098
Ground cover	0.098	0.084	0.084	0.070
Large trees	0.126	0.126	0.126	0.126
Tract size/ number of openings	0.126	0.126	0.126	0.126
Number of snags	0.110	0.088	0.088	0.099
HQI	0.549	0.794	0.727	0.849

* HES Habitat Quality Index (HQI) scores approximated from CERDS, the LMREP database, and Appendix B data for predominant forest subtypes in Huntington Point, MS zones HPI, HPII, and HPIII, including potential future subtype 26.

assessment and mitigation planning. In this example, the HPI zone will probably degrade in an unmanaged condition, but will gain 0.12 HQI units under management. The HPII zone would gain 0.12 HQI units under intensive management, but is unlikely to progress otherwise. The HPIII zone will probably gain 0.18 HQI units even if unmanaged; 0.24 units under management. In this case the models indicate that management of zones HPI and HP III would increase habitat values over unmanaged sites by 0.12 and 0.06 units, respectively, but only intensive management can improve habitat value in the HPII zone. On the other hand, intensive management would not be justified over normal hardwood management on HPI and HPIII sites, as it would not significantly add habitat value. This type of analysis can be employed to identify sites that will deteriorate in value under normal conditions (HPI) those that will improve under good management practices (HPI and HPIII) and those that require intensive management, such as clearcutting, site preparation, and direct seeding, in order to improve significantly (HPII).

Table 4

Example Model Application: Future Conditions

HP Zones	Current Subtype	Current HQI	Potential Pathways	Probable Future Subtype	Future HQI	Change From Current HQI
I	22	0.79	Unmanaged	28	0.73	-.06
			Managed	26	0.85	+.06
			Intensively managed	26	0.85	+.06
II	28	0.73	Unmanaged	28	0.73	0.0
			Managed	28	0.73	0.0
			Intensively managed	26	0.85	+.12
III	19	0.55	Unmanaged	28	0.73	+.18
			Managed	22	0.79	+.24
			Intensively managed	22	0.79	+.24

* Estimated HES Habitat Quality Index scores for current and predicted (year 100) subtypes under various levels of management in Huntington Point, MS zones HPI, HPII, and HPIII.

PART V: DISCUSSION

Ecosystem Characteristics

124. Forests of the confined floodplain of the Lower Mississippi River show little latitudinal variation reflective of climatic differences. A few species (e.g. Acer saccharinum, Quercus virginiana) have latitudinally restricted ranges, but only A. saccharinum is sufficiently important to merit special consideration of its distribution in applying the models developed here. The major latitudinal variation observed was the narrowness and industrial development of the leveed floodplain downriver of Baton Rouge. The frequent disturbance typical of the lower reaches of the river arrests forest development in very early stages or imparts a weedy character to mid-successional stages. These same patterns are observed on the river above Baton Rouge wherever the levee closely approaches the river channel, creating a narrow floodplain subject to turbulent, unmoderated flows during periods of overbank flooding.

125. Most of the leveed floodplain upstream of Baton Rouge is sufficiently wide that environmental factors other than flooding and disturbance influence forest development. The best predictors of forest site potential identified in this study relate to drainage characteristics and the development of soils as inferred from geomorphic and river survey maps. Evaluation of forest sample data in the context of these mapped features demonstrated their strong influence throughout the study area regardless of most other site characteristics. Although forests respond to the special conditions associated with certain unique habitats (e.g. islands), those conditions tend to be reflected in the geomorphology and meander history of those habitats.

126. One obvious reflection of the importance of fluvial processes along the river is the often repeated pattern of primary succession on newly created lands. The invasion of new bars by pioneer species (Salix nigra, S. interior, Populus deltoides) occurs much as described by Shelford (1954). Rapid sediment accretion on these newly colonized sites promotes a smooth transition to other forest types, the character of which is usually evident in the understory of the pioneer stand well before it reaches maturity. If left undisturbed subsequent stand development and changes in the relative importance of canopy species proceed in an orderly fashion reflecting individual species'

tolerances of shade and flooding, species' longevity, and soil drainage and chemistry. The later stages in this process rarely develop undisturbed, however, (see below), and Wiseman (1982) suggested that the availability of new bars for vegetation colonization has been increasingly restricted as river engineering works have progressed.

127. While forest site potential can be estimated largely on the basis of patterns of alluvial soil deposition and development, the actual characteristics of any particular forest stand may be highly variable depending on historical patterns of land use and forest exploitation. Surveys of the river and adjacent lands from the 1880's (Mississippi River Commission 1881-1897) indicate intensive agricultural development over much of what is now forested riverfront. As local and federal levee development projects progressed during this century most of these riverfront fields were abandoned and the character of the secondary forest no doubt reflected both the prior soil disturbance and the seed-source dependent colonization patterns associated with forest invasion of old fields.

128. For the most part, land clearing and abandonment effects since the turn of the century have been largely obliterated by decades of forest exploitation. There are very few examples of "old growth" of any forest type, and the small groves of large-diameter trees that remain tend to be on relatively inaccessible sites. Selective removal of high-value trees and particular species have left many stands in a degraded condition. *Celtis laevigata*, *Acer negundo* and other species of relatively low commercial value dominate most sites capable of supporting the more valuable Sweetgum-Oak type.

129. The current management objectives of commercial landowners provide a basis for estimating the future condition of many of the largest tracts in the study area. Hardwood timber companies own a large proportion of the lands along the river, and nearly all of the sites capable of supporting high value (Sweetgum-Oak type) species. While most of these lands show the effects of selective harvesting, recent logging operations on commercial lands usually reflect concern for the quality of the residual stand. Hardwood timber companies have an obvious interest in long-term stand quality for lumber production, and the soaring value of hunting leases on good quality forest land in recent years further encourages management rather than exploitation. Other owners (e.g. paper companies) may be less likely to manage for hardwood sawlog production, but also have a financial interest in maintaining huntable game populations.

130. Overall, forest development in the study area can be summarized as following classic succession patterns on newly accreted lands, but older sites are likely to support somewhat degraded stands dominated by fairly long-lived, shade tolerant species of moderate to low commercial value (such as Celtis laevigata). Very large tracts, which are usually owned by hardwood timber companies, are the only areas likely to be actively managed for species that are difficult to regenerate and slow to reach sawlog size (particularly Quercus species). Even on these sites, conversion of low-quality stands to Sweetgum-Oak or similar types is often complicated by the lack of a seed source and the stressful flooding and sedimentation conditions that may occur in portions of the confined floodplain. Therefore, while these large tracts have the potential to support highly desirable forest typ this is unlikely under most conditions. Most sites can be assumed to remain in relatively low-quality forest types indefinitely, or be managed to favor particular species (e.g. Carya illinoensis, Fraxinus pennsylvanica) when they are already present on a site.

Considerations in the Application of Resource Models

131. One objective of this research was to devise a method of estimating forest conditions at a scale compatible with habitat-based wildlife assessments for floodplain forest wildlife species. Current assessment approaches (US Army Engineer Division, Lower Mississippi Valley 1980, US Fish and Wildlife Service 1980) focus primarily on four categories of habitat components: availability of permanent or seasonal surface waters, proximity to crop residues, size of the forested tract, and forest structure and composition. The first three of these factors can be directly calculated using the CERDS geographic information system. However, forest characteristics are represented in CERDS only as generalized forest cover types. The sampling and data analysis procedures described here allowed partitioning of the general cover types based on site affinities, and management history. Thus, using CERDS and the models described herein mean values for a variety of variables important for wildlife habitat evaluation can be derived (Appendix B). Certain considerations are important, however, for proper application of the information developed.

132. The most obvious problem with adopting the mean values given in

Appendix B is the high degree of variation associated with most of them. As demonstrated previously (Figure 17) much of this variation reflects a predictable process of community development or responses to perturbations. Factors such as canopy cover may vary from near zero after harvest to near 100 percent within a decade. While the mean values reported in Appendix B are the best available estimate in the absence of specific stand data for a given site, a temporal frame of reference would clearly improve estimates and predictive capabilities.

133. Even without knowledge of the specific developmental stage at a site, the general replacement sequences and Appendix B data have potential application in various natural resource planning and management situations. In the planning context, these models address the question of short- and long-term site potential. For example, a lower-bank Black Willow stand downstream of Baton Rouge (e.g. subtype 10) is structurally and compositionally similar to the same type elsewhere on the river (e.g. subtype 18), but has a much more limited development potential (Figures 9 and 11). Similarly, Cottonwood-Willow stands on older lands away from the channel (e.g. subtype 21) have the potential to be intensively managed to a Sweetgum-Oak composition within decades, while 150 years or more may be required for a Cottonwood-Willow stand on newly accreted land (e.g. subtype 19) to succeed to Sweetgum-Oak. A planner evaluating current and future habitat values for wildlife species heavily dependent on hard mast would assign low current values to all of these stands, but potential future values would differ greatly, with subtypes 18 and 21 favored over subtypes 10 and 19, respectively.

134. Managers can exploit the predictive capability of this system to improve decisions regarding future resource availability. The ability to recognize site potential can guide management decisions, allowing intensive efforts to be applied where they will be most effective. Examples of temporal variation for particular habitat components (Figure 17) illustrate the potential of this system to assist in anticipating the occurrence of (or managing for) particular periods of high-quality habitat for certain wildlife species. For example, the high snag density resulting from the disintegration of even aged Salix nigra stands (Figure 17) may be a desirable element within a large management block. By evaluating the distribution of Black Willow type stands in the area (using CERDS), a manager can anticipate the occurrence of these temporary snag concentrations and make decisions to allow their development on

some sites, or speed transition to a more desirable cover type on other sites by harvesting the Black Willow type prior to or at maturity.

135. The long-term view of habitat quality afforded by this approach underscores the need to differentiate short-lived phenomena, permanent site characteristics and potential habitat quality in making sound resource management and land use decisions. As noted above, habitat components related to normal temporal variation in vegetation structure have limited bearing on the long-term wildlife habitat quality of a particular site. Snag, stump, and log densities, and canopy and ground cover vary widely depending on management practices and the size-class structure of the forest overstory. Conditions observed at any one time are likely to change substantially, and the mean values reported in Appendix B probably represent a good estimate of average conditions over time. Specific current values for such factors are relatively uninformative for determining future habitat quality.

136. Estimates of site potential are of much greater interest for habitat quality evaluations. As indicated in the examples reviewed above, stands of similar structure and composition may differ greatly in their potential to progress or be manipulated to a more desirable condition. Certain sites (sedimentation areas, shrubfields, disturbed soils, lower banks) are essentially arrested in early or mid-developmental stages for the foreseeable future. Even where progression to a desirable end-point (e.g. Sweetgum-Oak type) is anticipated on two different sites, the actual characteristics of those final stands may be very different. Contrasting a Sweetgum-Oak type on point bar (subtype 26) with one on natural levee underlain by point bar deposits (subtype 34) illustrates this point. Subtype 26 includes a more diverse mast species composition and is more consistently dominated by *Quercus* species than is subtype 34. If long-term wildlife management objectives include provision of an abundant and reliable mast crop, sites with the potential (including seed sources) to support subtype 26 would be preferred regardless of current stand conditions. Where understory characteristics are of primary interest, there is some indication that subtype 34 may tend to support a somewhat more diverse shrub assemblage, although ground cover and vine components are generally more diverse and abundant in subtype 26. These examples illustrate the value of making resource acquisition and management decisions based more on site potential than on current observations of highly variable vegetation structure attributes.

137. Current and future vegetation characteristics are estimated at the stand level (cover-type-by-site-type) in the modelling system presented herein. To take full advantage of this information for wildlife habitat assessments it must be interpreted in the context of the larger surrounding landscape and habitat components unrelated to stand attributes. Spatial considerations (forest tract size, connecting corridors between habitat types, juxtaposition and interspersion of habitat types, distance to crop residues, seed sources, or permanent water bodies) can be evaluated using CERDS to produce an overview of specific areas. Specific spatial questions can be explored using simple data-scanning and summarization procedures within CERDS. For example, proximity analysis is an internal CERDS procedure that allows the system to search for a feature (e.g. cropland) within a specific distance of another feature (e.g. a permanent water body). By further restricting the search to croplands within the 2-year floodplain (based on elevation above LWRP), the user can isolate potential waterfowl foraging sites within a specified distance from waterfowl resting areas. If the location of potential future mast production areas is of interest, the same process can be employed to identify sites (either forested or not) capable of supporting mast- producing species, as indicated by the models presented here. Extrapolating this process to a larger scale, CERDS and the vegetation models can be applied to assessments of long-range migration routes, anticipation of critical losses of rare or important habitat types, and large-scale assessments of potential changes in land use or management patterns.

Summary

138. Twenty-three forest cover types occur on the leveed floodplain of the Lower Mississippi River. Over a million acres of the area are forested, but nearly half of that acreage is occupied by two cover types: Sycamore-Sweetgum-Elm and Hackberry-Elm-Ash. About a third of the forests are early-successional (Black Willow and/or Cottonwood) and the remainder consist of localized stands of varied composition, including Sweetgum-Oak, Cypress-Tupelo, and tree plantations.

139. Most of the major dominant tree species are common throughout the study area, but some species show distinct latitudinal restrictions. <u>Quercus virginiana</u> is nearly absent on sites north of Baton Rouge, and <u>Acer</u>

saccharinum is largely restricted to sites north of Memphis. Some tree species occur primarily in special habitats, such as oxbow lakes, near tributary streams, and near bluffs. Understory vegetation development is related to overstory condition and successional stage. Shrub communities are most diverse in late-successional stands, while vine abundance and ground cover tend to be greatest in mid-successional stages.

140. Sample classification and site affinity evaluation were employed to investigate the processes influencing forest community distribution and change within the study area. Aside from the special habitats and latitudinal restrictions noted above, the site variables that most effectively accounted for the observed vegetation patterns were floodplain geomorphology and age of the sediments. These factors reflect site drainage conditions and soil development, both of which greatly influence the ability of particular tree species to germinate and persist. An additional important variable is forest succession and management. While classic succession patterns occur, particularly on islands and other sites where sediment accretion is substantial, forest characteristics generally reflect the strong influence of past timber harvesting practices. The combination of selective harvesting, isolation from seed sources, and stressful flooding and sedimentation conditions has resulted in the elimination of late-successional species (e.g. *Quercus* spp.) from many sites, while favoring opportunistic, shade-tolerant species (e.g. *Celtis* spp.).

141. Based on the site relationships and development trends described, general models of vegetation distribution and change were devised. Application of the models using the CERDS geographic information system to indicate site conditions allows estimation of current and probable future vegetation structure and composition for any site within the study area. The efficacy of this system was demonstrated for a test site, where current overstory composition was modelled with considerable accuracy, and future wildlife habitat quality was estimated under each of three management regimes.

142. This exercise illustrated the flexibility afforded by linking resource models with a geographic information system, which allows realistic consideration of management alternatives, site potential, and spatial relationships in wildlife habitat quality evaluations and projections.

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APPENDIX A

LIST OF SPECIES

EQUISETACEAE

Equisetum hyemale L.

OPHIOGLOSSACEAE

Botrychium virginianum (L.) Swartz

SCHIZAEACEAE

Lygodium japonicum (Thunberg) Swartz

PINACEAE

Pinus taeda L.

TAXODIACEAE

Taxodium distichum (L.) Richard

CUPRESSACEAE

Juniperus virginiana L.

POACEAE

Andropogon glomeratus (Walt.) B.S.P.
Arundinaria gigantea (Walt.) Muhl.
Chasmanthium latifolium (Michx.) Yates
Cynodon dactylon (L.) Persoon
Dichanthelium clandestinum (L.) Gould
Digitaria sanguinalis (L.) Scopoli
Diplachne uninervia (Presl.) Parodi
Echinochloa colonum (L.) Link
Echinochloa crus-galli (L.) Beauvois
Elymus canadensis L.
Elymus virginicus L.
Eragrostis hypnoides (Lam.) B.S.P.
Eragrostis spectabilis (Pursh) Steudel
Leersia hexandra Swartz
Leersia lenticularis Michaux
Leersia virginica Willd.
Leptochloa filiformis (Lam.) Beauvois
Oplismenus setarius (Lam.) R. & S.
Paspalum sp.
Paspalum floridanum Michaux
Panicum sp.
Panicum anceps Michaux
Panicum dichotimoflorum Michaux
Panicum flexile (Gattinger) Scribner
Panicum lanuginosum Ell.
Panicum ridigulum Bosc.
Poa sp.
Sorghum halepense (L.) Persoon
Setaria geniculata (Lam.) Beauvois
Sphenopholis obtusata (Michaux) Scribner
Triticum aestivum L.

CYPERACEAE

<u>Carex</u> sp.
<u>Carex</u> <u>crus-corvi</u> Shuttlew. ex Kuntze
<u>Carex</u> <u>muhlenbergii</u> Schkuhr
<u>Carex</u> <u>torta</u> Boott
<u>Cyperus</u> sp.
<u>Cyperus</u> <u>aristatus</u> Rottboell
<u>Cyperus</u> <u>erythrorhizos</u> Muhl.
<u>Cyperus</u> <u>esculentus</u> L.
<u>Cyperus</u> <u>rotundus</u> L.
<u>Cyperus</u> <u>strigosus</u> L.
<u>Fimbristylis</u> <u>autumnalis</u> (L.) R & S

ARACEAE

<u>Arisaema</u> <u>dracontium</u> (L.) Schott
<u>Arisaema</u> <u>triphyllum</u> (L.) Schott
<u>Peltandra</u> <u>virginica</u> (L.) Kunth.

LEMNACEAE

<u>Lemna</u> <u>minor</u> L.

COMMELINACEAE

<u>Commelina</u> <u>communis</u> L.
<u>Commelina</u> <u>diffusa</u> Burman f.
<u>Commelina</u> <u>virginica</u> L.
<u>Tradescantia</u> <u>ohiensis</u> Raf.
<u>Tradescantia</u> <u>virginiana</u> L.

PONTEDERIACEAE

<u>Eichhornia</u> <u>crassipes</u> (Martius) Solms
<u>Heteranthera</u> <u>limosa</u> (Sw.) Willd.

LILIACEAE

<u>Dioscorea</u> <u>quaternata</u> (Walt.) G.F. Gmel.
<u>Smilax</u> <u>bona-nox</u> L.
<u>Smilax</u> <u>glauca</u> Walter
<u>Smilax</u> <u>hispida</u> Muhl.
<u>Smilax</u> <u>rotundifolia</u> L.

IRIDACEAE

<u>Iris</u> <u>fulva</u> Ker.

ORCHIDACEAE

<u>Triphora</u> <u>trianthophora</u> (Swartz) Rydberg

SAURURACEAE

<u>Saururus</u> <u>cernuus</u> L.

SALICACEAE

<u>Salix</u> <u>exigua</u> Nuttall
<u>Salix</u> <u>nigra</u> Marshall
<u>Populus</u> <u>deltoides</u> Marshall
<u>Populus</u> <u>heterophylla</u> L.

JUGLANDACEAE

Carya aquatica (Michaux f.) Nuttall
Carya cordiformis (Wang.) K. Koch
Carya illinoensis (Wang.) K. Koch
Carya laciniosa (Michaux f.) Loudon
Juglans nigra L.

BETULACEAE

Carpinus caroliniana Walter
Ostrya virginiana (Miller) K. Koch

FAGACEAE

Quercus lyrata Walter
Quercus michauxii Nuttall
Quercus nigra L.
Quercus nuttallii Palmer
Quercus pagoda Raf.
Quercus palustris Muenchh.
Quercus phellos L.
Quercus virginiana Miller

ULMACEAE

Celtis laevigata Willd.
Celtis occidentalis L.
Planern aquatica Walter ex J.F. Gmelin
Ulmus alata Michaux
Ulmus americana L.
Ulmus crassifolia Nuttall
Ulmus rubra Muhl.

MORACEAE

Broussonetia papyrifera (L.) Vent.
Maclura pomifera (Raf.) Schneider
Morus alba L.
Morus rubra L.

URTICACEAE

Boehmeria cylindrica (L.) Swartz
Laportea canadensis (L.) Weddell
Pilea pumila (L.) Gray
Urtica chamaedryoides Pursh.
Urtica dioica L.

ARISTOLOCHIACEAE

Aristolochia serpentaria L.

POLYGONACEAE

Brunnichia cirrhosa Banks ex Gaertner
Polygonum sp.
Polygonum amphibium L.
Polygonum densiflorum Meissner
Polygonum hydropiperoides Michaux
Polygonum lapathifolium L.

Polygonum punctatum Ell.
Polygonum scandens L.
Polygonum virginianum L.

CHENOPODIACEAE
Chenopodium album L.

AMARANTHACEAE
Alternanthera philoxeroides (Martius) Grisebach
Amaranthus palmeri Watson
Iresine rhizomatosa Standley

PHYTOLACCACEAE
Phytolacca americana L.

AIZOACEAE
Mollugo verticillata L.

CARYOPHYLLACEAE
Cerastium semidecandrum L.
Stellaria media (L.) Cyrillo

RANUNCULACEAE
Clematis sp.
Clematis crispa L.
Clematis virginiana L.

MENISPERMACEAE
Cocculus carolinus (L.) DC.
Menispermum canadense L.

ANNONACEAE
Asimina triloba (L.) Dunal

LAURACEAE
Lindera benzoin (L.) Blume
Sassafras albidum (Nuttall) Nees

BRASSICACEAE
Rorippa barbareifolia (DC.) Kitagawa
Rorippa sessiliflora (Nuttall) Hitchcock
Rorippa sinuata (Nuttall) Hitchcock

CRASSULACEAE
Penthorum sedoides L.

SAXIFRAGACEAE
Decumaria barbara L.

HAMAMELIDACEAE
Liquidambar styraciflua L.

PLATANACEAE
    Platanus occidentalis L.

ROSACEAE
    Agrimonia parviflora Aiton
    Crataegus sp.
    Crataegus marshallii Eggl.
    Crataegus viridus L.
    Geum canadense Jacquin
    Malus coronaria (L.) Miller
    Prunus americana Marshall
    Prunus serotina Ehrhart
    Rubus sp.
    Rubus argutus Link
    Rubus trivialis Michaux

FABACEAE
    Amorpha fruticosa L.
    Apios americana Medicus
    Cercis canadensis L.
    Desmanthus illinoensis (Michaux) MacM.
    Desmodium sp.
    Desmodium canescens (L.) DC
    Desmodium paniculatum (L.) DC
    Gleditsia aquatica Marshall
    Gleditsia triacanthos L.
    Gymnocladus dioica (L.) K. Koch
    Strophostyles helvola (L.) Ell.
    Vicia sp.

OXALIDACEAE
    Oxalis stricta L.

MELIACEAE
    Melia azedarach L.

EUPHORBIACEAE
    Acalypha ostryaefolia Riddell
    Acalypha rhomboidea Raf.
    Chamaesyce humistrata (Englm.) Small
    Croton sp.
    Croton glandulosa L.
    Euphorbia maculata (L.) Small
    Sapium sebiferum (L.) Roxb.

ANACARDIACEAE
    Rhus copallina L.
    Toxicodendron radicans

AQUIFOLIACEAE
    Ilex decidua Walter

CELASTRACEAE
    Evonymus amercanus L.

ACERACEAE

Acer negundo L.
Acer rubrum var. *drummondii* (Hook. & Arn.) Sarg.
Acer saccharinum L.

SAPINDACEAE

Cardiospermum halicacabum L.

BALSAMINACEAE

Impatiens capensis Meerb.

RHAMNACEAE

Berchemia scandens (Hill) K. Koch

VITACEAE

Ampelopsis arborea (L.) Koehne
Ampelopsis cordata Michaux
Parthenocissus quinquefolia (L.) Planchon
Vitis aestivalis Michaux
Vitis cinerea Engelm
Vitis palmata Vahl.
Vitis riparia Michaux
Vitis rotundifolia Michaux

MALVACEAE

Hibiscus militaris Cav.
Sida spinosa L.

HYPERICACEAE

Hypericum mutilum L.
Triadenum walteri (J.G. Gael.) Gleason

VIOLACEAE

Viola papilionacea Pursh
Viola raffinesquii Greene

PASSIFLORACEAE

Passiflora lutea L.

LYTHRACEAE

Lythrum alatum Pursh
Rotala ramosior (L.) Koehne

ONAGRACEAE

Ludwigia sp.
Ludwigia alternifolia L.
Ludwigia decurrens Walter
Ludwigia peploides (H.B.K.) Ravens

APIACEAE

Chaerophyllum sp.
Cryptotaenia canadensis (L.) DC.
Hydrocotyle sp.

Sanicula canadensis L.
Trepocarpus aethusae Nuttall

NYSSACEAE
Nyssa aquatica L.
Nyssa sylvatica Marshall

CORNACEAE
Cornus drummondii C. A. Mey.

ERICACEAE
Vaccineum sp.

PRIMULACEAE
Samolus valerandi L.

EBENACEAE
Diospyros virginiana L.

STYRACEAE
Styrax americana Lam.
Styrax grandifolia Aiton

OLEACEAE
Forestiera acuminata (Michaux) Poiret
Fraxinus pennsylvanica Marshall
Fraxinus tomentosa Michaux f.
Ligustrum lucidum Ait.
Ligustrum sinense Lour.

LOGANIACEAE
Cynoctonum mitreola (L.) Britton
Gelsemium sempervirens (L.) Aiton f.

APOCYNACEAE
Trachelospermum difforme (Walter) Gray

ASCLEPIADACEAE
Asclepias perennis Walter
Cynanchum laeve (Michaux) Persoon
Matelea gonocarpa (Walter) Shinners

CONVOLVULACEAE
Cuscuta sp.
Ipomea sp.
Ipomea hederacea (L.) Jacquin
Ipomea lacunosa L.
Ipomea purpurea (L.) Roth

BORAGINACEAE
Hackelia virginiana (L.) I.M. Johnston
Heliotropium indicum L.

VERBENACEAE

Lippia lanceolata Michaux

LAMIACEAE

Lycopus rubellus Moench.
Perilla frutescens (L.) Britton
Prunella vulgaris L.
Stachys tenuifolia Willd.
Teucrium canadense L.

SOLANACEAE

Physallis angulata L.
Physallis pubescens L.
Solanum americanum Miller
Solanum rostratum Dunal

SCROPHULARIACEAE

Gratiola sp.
Lindernia sp.
Lindernia dubia (L.) Pennell
Lindernia dubia var. *anagallidea* (Michx.) Penn.
Mazus japonicus (Thunberg) Kuntze
Veronica peregrina L.

BIGNONIACEAE

Bignonia capreolata L.
Campsis radicans (L.) Seemann

ACANTHACEAE

Dicliptera brachiata (Pursh) Sprengel
Justicia ovata (Walter) Lindau
Ruellia strepens L.

RUBIACEAE

Diodia virginiana L.
Cephalanthus occidentalis L.
Galium aparine L.
Spermacoce glabra Michaux

CAPRIFOLIACEAE

Lonicera japonica Thunberg
Sambucus canadensis L.

CUCURBITACEAE

Melothria pendula L.
Sicyos angulatus L.

CAMPANULACEAE

Campanula americana L.

ASTERACEAE

Ambrosia artemesiifolia L.
Ambrosia trifida L.
Artemesia sp.
Artemesia annua L.
Aster sp.
Aster lateriflorus (L.) Britton
Aster simplex Willd.
Bidens sp.
Bidens aristosa (Michaux) Britton
Bidens frondosa L.
Eclipta alba (L.) Hasskarl
Elephantopus carolinianus Willd.
Erechtites hieracifolia (L.) Raf.
Eupatorium coelestinum L.
Eupatorium incarnatum Walter
Eupatorium maculatum L.
Eupatorium rugosum Houttuyn
Eupatorium serotinum Michaux
Iva sp.
Iva annua L.
Lactuca sp.
Lactuca canadensis L.
Mikania scandens (L.) Willd.
Pluchea camphorata (L.) DC.
Senecio glabellus Poiret
Solidago canadensis L.
Spilanthes americana (Mutis) Hieron
Vernonia altissima Nuttall
Vernonia gigantea (Walt.) Trel.
Xanthium strumarium L.

APPENDIX B

FOREST SUBTYPE SUMMARIES*

* Subtype numbers correspond to those in the subtype key (Figure 7). Additional detailed data are available in the LMREP database. This appendix is organized in five sections:

SUBTYPE: 1
NUMBER OF PLOTS: 16

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	43.8	16.25	2.50	0	18.75
CARYA ILLINOENSIS	56.3	16.25	1.25	0	17.50
CELTIS LAEVIGATA	62.5	30.63	8.13	0	38.75
CORNUS DRUMMONDII	43.8	16.88	0	0	16.88
FRAXINUS PENNSYLVANICA	25.0	10.00	0	0.63	10.63
GLEDITSIA TRIACANTHOS	12.5	1.25	0	0	1.25
ILEX DECIDUA	12.5	1.88	0	0	1.88
LIQUIDAMBAR STYRACIFLUA	6.3	1.25	0	0	1.25
PLATANUS OCCIDENTALIS	31.3	3.13	0	0	3.13
POPULUS DELTOIDES	100.0	55.00	51.25	41.88	148.13
TOTAL	100.0	152.50	63.13	42.50	258.13
STD DEV		164.34	51.86	30.66	186.98

SUBTYPE: 2
NUMBER OF PLOTS: 7

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
DIOSPYROS VIRGINIANA	14.3	1.43	0	0	1.43
PLATANUS OCCIDENTALIS	100.0	121.43	124.29	10.00	255.71
TOTAL	100.0	122.86	124.29	10.00	257.14
STD DEV		77.40	61.33	11.55	22.15

SUBTYPE: 3
NUMBER OF PLOTS: 4

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA ILLINOENSIS	25.0	0	0	2.50	2.50
CELTIS LAEVIGATA	50.0	20.00	0	0	20.00
CORNUS DRUMMONDII	50.0	105.00	0	0	105.00
GLEDITSIA TRIACANTHOS	50.0	5.00	5.00	7.50	17.50
POPULUS DELTOIDES	25.0	5.00	0	0	5.00
SALIX INTERIOR	50.0	155.00	0	0	155.00
SALIX NIGRA	50.0	22.50	7.50	0	30.00
ULMUS AMERICANA	25.0	2.50	0	0	2.50
TOTAL	100.0	315.00	12.50	10.00	337.50
STD DEV		74.16	15.00	14.14	55.60

SUBTYPE: 4
NUMBER OF PLOTS: 10

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA AQUATICA	50.0	29.00	38.00	40.00	107.00
CARYA ILLINOENSIS	10.0	0	1.00	0	1.00
CELTIS LAEVIGATA	30.0	7.00	1.00	3.00	11.00
FORESTIERA ACUMINATA	50.0	101.00	14.00	7.00	122.00
FRAXINUS PENNSYLVANICA	10.0	0	1.00	0	1.00
GLEDITSIA AQUATICA	20.0	11.00	3.00	0	14.00
PLANERA AQUATICA	20.0	10.00	3.00	1.00	14.00
POPULUS DELTOIDES	20.0	18.00	0	0	18.00
QUERCUS LYRATA	50.0	13.00	3.00	3.00	19.00
SALIX INTERIOR	20.0	20.00	0	0	20.00
SALIX NIGRA	30.0	7.00	3.00	1.00	11.00
TAXODIUM DISTICHUM	10.0	1.00	0	0	1.00
TOTAL	100.0	217.00	67.00	55.00	339.00
STD DEV		178.76	53.97	49.72	200.52

SUBTYPE: 5
NUMBER OF PLOTS: 25

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	40.0	2.40	2.00	1.20	5.60
ACER SACCHARINUM	20.0	5.20	11.60	21.60	38.40
CARYA ILLINOENSIS	60.0	16.40	6.40	9.60	32.40
CELTIS LAEVIGATA	88.0	37.20	17.60	16.00	70.80
CORNUS DRUMMONDII	32.0	10.00	0	0	10.00
CRATAEGUS SP	4.0	0.40	0	0	0.40
DIOSPYROS VIRGINIANA	4.0	0.40	0.40	0	0.80
FORESTIERA ACUMINATA	36.0	25.20	2.00	0	27.20
FRAXINUS PENNSYLVANICA	20.0	3.20	0.80	0	4.00
GLEDITSIA TRIACANTHOS	28.0	0	2.80	4.40	7.20
ILEX DECIDUA	8.0	2.00	0	0	2.00
MACLURA POMIFERA	4.0	0.80	0.80	0.40	2.00
MORUS ALBA	8.0	0.80	0.40	0.40	1.60
MORUS RUBRA	32.0	4.00	1.20	0.80	6.00
PLATANUS OCCIDENTALIS	12.0	0.80	0.40	2.00	3.20
POPULUS DELTOIDES	36.0	0	0.40	9.60	10.00
QUERCUS LYRATA	4.0	0.40	0	0	0.40
SALIX NIGRA	12.0	0	0	4.00	4.00
ULMUS AMERICANA	44.0	10.80	7.60	2.80	21.20
TOTAL	100.0	120.00	54.40	72.80	247.20
STD DEV		72.57	29.73	40.16	61.34

SUBTYPE: 6
NUMBER OF PLOTS: 25

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	48.0	30.00	9.20	2.00	41.20
ACER SACCHARINUM	24.0	2.40	9.20	5.20	16.80
CARYA ILLINOENSIS	20.0	2.80	0.40	3.20	6.40
CELTIS LAEVIGATA	88.0	33.60	14.40	2.80	50.80
CORNUS DRUMMONDII	40.0	18.40	0	0	18.40
CRATAEGUS VIRIDUS	12.0	1.60	0	0	1.60
DIOSPYROS VIRGINIANA	24.0	1.60	1.20	0.40	3.20
FORESTIERA ACUMINATA	20.0	20.40	1.60	0	22.00
FRAXINUS PENNSYLVANICA	48.0	27.60	10.40	0.80	38.80
GLEDITSIA AQUATICA	8.0	0	0.80	0	0.80
ILEX DECIDUA	8.0	2.40	0	0	2.40
LIQUIDAMBAR STYRACIFLUA	28.0	7.60	10.00	13.60	31.20
MORUS RUBRA	4.0	0.40	0	0	0.40
PLATANUS OCCIDENTALIS	24.0	8.00	2.00	2.80	12.80
POPULUS DELTOIDES	68.0	0.40	1.20	31.60	33.20
QUERCUS NIGRA	16.0	0.80	1.20	1.60	3.60
SALIX NIGRA	12.0	1.20	6.00	6.80	14.00
SAPIUM SEBIFERUM	4.0	0.80	0	0	0.80
ULMUS AMERICANA	52.0	7.20	1.20	0.80	9.20
TOTAL	100.0	167.20	68.80	71.60	307.60
STD DEV		115.16	49.78	36.93	125.04

SUBTYPE: 7
NUMBER OF PLOTS: 6

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA AQUATICA	50.0	0	1.67	10.00	11.67
GLEDITSIA AQUATICA	33.3	0	1.67	1.67	3.33
NYSSA AQUATICA	33.3	230.00	48.33	6.67	285.00
PLANERA AQUATICA	66.7	30.00	10.00	0	40.00
QUERCUS LYRATA	16.7	0	0	1.67	1.67
SALIX NIGRA	50.0	1.67	10.00	11.67	23.33
TAXODIUM DISTICHUM	83.3	3.33	1.67	30.00	35.00
TOTAL	100.0	265.00	73.33	61.67	400.00
STD DEV		362.48	57.50	34.30	390.33

SUBTYPE: 8
NUMBER OF PLOTS: 20

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	55.0	46.00	19.00	1.50	66.50
ACER RUBRUM	15.0	2.50	0.50	2.00	5.00
ACER SACCHARINUM	20.0	2.50	0	1.50	4.00
CARYA AQUATICA	50.0	6.50	9.50	14.00	30.00
CELTIS LAEVIGATA	55.0	9.50	1.00	9.00	19.50
DIOSPYROS VIRGINIANA	5.0	0	0	1.00	1.00
FORESTIERA ACUMINATA	45.0	39.50	9.00	1.00	49.50
FRAXINUS PENNSYLVANICA	60.0	9.00	8.00	7.00	24.00
GLEDITSIA AQUATICA	15.0	0	0	2.50	2.50
LIQUIDAMBAR STYRACIFLUA	15.0	1.00	0	3.50	4.50
MORUS RUBRA	5.0	0.50	0	0	0.50
NYSSA AQUATICA	5.0	0	0	1.00	1.00
PLANERA AQUATICA	40.0	4.00	10.00	0.50	14.50
PLATANUS OCCIDENTALIS	20.0	0	0	2.00	2.00
POPULUS DELTOIDES	5.0	0	0	1.00	1.00
QUERCUS LYRATA	25.0	1.50	0.50	1.50	3.50
SALIX NIGRA	5.0	0	0	0.50	0.50
TAXODIUM DISTICHUM	90.0	5.00	10.50	43.50	59.00
ULMUS AMERICANA	30.0	1.00	2.50	2.00	5.50
TOTAL	100.0	128.50	70.50	95.00	294.00
STD DEV		84.81	37.76	52.87	110.09

SUBTYPE: 9
NUMBER OF PLOTS: 12

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA ILLINOENSIS	8.3	1.67	0	0	1.67
CELTIS LAEVIGATA	50.0	5.00	4.17	0	9.17
CORNUS DRUMMONDII	8.3	0.83	0	0	0.83
FORESTIERA ACUMINATA	16.7	5.00	0	0	5.00
MORUS RUBRA	8.3	3.33	0	0	3.33
PLATANUS OCCIDENTALIS	33.3	4.17	0.83	2.50	7.50
QUERCUS NIGRA	8.3	1.67	0	0.83	2.50
SALIX NIGRA	100.0	15.00	65.00	117.50	197.50
TOTAL	100.0	36.67	70.00	120.83	227.50
STD DEV		27.08	37.90	59.31	79.21

SUBTYPE: 10
NUMBER OF PLOTS: 11

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
AMORPHA FRUTICOSA	9.1	0.91	0	0	0.91
SALIX INTERIOR	18.2	29.09	2.73	0	31.82
SALIX NIGRA	100.0	251.82	84.55	11.82	348.18
TAXODIUM DISTICHUM	18.2	0.91	0.91	5.45	7.27
TOTAL	100.0	282.73	88.18	17.27	388.18
STD DEV		162.12	46.87	25.33	142.96

SUBTYPE: 11
NUMBER OF PLOTS: 7

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER RUBRUM	14.3	1.43	0	0	1.43
CARYA AQUATICA	14.3	0	1.43	0	1.43
CARYA ILLINOENSIS	100.0	8.57	17.14	18.57	44.29
CELTIS LAEVIGATA	100.0	38.57	18.57	40.00	97.14
CORNUS DRUMMONDII	57.1	17.14	0	0	17.14
DIOSPYROS VIRGINIANA	28.6	8.57	0	0	8.57
MORUS RUBRA	28.6	7.14	0	0	7.14
PLATANUS OCCIDENTALIS	28.6	12.86	7.14	11.43	31.43
POPULUS DELTOIDES	28.6	1.43	0	4.29	5.71
QUERCUS LYRATA	28.6	0	0	4.29	4.29
SALIX NIGRA	14.3	0	1.43	4.29	5.71
ULMUS AMERICANA	28.6	2.86	0	4.29	7.14
TOTAL	100.0	98.57	45.71	87.14	231.43
STD DEV		55.21	34.09	16.04	68.17

SUBTYPE: 12
NUMBER OF PLOTS: 19

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	52.6	18.95	9.47	4.21	32.63
ACER RUBRUM	21.1	1.58	0	0.53	2.11
CARYA ILLINOENSIS	47.4	3.68	1.58	2.63	7.89
CELTIS LAEVIGATA	100.0	38.42	23.68	52.63	114.74
CORNUS DRUMMONDII	47.4	11.05	0.53	0	11.58
FORESTIERA ACUMINATA	21.1	17.89	0.53	0	18.42
FRAXINUS PENNSYLVANICA	5.3	0	0	0.53	0.53
ILEX DECIDUA	10.5	1.58	0	0	1.58
LIGUSTRUM SINENSE	5.3	0.53	0	0	0.53
MORUS RUBRA	15.8	1.05	0.53	0	1.58
PLATANUS OCCIDENTALIS	47.4	2.11	4.74	4.74	11.58
POPULUS DELTOIDES	21.1	0	0.53	1.58	2.11
QUERCUS NIGRA	10.5	1.05	0.53	0	1.58
QUERCUS VIRGINIANA	10.5	1.05	0.53	1.58	3.16
SALIX INTERIOR	5.3	1.05	1.58	0	2.63
SALIX NIGRA	15.8	1.05	3.16	7.37	11.58
TAXODIUM DISTICHUM	5.3	0	0	0.53	0.53
ULMUS AMERICANA	36.8	3.68	1.58	1.05	6.32
TOTAL	100.0	104.74	48.95	77.37	231.05
STD DEV		42.61	32.47	23.06	45.20

SUBTYPE: 13
NUMBER OF PLOTS: 51

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	5.9	1.18	0.39	0.20	1.76
CARYA ILLINOENSIS	11.8	0.98	0	0.39	1.37
CELTIS LAEVIGATA	35.3	18.04	5.69	2.75	26.47
CEPHALANTHUS OCCIDENTALIS	3.9	1.37	0	0	1.37
CORNUS DRUMMONDII	19.6	4.31	0	0	4.31
DIOSPYROS VIRGINIANA	2.0	0.20	0	0	0.20
FORESTIERA ACUMINATA	27.5	11.57	0	0	11.57
FRAXINUS PENNSYLVANICA	3.9	0.78	0.20	0	0.98
GLEDITSIA TRIACANTHOS	2.0	0.20	0	0	0.20
PLATANUS OCCIDENTALIS	13.7	2.35	0.98	0.39	3.73
POPULUS DELTOIDES	15.7	3.92	0	0.20	4.12
SALIX INTERIOR	13.7	9.61	0.59	0	10.20
SAMBUCUS CANADENSIS	2.0	0.39	0	0	0.39
SALIX NIGRA	100.0	78.43	76.86	68.04	223.33
SAPIUM SEBIFERUM	7.8	0.98	0.39	0	1.37
TAXODIUM DISTICHUM	2.0	0	0.20	0	0.20
ULMUS AMERICANA	2.0	0.20	0.20	0.20	0.59
TOTAL	100.0	134.51	85.49	72.16	292.16
STD DEV		144.30	59.74	45.84	156.68

SUBTY'E: 14
NUMBE? OF PLOTS: 9

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	33.3	7.78	0	0	7.78
ACER RUBRUM	22.2	4.44	1.11	1.11	6.67
AMORPHA FRUTICOSA	11.1	2.22	0	0	2.22
CARYA ILLINOENSIS	44.4	11.11	0	0	11.11
CELTIS LAEVIGATA	66.7	33.33	13.33	5.56	52.22
CORNUS DRUMMONDII	22.2	3.33	0	0	3.33
FORESTIERA ACUMINATA	22.2	18.89	0	0	18.89
FRAXINUS PENNSYLVANICA	22.2	0	1.11	1.11	2.22
PLATANUS OCCIDENTALIS	55.6	12.22	4.44	3.33	20.00
POPULUS DELTOIDES	100.0	57.78	22.22	13.33	93.33
SALIX INTERIOR	33.3	31.11	1.11	0	32.22
SALIX NIGRA	88.9	116.67	24.44	6.67	147.78
SAPIUM SEBIFERUM	33.3	5.56	0	0	5.56
ULMUS AMERICANA	22.2	4.44	2.22	2.22	8.89
TOTAL	100.0	308.89	70.00	33.33	412.22
STD DEV		129.27	42.72	34.28	126.07

SUBTYPE: 15
NUMBER OF PLOTS: 15

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	66.7	20.00	10.00	4.67	34.67
CARYA ILLINOENSIS	80.0	43.33	19.33	14.67	77.33
CELTIS LAEVIGATA	86.7	40.00	10.00	13.33	63.33
CORNUS DRUMMONDII	80.0	25.33	0	0	25.33
DIOSPYROS VIRGINIANA	20.0	3.33	2.00	0	5.33
FORESTIERA ACUMINATA	13.3	2.00	1.33	0	3.33
LIQUIDAMBAR STYRACIFLUA	6.7	0.67	0	0	0.67
PLATANUS OCCIDENTALIS	66.7	16.00	12.67	16.67	45.33
POPULUS DELTOIDES	46.7	6.67	4.00	9.33	20.00
QUERCUS LYRATA	6.7	0	0	0.67	0.67
SALIX NIGRA	26.7	5.33	2.67	3.33	11.33
TAXODIUM DISTICHUM	13.3	0.67	0.67	0	1.33
ULMUS AMERICANA	26.7	6.00	0.67	0.67	7.33
TOTAL	100.0	169.33	63.33	63.33	296.00
STD DEV		56.75	26.64	25.54	51.93

SUBTYPE: 16
NUMBER OF PLOTS: 32

		DENSITY PER ACRE			
SPECIES	CONSTANCY	DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	28.1	5.94	0.31	1.56	7.81
ACER RUBRUM	3.1	0.63	0	0	0.63
CARYA ILLINOENSIS	78.1	15.00	11.88	8.13	35.00
CELTIS LAEVIGATA	100.0	52.19	39.06	36.88	128.13
CORNUS DRUMMONDII	50.0	35.94	2.19	0	38.13
CRATAEGUS VIRIDUS	6.3	0.94	0	0	0.94
DIOSPYROS VIRGINIANA	6.3	0.31	0.31	0	0.63
FORESTIERA ACUMINATA	18.8	9.38	0	0	9.38
FRAXINUS PENNSYLVANICA	6.3	0	0	0.94	0.94
GLEDITSIA AQUATICA	12.5	0	1.25	0.63	1.88
GLEDITSIA TRIACANTHOS	9.4	0	0	0.94	0.94
ILEX DECIDUA	12.5	3.13	0	0	3.13
LIGUSTRUM SINENSE	3.1	0.31	0	0	0.31
LIGUSTRUM LUCIDUM	6.3	1.56	0	0	1.56
MORUS RUBRA	9.4	1.25	0.94	0	2.19
PLATANUS OCCIDENTALIS	40.6	2.81	2.50	5.31	10.63
POPULUS DELTOIDES	25.0	0	0	4.38	4.38
PRUNUS SEROTINA	3.1	0.31	0.31	0	0.63
QUERCUS LYRATA	6.3	0.31	0.94	0.31	1.56
QUERCUS NIGRA	9.4	0.63	0.63	0.31	1.56
QUERCUS VIRGINIANA	12.5	1.25	0.31	0	1.56
SALIX NIGRA	21.9	0.63	0.63	2.50	3.75
TAXODIUM DISTICHUM	9.4	0.63	0.31	0	0.94
ULMUS AMERICANA	21.9	2.81	0.63	0.63	4.06
TOTAL	100.0	135.94	62.19	62.50	260.63
STD DEV		94.93	37.48	28.06	98.21

SUBTYPE: 17
NUMBER OF PLOTS: 15

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER SACCHARINUM	33.3	5.33	0.67	0	6.00
CARYA ILLINOENSIS	6.7	4.00	0	0	4.00
CELTIS LAEVIGATA	26.7	9.33	2.00	0	11.33
FORESTIERA ACUMINATA	6.7	1.33	0	0	1.33
GLEDITSIA TRIACANTHOS	6.7	2.67	0	0	2.67
PLANERA AQUATICA	6.7	1.33	0	0	1.33
PLATANUS OCCIDENTALIS	6.7	4.00	5.33	1.33	10.67
POPULUS DELTOIDES	46.7	4.67	7.33	3.33	15.33
SALIX INTERIOR	13.3	1.33	2.67	0.67	4.67
SALIX NIGRA	100.0	205.33	77.33	77.33	360.00
TOTAL	100.0	239.33	95.33	82.67	417.33
STD DEV		291.66	87.58	63.30	311.85

SUBTYPE: 18
NUMBER OF PLOTS: 6

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
MORUS RUBRA	16.7	3.33	0	0	3.33
POPULUS DELTOIDES	33.3	3.33	1.67	0	5.00
SALIX INTERIOR	33.3	51.67	5.00	0	56.67
SALIX NIGRA	100.0	343.33	158.33	11.67	513.33
TOTAL	100.0	401.67	165.00	11.67	578.33
STD DEV		173.37	113.09	13.29	252.06

SUBTYPE: 19
NUMBER OF PLOTS: 9

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	22.2	1.11	0	2.22	3.33
ACER SACCHARINUM	33.3	1.11	10.00	23.33	34.44
CELTIS LAEVIGATA	44.4	13.33	3.33	1.11	17.78
FORESTIERA ACUMINATA	11.1	1.11	0	0	1.11
FRAXINUS PENNSYLVANICA	11.1	1.11	0	0	1.11
MORUS RUBRA	11.1	1.11	0	0	1.11
PLATANUS OCCIDENTALIS	33.3	5.56	0	0	5.56
POPULUS DELTOIDES	88.9	0	4.44	30.00	34.44
SALIX INTERIOR	33.3	3.33	2.22	1.11	6.67
SALIX NIGRA	66.7	1.11	1.11	5.56	7.78
ULMUS AMERICANA	11.1	0	1.11	0	1.11
TOTAL	100.0	28.89	22.22	63.33	114.44
STD DEV		22.61	12.02	33.54	28.33

SUBTYPE: 20
NUMBER OF PLOTS: 27

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	70.4	13.33	14.07	11.48	38.89
CARYA ILLINOENSIS	37.0	8.15	4.07	1.48	13.70
CELTIS LAEVIGATA	85.2	27.04	26.67	28.52	82.22
CORNUS DRUMMONDII	33.3	52.59	0	0	52.59
DIOSPYROS VIRGINIANA	3.7	0	0.37	0	0.37
FORESTIERA ACUMINATA	14.8	3.33	0	0	3.33
FRAXINUS PENNSYLVANICA	11.1	0.74	0.74	1.11	2.59
GLEDITSIA TRIACANTHOS	7.4	0.74	0	0	0.74
ILEX DECIDUA	3.7	0.37	0	0	0.37
LIQUIDAMBAR STYRACIFLUA	3.7	0	0	0.37	0.37
PLATANUS OCCIDENTALIS	44.4	23.70	7.78	1.48	32.96
POPULUS DELTOIDES	59.3	0.37	1.11	12.59	14.07
QUERCUS NIGRA	14.8	0	1.11	1.11	2.22
SALIX NIGRA	3.7	0	0	0.37	0.37
ULMUS AMERICANA	33.3	8.15	5.56	1.85	15.56
TOTAL	100.0	138.52	61.48	60.37	260.37
STD DEV		166.13	31.34	23.49	170.98

SUBTYPE: 21
NUMBER OF PLOTS: 37

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	67.6	15.95	23.51	10.81	50.27
ACER RUBRUM	8.1	1.08	0.27	0.54	1.89
ACER SACCHARINUM	40.5	11.89	5.14	5.14	22.16
CARYA ILLINOENSIS	21.6	1.08	1.35	1.08	3.51
CELTIS LAEVIGATA	73.0	26.49	10.00	5.14	41.62
CORNUS DRUMMONDII	13.5	2.16	0	0	2.16
DIOSPYROS VIRGINIANA	2.7	0	0.27	0	0.27
FORESTIERA ACUMINATA	27.0	11.08	1.35	0.27	12.70
FRAXINUS PENNSYLVANICA	18.9	1.35	2.97	1.35	5.68
GLEDITSIA TRIACANTHOS	8.1	0.81	0	0.27	1.08
GYMNOCLADUS DIOICA	2.7	0	0.27	0.27	0.54
LIQUIDAMBAR STYRACIFLUA	13.5	0.27	1.35	1.08	2.70
MACLURA POMIFERA	2.7	0.54	0.27	0	0.81
MORUS RUBRA	32.4	6.76	0.81	0	7.57
PLATANUS OCCIDENTALIS	35.1	1.08	1.62	3.51	6.22
POPULUS DELTOIDES	81.1	36.49	1.62	23.78	61.89
QUERCUS PAGODA	2.7	0.27	0	0	0.27
SALIX NIGRA	16.2	0.27	0	1.89	2.16
ULMUS AMERICANA	40.5	4.59	3.51	2.70	10.81
TOTAL	100.0	122.16	54.32	57.84	234.32
STD DEV		132.86	38.63	27.30	112.61

SUBTYPE: 22
NUMBER OF PLOTS: 64

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	79.7	27.97	15.63	14.22	57.81
ACER RUBRUM	3.1	0.16	0.16	0	0.31
ACER SACCHARINUM	10.9	1.88	0.63	0.78	3.28
CARYA ILLINOENSIS	75.0	2.81	7.34	19.22	29.38
CELTIS LAEVIGATA	92.2	39.38	16.72	17.97	74.06
CORNUS DRUMMONDII	37.5	19.69	0	0	19.69
CRATAEGUS SP	1.6	0	0.16	0	0.16
DIOSPYROS VIRGINIANA	1.6	0	0.16	0	0.16
FORESTIERA ACUMINATA	23.4	9.84	0.63	0	10.47
FRAXINUS PENNSYLVANICA	15.6	0.94	1.72	2.34	5.00
GLEDITSIA TRIACANTHOS	3.1	0	0	0.31	0.31
GYMNOCLADUS DIOICA	3.1	0.47	0	0.16	0.63
ILEX DECIDUA	7.8	2.19	0.47	0	2.66
LIQUIDAMBAR STYRACIFLUA	14.1	0.47	1.25	1.88	3.59
MORUS RUBRA	17.2	3.28	1.09	0.63	5.00
PLATANUS OCCIDENTALIS	34.4	1.09	1.56	8.44	11.09
POPULUS DELTOIDES	4.7	0	0.16	0.31	0.47
QUERCUS LYRATA	6.3	0.16	0	0.47	0.63
QUERCUS NUTTALLII	6.3	0.47	0.63	0.16	1.25
RHUS COPPALINA	6.3	1.41	0.31	0	1.72
SALIX NIGRA	3.1	0	0	0.47	0.47
ULMUS AMERICANA	64.1	9.22	3.13	1.88	14.22
ULMUS CRASSIFOLIA	6.3	0.63	0.16	0	0.78
TOTAL	100.0	122.03	51.88	69.22	243.13
STD DEV		69.56	29.59	24.90	79.44

SUBTYPE: 23
NUMBER OF PLOTS: 16

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	62.5	8.75	6.25	6.25	21.25
ACER SACCHARINUM	56.3	96.25	17.50	12.50	126.25
ASIMINA TRILOBA	31.3	30.00	0	0	30.00
CARYA AQUATICA	6.3	0	0	0.63	0.63
CARYA ILLINOENSIS	56.3	0	1.88	17.50	19.38
CELTIS LAEVIGATA	75.0	44.38	12.50	9.38	66.25
CORNUS DRUMMONDII	18.8	5.63	0	0	5.63
DIOSPYROS VIRGINIANA	18.8	0	2.50	1.25	3.75
FORESTIERA ACUMINATA	6.3	14.38	1.25	0	15.63
FRAXINUS PENNSYLVANICA	31.3	11.88	1.25	1.25	14.38
GLEDITSIA TRIACANTHOS	6.3	0	0	0.63	0.63
GYMNOCLADUS DIOICA	6.3	0.63	0	0	0.63
ILEX DECIDUA	6.3	1.88	0	0	1.88
LIQUIDAMBAR STYRACIFLUA	25.0	1.25	5.63	19.38	26.25
MORUS RUBRA	12.5	1.25	0.63	0.63	2.50
PLATANUS OCCIDENTALIS	12.5	0	0.63	0.63	1.25
POPULUS DELTOIDES	18.8	0.63	1.25	0.63	2.50
QUERCUS LYRATA	25.0	5.63	0.63	0	6.25
QUERCUS PALUSTRIS	6.3	0	0	0.63	0.63
SALIX NIGRA	18.8	1.25	3.13	0	4.38
ULMUS AMERICANA	100.0	10.00	11.25	10.00	31.25
TOTAL	100.0	233.75	66.25	81.25	381.25
STD DEV		190.57	41.93	49.11	182.35

SUBTYPE: 24
NUMBER OF PLOTS: 14

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	14.3	1.43	0.71	0	2.14
ACER RUBRUM	42.9	4.29	2.14	1.43	7.86
ACER SACCHARINUM	7.1	0.71	0	0	0.71
CARYA AQUATICA	28.6	6.43	2.86	2.86	12.14
CARPINUS CAROLINIANA	7.1	0	0.71	0	0.71
CARYA ILLINOENSIS	28.6	0	1.43	4.29	5.71
CARYA LACINIOSA	21.4	1.43	0	2.14	3.57
CERCIS CANADENSIS	7.1	1.43	0	0	1.43
CELTIS LAEVIGATA	57.1	26.43	0.71	0	27.14
CORNUS DRUMMONDII	14.3	2.14	0	0	2.14
CRATAEGUS SP	7.1	0.71	0	0	0.71
DIOSPYROS VIRGINIANA	42.9	1.43	5.00	2.86	9.29
FRAXINUS PENNSYLVANICA	7.1	0	0	0.71	0.71
GLEDITSIA TRIACANTHOS	21.4	0	1.43	2.14	3.57
ILEX DECIDUA	28.6	3.57	0	0	3.57
LIQUIDAMBAR STYRACIFLUA	100.0	16.43	19.29	59.29	95.00
MORUS RUBRA	7.1	0.71	0	0	0.71
PLATANUS OCCIDENTALIS	7.1	0	0	0.71	0.71
QUERCUS LYRATA	21.4	5.00	3.57	1.43	10.00
QUERCUS MICHAUXII	7.1	0	0	0.71	0.71
QUERCUS NIGRA	21.4	11.43	2.86	3.57	17.86
QUERCUS NUTTALLII	7.1	0.71	0	0	0.71
QUERCUS PAGODA	14.3	2.14	0	0	2.14
QUERCUS PHELLOS	28.6	8.57	2.86	1.43	12.86
ULMUS AMERICANA	64.3	30.71	4.29	2.14	37.14
TOTAL	100.0	125.71	47.86	85.71	259.29
STD DEV		64.77	35.56	40.52	91.61

SUBTYPE: 25
NUMBER OF PLOTS: 10

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER RUBRUM	20.0	7.00	0	0	7.00
ACER SACCHARINUM	50.0	24.00	8.00	4.00	36.00
CARYA AQUATICA	50.0	2.00	2.00	3.00	7.00
CARYA ILLINOENSIS	20.0	0	0	2.00	2.00
CELTIS LAEVIGATA	40.0	40.00	0	0	40.00
CRATAEGUS VIRIDUS	20.0	2.00	0	0	2.00
DIOSPYROS VIRGINIANA	20.0	0	1.00	2.00	3.00
FORESTIERA ACUMINATA	20.0	3.00	0	0	3.00
FRAXINUS PENNSYLVANICA	40.0	3.00	2.00	1.00	6.00
ILEX DECIDUA	40.0	7.00	0	0	7.00
LIQUIDAMBAR STYRACIFLUA	60.0	18.00	5.00	4.00	27.00
PLANERA AQUATICA	10.0	1.00	0	0	1.00
QUERCUS LYRATA	90.0	8.00	6.00	23.00	37.00
QUERCUS NUTTALLII	40.0	0	0	6.00	6.00
QUERCUS PAGODA	30.0	0	0	3.00	3.00
QUERCUS PHELLOS	80.0	2.00	3.00	19.00	24.00
TAXODIUM DISTICHUM	30.0	0	0	4.00	4.00
ULMUS AMERICANA	20.0	11.00	0	0	11.00
TOTAL	100.0	128.00	27.00	71.00	226.00
STD DEV		98.86	29.46	32.47	76.77

SUBTYPE: 26
NUMBER OF PLOTS: 12

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA CORDIFORMIS	41.7	11.67	7.50	2.50	21.67
CARYA ILLINOENSIS	16.7	0	4.17	4.17	8.33
CARYA LACINIOSA	50.0	30.00	3.33	1.67	35.00
CERCIS CANADENSIS	16.7	3.33	1.67	0	5.00
CELTIS LAEVIGATA	33.3	7.50	0	0	7.50
CRATAEGUS VIRIDUS	8.3	0.83	0	0	0.83
DIOSPYROS VIRGINIANA	25.0	2.50	0.83	0.83	4.17
FRAXINUS PENNSYLVANICA	8.3	1.67	5.00	0	6.67
ILEX DECIDUA	25.0	4.17	0	0	4.17
LIQUIDAMBAR STYRACIFLUA	83.3	32.50	13.33	8.33	54.17
MORUS RUBRA	41.7	5.00	1.67	0	6.67
NYSSA SYLVATICA	25.0	3.33	1.67	0	5.00
PLATANUS OCCIDENTALIS	8.3	0.83	0	0	0.83
PRUNUS AMERICANA	8.3	0.83	0	0	0.83
QUERCUS NIGRA	66.7	1.67	8.33	21.67	31.67
QUERCUS PAGODA	33.3	0.83	2.50	2.50	5.83
QUERCUS PHELLOS	50.0	11.67	8.33	10.83	30.83
SASSAFRAS ALBIDUM	8.3	1.67	0	0	1.67
ULMUS AMERICANA	75.0	28.33	6.67	0	35.00
TOTAL	100.0	148.33	65.00	52.50	265.83
STD DEV		87.37	35.03	51.19	83.17

SUBTYPE: 27
NUMBER OF PLOTS: 36

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	83.3	36.39	16.94	8.33	61.67
ACER SACCHARINUM	11.1	0.56	0.28	1.67	2.50
CARYA AQUATICA	5.6	0	0	0.56	0.56
CARYA CORDIFORMIS	2.8	0.28	0	0	0.28
CARYA ILLINOENSIS	33.3	0.28	1.94	3.33	5.56
CELTIS LAEVIGATA	100.0	45.83	23.06	30.28	99.17
CORNUS DRUMMONDII	16.7	1.67	0	0	1.67
CRATAEGUS SP	8.3	0.83	0	0	0.83
DIOSPYROS VIRGINIANA	11.1	0.83	0.56	0	1.39
FORESTIERA ACUMINATA	30.6	15.83	1.11	0	16.94
FRAXINUS PENNSYLVANICA	58.3	23.61	10.83	19.72	54.17
GLEDITSIA AQUATICA	2.8	0	0	0.28	0.28
LIQUIDAMBAR STYRACIFLUA	16.7	1.67	0.56	1.11	3.33
MORUS RUBRA	8.3	1.11	0	0	1.11
PLANERA AQUATICA	5.6	1.11	0	0	1.11
PLATANUS OCCIDENTALIS	13.9	0.28	0.28	1.11	1.67
POPULUS DELTOIDES	5.6	0	0	1.11	1.11
QUERCUS LYRATA	25.0	2.50	2.22	4.17	8.89
QUERCUS NIGRA	5.6	0.56	0	0.56	1.11
QUERCUS NUTTALLII	11.1	1.11	0.83	0.83	2.78
TAXODIUM DISTICHUM	13.9	0.56	0.28	2.50	3.33
ULMUS AMERICANA	77.8	11.94	8.89	5.56	26.39
TOTAL	100.0	146.94	67.78	81.11	295.83
STD DEV		97.83	39.43	28.36	116.16

SUBTYPE: 28
NUMBER OF PLOTS: 61

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	75.4	15.08	12.79	11.80	39.67
ACER SACCHARINUM	3.3	0.16	0.16	0.16	0.49
CARYA AQUATICA	1.6	0	0.16	0.16	0.33
CARYA ILLINOENSIS	67.2	5.74	4.75	8.52	19.02
CELTIS LAEVIGATA	90.2	62.30	28.85	24.59	115.74
CORNUS DRUMMONDII	29.5	8.20	0.16	0	8.36
DIOSPYROS VIRGINIANA	8.2	1.31	0.16	0.82	2.30
FORESTIERA ACUMINATA	29.5	20.82	3.44	0	24.26
FRAXINUS PENNSYLVANICA	32.8	10.49	3.11	2.79	16.39
GLEDITSIA AQUATICA	1.6	0	0	0.33	0.33
GLEDITSIA TRIACANTHOS	8.2	0	0.33	0.49	0.82
ILEX DECIDUA	4.9	1.31	0	0	1.31
LINDERA BENZOIN	4.9	0.82	0	0	0.82
LIQUIDAMBAR STYRACIFLUA	6.6	0	0	0.82	0.82
MORUS RUBRA	9.8	0.49	0.16	0.33	0.98
PLATANUS OCCIDENTALIS	29.5	1.64	1.48	3.28	6.39
POPULUS DELTOIDES	19.7	0.16	0.33	2.79	3.28
QUERCUS LYRATA	4.9	0.49	0	0.16	0.66
QUERCUS NUTTALLII	1.6	0	0.49	0	0.49
RHUS COPPALINA	1.6	0.16	0	0	0.16
SALIX NIGRA	11.5	0	0.33	4.10	4.43
TAXODIUM DISTICHUM	4.9	0.66	0.16	0.33	1.15
ULMUS AMERICANA	42.6	6.39	3.44	2.79	12.62
TOTAL	100.0	136.23	60.33	64.26	260.82
STD DEV		90.19	31.94	30.25	93.97

SUBTYPE: 29
NUMBER OF PLOTS: 25

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DENSITY PER ACRE: DBH 5.5-9.4 INCHES	DENSITY PER ACRE: DBH >9.4 INCHES	DENSITY PER ACRE: TOTAL DBH >2.0 INCHES
ACER NEGUNDO	48.0	23.60	16.40	4.40	44.40
ACER SACCHARINUM	88.0	71.20	18.40	8.80	98.40
ASIMINA TRILOBA	4.0	0.80	0	0	0.80
CARYA ILLINOENSIS	8.0	0.40	0.40	0	0.80
CELTIS LAEVIGATA	36.0	7.20	0.80	0	8.00
CORNUS DRUMMONDII	24.0	4.00	0	0	4.00
FRAXINUS PENNSYLVANICA	4.0	0.40	0	0	0.40
MORUS RUBRA	56.0	19.60	2.80	0	22.40
PLATANUS OCCIDENTALIS	52.0	8.00	6.80	12.80	27.60
POPULUS DELTOIDES	56.0	13.20	3.60	15.20	32.00
SALIX INTERIOR	4.0	24.80	0	0	24.80
SALIX NIGRA	44.0	30.40	5.20	25.20	60.80
ULMUS AMERICANA	52.0	33.20	8.00	0	41.20
TOTAL	100.0	236.80	62.40	66.40	365.60
STD DEV		192.93	41.86	36.39	190.22

SUBTYPE: 30
NUMBER OF PLOTS: 25

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	96.0	61.20	8.80	17.20	87.20
ACER SACCHARINUM	76.0	24.00	10.00	8.80	42.80
ASIMINA TRILOBA	36.0	26.80	0.40	0.40	27.60
CARYA ILLINOENSIS	12.0	1.20	0.40	0	1.60
CELTIS LAEVIGATA	72.0	30.40	4.40	1.60	36.40
CORNUS DRUMMONDII	16.0	3.20	0	0	3.20
FORESTIERA ACUMINATA	12.0	3.60	0	0	3.60
FRAXINUS PENNSYLVANICA	28.0	2.40	1.60	1.60	5.60
GYMNOCLADUS DIOICA	4.0	0.80	0	0.40	1.20
ILEX DECIDUA	4.0	0.40	0	0	0.40
JUGLANS NIGRA	4.0	0	0.40	0	0.40
LINDERA BENZOIN	8.0	0.80	0	0	0.80
MORUS RUBRA	44.0	8.00	1.20	0	9.20
PLATANUS OCCIDENTALIS	52.0	3.20	0.80	5.20	9.20
POPULUS DELTOIDES	72.0	0	1.60	22.80	24.40
SALIX NIGRA	32.0	0.40	5.60	17.60	23.60
ULMUS AMERICANA	56.0	13.20	4.80	2.00	20.00
TOTAL	100.0	179.60	40.00	77.60	297.20
STD DEV		91.13	26.61	29.62	100.31

SUBTYPE: 31
NUMBER OF PLOTS: 35

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	91.4	30.29	11.43	7.71	49.43
ACER SACCHARINUM	51.4	8.00	9.14	10.00	27.14
ASIMINA TRILOBA	17.1	5.14	0.29	0	5.43
CARYA ILLINOENSIS	28.6	0.86	1.14	1.14	3.14
CARYA LACINIOSA	2.9	0	0	0.29	0.29
CELTIS LAEVIGATA	94.3	54.00	22.29	29.14	105.43
CORNUS DRUMMONDII	20.0	8.00	0	0	8.00
DIOSPYROS VIRGINIANA	5.7	0.29	0.29	0.29	0.86
FORESTIERA ACUMINATA	2.9	0.86	0.29	0	1.14
FRAXINUS PENNSYLVANICA	37.1	4.29	4.29	3.71	12.29
GLEDITSIA TRIACANTHOS	2.9	0	0	0.29	0.29
GYMNOCLADUS DIOICA	2.9	0.29	0.57	0	0.86
ILEX DECIDUA	20.0	3.71	0	0	3.71
LIQUIDAMBAR STYRACIFLUA	22.9	4.00	6.57	7.71	18.29
MACLURA POMIFERA	5.7	1.43	0	0	1.43
MORUS RUBRA	42.9	7.43	1.14	0.86	9.43
PLATANUS OCCIDENTALIS	28.6	3.14	2.00	1.71	6.86
POPULUS DELTOIDES	14.3	1.71	0	1.43	3.14
POPULUS HETEROPHYLLA	2.9	0.29	0	0	0.29
QUERCUS NUTTALLII	2.9	0	0	0.29	0.29
ULMUS AMERICANA	68.6	20.57	8.57	4.29	33.43
TOTAL	100.0	154.29	68.00	68.86	291.14
STD DEV		97.72	31.70	39.84	99.55

SUBTYPE: 32
NUMBER OF PLOTS: 44

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	84.1	52.05	22.95	8.41	83.41
ACER RUBRUM	2.3	0.45	0	0	0.45
ACER SACCHARINUM	18.2	2.05	0.45	0.91	3.41
ASIMINA TRILOBA	15.9	2.95	0.23	0	3.18
CARPINUS CAROLINIANA	13.6	1.36	0.91	0	2.27
CARYA CORDIFORMIS	6.8	0	0	0.68	0.68
CARYA ILLINOENSIS	77.3	8.64	6.82	17.95	33.41
CARYA LACINIOSA	2.3	0	0.23	0	0.23
CELTIS LAEVIGATA	88.6	40.68	13.64	13.18	67.50
CORNUS DRUMMONDII	31.8	7.50	0	0	7.50
CRATAEGUS VIRIDUS	4.5	0.45	0	0	0.45
DIOSPYROS VIRGINIANA	15.9	5.68	1.59	0.68	7.95
FORESTIERA ACUMINATA	13.6	18.64	1.82	0.23	20.68
FRAXINUS PENNSYLVANICA	34.1	3.18	5.23	5.23	13.64
GLEDITSIA AQUATICA	4.5	0	0	0.45	0.45
GLEDITSIA TRIACANTHOS	4.5	0	0	0.45	0.45
ILEX DECIDUA	11.4	2.27	0	0	2.27
JUGLANS NIGRA	2.3	0	0	0.45	0.45
LINDERA BENZOIN	2.3	0.45	0	0	0.45
LIQUIDAMBAR STYRACIFLUA	18.2	0.45	0.23	1.82	2.50
MELIA AZEDARACH	2.3	0.23	0	0	0.23
MORUS RUBRA	6.8	0	0.68	0	0.68
PLATANUS OCCIDENTALIS	43.2	9.55	7.05	6.59	23.18
POPULUS DELTOIDES	4.5	0.45	0	0.45	0.91
QUERCUS NUTTALLII	4.5	0	0	0.45	0.45
QUERCUS PALUSTRIS	2.3	0	0	0.23	0.23
SALIX NIGRA	4.5	0.23	0	0.45	0.68
ULMUS AMERICANA	52.3	12.95	5.45	2.95	21.36
TOTAL	93.2	170.23	67.27	61.59	299.09
STD DEV		154.91	41.39	28.61	181.61

SUBTYPE: 33
NUMBER OF PLOTS: 9

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	100.0	30.00	10.00	23.33	63.33
ACER SACCHARINUM	22.2	2.22	0	2.22	4.44
ASIMINA TRILOBA	55.6	45.56	0	0	45.56
CARYA CORDIFORMIS	11.1	0	0	1.11	1.11
CARYA ILLINOENSIS	22.2	2.22	0	1.11	3.33
CARYA LACINIOSA	11.1	0	0	1.11	1.11
CELTIS LAEVIGATA	100.0	47.78	6.67	16.67	71.11
FRAXINUS PENNSYLVANICA	55.6	5.56	5.56	10.00	21.11
ILEX DECIDUA	11.1	1.11	0	0	1.11
JUGLANS NIGRA	22.2	0	1.11	1.11	2.22
LIQUIDAMBAR STYRACIFLUA	88.9	5.56	11.11	41.11	57.78
MORUS RUBRA	22.2	2.22	2.22	0	4.44
PLATANUS OCCIDENTALIS	11.1	0	0	1.11	1.11
POPULUS DELTOIDES	11.1	0	0	2.22	2.22
QUERCUS NIGRA	22.2	2.22	0	0	2.22
QUERCUS NUTTALLII	11.1	0	0	1.11	1.11
QUERCUS PALUSTRIS	33.3	1.11	1.11	1.11	3.33
ULMUS AMERICANA	55.6	14.44	12.22	1.11	27.78
ULMUS RUBRA	11.1	1.11	0	0	1.11
TOTAL	100.0	161.11	50.00	104.44	315.56
STD DEV		84.33	27.84	37.12	109.44

SUBTYPE: 34
NUMBER OF PLOTS: 7

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	85.7	10.00	11.43	4.29	25.71
ACER RUBRUM	28.6	2.86	1.43	5.71	10.00
ASIMINA TRILOBA	42.9	14.29	0	0	14.29
CARYA AQUATICA	14.3	1.43	0	0	1.43
CARYA CORDIFORMIS	28.6	1.43	1.43	0	2.86
CARYA ILLINOENSIS	14.3	1.43	0	0	1.43
CERCIS CANADENSIS	28.6	4.29	1.43	0	5.71
CELTIS LAEVIGATA	42.9	52.86	0	0	52.86
DIOSPYROS VIRGINIANA	14.3	0	0	2.86	2.86
FRAXINUS PENNSYLVANICA	71.4	7.14	4.29	4.29	15.71
FRAXINUS PROFUNDA	28.6	2.86	5.71	7.14	15.71
ILEX DECIDUA	28.6	2.86	0	0	2.86
JUGLANS NIGRA	28.6	1.43	0	4.29	5.71
LIQUIDAMBAR STYRACIFLUA	42.9	0	1.43	4.29	5.71
MORUS RUBRA	42.9	7.14	0	0	7.14
QUERCUS LYRATA	42.9	4.29	5.71	4.29	14.29
QUERCUS NUTTALLII	57.1	0	2.86	10.00	12.86
SASSAFRAS ALBIDUM	42.9	4.29	7.14	21.43	32.86
TAXODIUM DISTICHUM	28.6	0	2.86	1.43	4.29
ULMUS AMERICANA	42.9	1.43	5.71	2.86	10.00
TOTAL	100.0	120.00	51.43	72.86	244.29
STD DEV		45.09	26.10	18.90	68.76

SUBTYPE: 35
NUMBER OF PLOTS: 45

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	91.1	37.33	18.89	16.89	73.11
ACER RUBRUM	6.7	0.44	0.22	0.44	1.11
ACER SACCHARINUM	24.4	2.44	4.22	9.78	16.44
CARYA AQUATICA	22.2	2.00	0.89	2.00	4.89
CARYA ILLINOENSIS	20.0	3.56	0.22	1.33	5.11
CELTIS LAEVIGATA	71.1	26.89	16.00	20.89	63.78
CELTIS OCCIDENTALIS	2.2	0.22	0	0	0.22
CORNUS DRUMMONDII	20.0	8.67	0	0	8.67
CRATAEGUS SP	6.7	0.67	0	0	0.67
DIOSPYROS VIRGINIANA	4.4	1.11	0.22	0.22	1.56
FORESTIERA ACUMINATA	11.1	5.56	0	0	5.56
FRAXINUS PENNSYLVANICA	75.6	9.56	6.67	20.44	36.67
GLEDITSIA AQUATICA	6.7	0.22	0.67	1.11	2.00
GLEDITSIA TRIACANTHOS	8.9	0.22	0.22	0.44	0.89
GYMNOCLADUS DIOICA	2.2	0	0	0.22	0.22
ILEX DECIDUA	15.6	3.11	0	0	3.11
LIQUIDAMBAR STYRACIFLUA	28.9	4.22	2.89	2.67	9.78
MORUS RUBRA	20.0	1.78	1.56	0.89	4.22
PLANERA AQUATICA	2.2	2.89	0	0	2.89
PLATANUS OCCIDENTALIS	20.0	0.89	0.44	3.78	5.11
POPULUS DELTOIDES	8.9	0	0	2.00	2.00
QUERCUS LYRATA	17.8	1.33	0.44	0.89	2.67
QUERCUS NIGRA	2.2	0.22	0	0	0.22
QUERCUS NUTTALLII	31.1	2.22	3.11	1.33	6.67
TAXODIUM DISTICHUM	2.2	0	0	0.67	0.67
ULMUS AMERICANA	68.9	17.11	4.89	5.56	27.56
ULMUS CRASSIFOLIA	13.3	0.67	0.22	1.11	2.00
TOTAL	100.0	133.33	61.78	92.67	287.78
STD DEV		100.09	45.89	33.94	123.67

SUBTYPE: 36
NUMBER OF PLOTS: 21

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	90.5	19.05	10.48	11.90	41.43
ASIMINA TRILOBA	4.8	0.48	0	0	0.48
CARYA ILLINOENSIS	76.2	12.86	8.57	11.43	32.86
CELTIS LAEVIGATA	100.0	75.24	27.14	25.71	128.10
CORNUS DRUMMONDII	38.1	11.90	0	0	11.90
DIOSPYROS VIRGINIANA	9.5	0.48	1.90	0	2.38
FRAXINUS PENNSYLVANICA	19.0	0	0	2.38	2.38
GLEDITSIA TRIACANTHOS	4.8	0	0.48	0	0.48
ILEX DECIDUA	4.8	0.95	0	0	0.95
MORUS RUBRA	14.3	0	0.95	0.48	1.43
PLATANUS OCCIDENTALIS	23.8	2.38	4.76	10.00	17.14
POPULUS DELTOIDES	23.8	0	0	3.33	3.33
QUERCUS LYRATA	4.8	0	0.48	0	0.48
QUERCUS NIGRA	4.8	0	0	0.48	0.48
SALIX NIGRA	28.6	0	0.48	3.81	4.29
ULMUS AMERICANA	47.6	9.05	0.95	0.95	10.95
TOTAL	100.0	132.38	56.19	70.48	259.05
STD DEV		98.64	40.18	20.37	120.62

SUBTYPE: 37
NUMBER OF PLOTS: 15

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	80.0	15.33	14.67	11.33	41.33
ACER SACCHARINUM	46.7	5.33	1.33	5.33	12.00
ASIMINA TRILOBA	20.0	3.33	0	0	3.33
CARYA ILLINOENSIS	53.3	16.00	6.67	3.33	26.00
CELTIS LAEVIGATA	100.0	92.00	28.00	22.67	142.67
CORNUS DRUMMONDII	13.3	1.33	0	0	1.33
FORESTIERA ACUMINATA	13.3	3.33	0	0	3.33
FRAXINUS PENNSYLVANICA	53.3	4.67	4.00	4.00	12.67
ILEX DECIDUA	13.3	4.00	0	0	4.00
LINDERA BENZOIN	6.7	0.67	0	0	0.67
LIQUIDAMBAR STYRACIFLUA	6.7	0	0	1.33	1.33
MACLURA POMIFERA	6.7	0	0.67	0	0.67
MORUS RUBRA	33.3	2.00	2.00	0	4.00
PLATANUS OCCIDENTALIS	20.0	0.67	1.33	2.00	4.00
POPULUS DELTOIDES	66.7	0	0	13.33	13.33
SALIX NIGRA	20.0	0	0	4.00	4.00
ULMUS AMERICANA	60.0	8.67	4.67	5.33	18.67
TOTAL	100.0	157.33	63.33	72.67	293.33
STD DEV		81.19	24.10	36.15	87.07

SUBTYPE: 38
NUMBER OF PLOTS: 3

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA ILLINOENSIS	33.3	3.33	0	0	3.33
CELTIS LAEVIGATA	66.7	50.00	0	3.33	53.33
POPULUS DELTOIDES	100.0	20.00	33.33	5C.00	103.33
SALIX INTERIOR	33.3	30.00	0	0	30.00
SALIX NIGRA	33.3	0	0	3.33	3.33
TOTAL	100.0	103.33	33.33	56.67	193.33
STD DEV		41.63	30.55	49.33	45.09

SUBTYPE: 39
NUMBER OF PLOTS: [illegible]

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DENSITY PER ACRE: DBH 5.5-9.4 INCHES	DENSITY PER ACRE: DBH >9.4 INCHES	DENSITY PER ACRE: TOTAL DBH >2.0 INCHES
ACER NEGUNDO	66.7	13.33	20.00	16.67	50.00
CELTIS LAEVIGATA	100.0	16.67	30.00	46.67	93.33
DIOSPYROS VIRGINIANA	33.3	0	0	3.33	3.33
FRAXINUS PENNSYLVANICA	33.3	0	0	6.67	6.67
ILEX DECIDUA	33.3	3.33	0	0	3.33
MORUS RUBRA	66.7	6.67	0	0	6.67
ULMUS AMERICANA	66.7	3.33	3.33	0	6.67
TOTAL	100.0	43.33	53.33	73.33	170.00
STD DEV		32.15	20.82	32.15	72.11

SUBTYPE: 40
NUMBER OF PLOTS: 12

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	83.3	9.17	25.83	15.00	50.00
ACER SACCHARINUM	16.7	1.67	2.50	15.83	20.00
CARYA ILLINOENSIS	91.7	0	5.00	19.17	24.17
CELTIS LAEVIGATA	91.7	42.50	15.00	21.67	79.17
CORNUS DRUMMONDII	41.7	20.83	0	0	20.83
DIOSPYROS VIRGINIANA	8.3	0	0	0.83	0.83
FRAXINUS PENNSYLVANICA	33.3	0.83	0	3.33	4.17
MORUS RUBRA	33.3	0	3.33	0.83	4.17
PLATANUS OCCIDENTALIS	8.3	1.67	0	0	1.67
ULMUS AMERICANA	58.3	11.67	1.67	2.50	15.83
TOTAL	100.0	88.33	53.33	79.17	220.83
STD DEV		105.73	29.64	25.03	93.95

SUBTYPE: 41
NUMBER OF PLOTS: 12

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	66.7	10.83	17.50	13.33	41.67
ACER SACCHARINUM	25.0	2.50	0.83	1.67	5.00
ASIMINA TRILOBA	16.7	3.33	0	0	3.33
CARYA ILLINOENSIS	58.3	22.50	3.33	1.67	27.50
CELTIS LAEVIGATA	83.3	33.33	19.17	26.67	79.17
CORNUS DRUMMONDII	8.3	0.83	0	0	0.83
DIOSPYROS VIRGINIANA	8.3	0	0	0.83	0.83
FRAXINUS PENNSYLVANICA	50.0	1.67	0.83	9.17	11.67
GLEDITSIA TRIACANTHOS	8.3	0	0	0.83	0.83
ILEX DECIDUA	16.7	2.50	0	0	2.50
LIQUIDAMBAR STYRACIFLUA	25.0	1.67	0.83	0.83	3.33
MORUS RUBRA	25.0	0	2.50	0	2.50
PLATANUS OCCIDENTALIS	8.3	0	0.83	0	0.83
QUERCUS LYRATA	25.0	0.83	0	2.50	3.33
QUERCUS NUTTALLII	8.3	0	0	0.83	0.83
TAXODIUM DISTICHUM	16.7	0	0	3.33	3.33
ULMUS AMERICANA	75.0	3.33	3.33	7.50	14.17
TOTAL	100.0	83.33	49.17	69.17	201.67
STD DEV		65.41	23.53	27.78	67.93

SUBTYPE: 42
NUMBER OF PLOTS: 8

		DENSITY PER ACRE			
SPECIES	CONSTANCY	DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	87.5	10.00	28.75	20.00	58.75
CARYA ILLINOENSIS	87.5	8.75	13.75	10.00	32.50
CELTIS LAEVIGATA	100.0	66.25	51.25	32.50	150.00
CORNUS DRUMMONDII	50.0	11.25	0	0	11.25
MACLURA POMIFERA	12.5	0	0	1.25	1.25
MORUS RUBRA	12.5	1.25	0	0	1.25
PLATANUS OCCIDENTALIS	50.0	2.50	5.00	2.50	10.00
POPULUS DELTOIDES	62.5	0	7.50	26.25	33.75
QUERCUS NIGRA	25.0	2.50	0	0	2.50
ULMUS AMERICANA	62.5	16.25	5.00	1.25	22.50
TOTAL	100.0	118.75	111.25	93.75	323.75
STD DEV		66.64	46.73	37.01	101.83

SUBTYPE: 43
NUMBER OF PLOTS: 34

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	8.8	4.71	2.94	0	7.65
CARYA ILLINOENSIS	29.4	3.53	1.47	0.59	5.59
CELTIS LAEVIGATA	64.7	44.41	18.53	16.76	79.71
CEPHALANTHUS OCCIDENTALIS	5.9	0.59	0	0	0.59
FORESTIERA ACUMINATA	38.2	17.65	3.24	0	20.88
FRAXINUS PENNSYLVANICA	11.8	0.59	0	0.59	1.18
GLEDITSIA TRIACANTHOS	2.9	0	0	0.29	0.29
ILEX DECIDUA	5.9	0.88	0	0	0.88
PLANERA AQUATICA	5.9	6.47	0	0	6.47
PLATANUS OCCIDENTALIS	14.7	5.88	1.47	0.29	7.65
POPULUS DELTOIDES	35.3	33.53	7.06	12.35	52.94
SALIX NIGRA	85.3	49.12	11.47	46.76	107.35
TAXODIUM DISTICHUM	2.9	0	0	0.29	0.29
ULMUS AMERICANA	8.8	0	0	0.88	0.88
TOTAL	100.0	167.35	46.18	78.82	292.35
STD DEV		259.42	42.50	37.80	271.32

SUBTYPE: 44
NUMBER OF PLOTS: 24

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	54.2	10.00	2.92	6.67	19.58
ACER RUBRUM	4.2	0	0.42	0.42	0.83
ACER SACCHARINUM	25.0	5.42	5.00	10.00	20.42
ASIMINA TRILOBA	4.2	2.08	0	0	2.08
CARYA ILLINOENSIS	70.8	19.58	10.00	12.92	42.50
CELTIS LAEVIGATA	75.0	22.50	20.42	12.08	55.00
CORNUS DRUMMONDII	25.0	10.42	0	0	10.42
CRATAEGUS VIRIDUS	4.2	0.83	0	0	0.83
FORESTIERA ACUMINATA	41.7	21.67	0.83	0	22.50
FRAXINUS PENNSYLVANICA	87.5	15.42	3.33	11.25	30.00
FRAXINUS PROFUNDA	4.2	0	0.42	0	0.42
GLEDITSIA AQUATICA	4.2	0	0	0.42	0.42
ILEX DECIDUA	41.7	15.00	0	0	15.00
JUGLANS NIGRA	4.2	0	0	0.42	0.42
LIQUIDAMBAR STYRACIFLUA	12.5	0.83	0.83	1.25	2.92
MORUS RUBRA	16.7	0.83	0.83	0	1.67
PLANERA AQUATICA	4.2	0	0.42	0	0.42
PLATANUS OCCIDENTALIS	45.8	1.25	0.83	7.50	9.58
POPULUS DELTOIDES	8.3	0	0	1.67	1.67
SALIX NIGRA	4.2	0	0	0.42	0.42
TAXODIUM DISTICHUM	4.2	0	0	0.42	0.42
ULMUS AMERICANA	50.0	4.58	3.75	3.33	11.67
TOTAL	100.0	130.42	50.00	68.75	249.17
STD DEV		85.95	31.90	34.05	81.50

SUBTYPE: 45
NUMBER OF PLOTS: 15

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	40.0	3.33	0.67	0.67	4.67
ACER RUBRUM	13.3	0.67	2.00	0	2.67
ASIMINA TRILOBA	6.7	0.67	0	0	0.67
CARPINUS CAROLINIANA	13.3	2.00	0	0	2.00
CARYA ILLINOENSIS	66.7	2.67	2.00	8.67	13.33
CELTIS LAEVIGATA	93.3	32.67	23.33	7.33	63.33
CORNUS DRUMMONDII	33.3	4.00	0	0	4.00
DIOSPYROS VIRGINIANA	13.3	0	2.00	0	2.00
GLEDITSIA TRIACANTHOS	33.3	0	0.67	4.00	4.67
ILEX DECIDUA	46.7	20.67	0	0	20.67
LIQUIDAMBAR STYRACIFLUA	93.3	15.33	12.00	20.00	47.33
MORUS RUBRA	20.0	1.33	2.00	0	3.33
NYSSA SYLVATICA	6.7	0.67	0	0	0.67
POPULUS DELTOIDES	20.0	0	0	2.00	2.00
QUERCUS LYRATA	6.7	0	0.67	0	0.67
QUERCUS MICHAUXII	20.0	6.00	2.00	2.00	10.00
QUERCUS NIGRA	73.3	48.67	11.33	12.00	72.00
QUERCUS NUTTALLII	33.3	1.33	0	3.33	4.67
ULMUS AMERICANA	60.0	5.33	4.67	4.67	14.67
TOTAL	100.0	145.33	63.33	64.67	273.33
STD DEV		71.30	27.69	23.86	77.80

SUBTYPE: 46
NUMBER OF PLOTS: 34

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	67.6	26.47	6.47	5.59	33.53
ACER RUBRUM	2.9	0.29	0	0	0.29
ACER SACCHARINUM	38.2	10.00	0.88	1.47	12.35
CARYA AQUATICA	5.9	0	0	0.88	0.88
CARYA ILLINOENSIS	32.4	2.65	2.65	1.76	7.06
CARYA LACINIOSA	8.8	1.47	0.29	0.88	2.65
CELTIS LAEVIGATA	100.0	49.41	21.18	28.82	99.41
CORNUS DRUMMONDII	5.9	0.88	0	0	0.88
CRATAEGUS SP	2.9	0.29	0	0	0.29
DIOSPYROS VIRGINIANA	8.8	0.29	0.29	0.29	0.88
FORESTIERA ACUMINATA	20.6	5.59	0.88	0	6.47
FRAXINUS PENNSYLVANICA	85.3	12.65	3.82	15.29	31.76
GLEDITSIA AQUATICA	2.9	0	0.59	0	0.59
GLEDITSIA TRIACANTHOS	2.9	0	0	0.29	0.29
GYMNOCLADUS DIOICA	2.9	0.59	0	0	0.59
ILEX DECIDUA	5.9	0.88	0	0	0.88
LIQUIDAMBAR STYRACIFLUA	8.8	0.29	0.29	0.29	0.88
MORUS RUBRA	17.6	2.94	0.29	0.29	3.53
PLATANUS OCCIDENTALIS	14.7	0.88	0.29	1.18	2.35
POPULUS DELTOIDES	17.6	0	0	2.65	2.65
QUERCUS LYRATA	14.7	0.88	0.29	1.18	2.35
QUERCUS NIGRA	8.8	0.29	0.59	0	0.88
QUERCUS NUTTALLII	20.6	0.29	0	2.35	2.65
SALIX NIGRA	5.9	0	0	1.76	1.76
TAXODIUM DISTICHUM	5.9	0.59	0	0.59	1.18
ULMUS AMERICANA	70.6	17.94	4.71	2.06	24.71
ULMUS CRASSIFOLIA	5.9	0.29	0.29	0.29	0.88
TOTAL	100.0	135.88	43.82	67.94	247.65
STD DEV		66.34	32.85	23.84	65.74

SUBTYPE: 47
NUMBER OF PLOTS: 17

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	94.1	29.41	11.18	11.18	51.76
ACER SACCHARINUM	23.5	0	0	4.71	4.71
CARYA CORDIFORMIS	5.9	0	0.59	0	0.59
CARYA ILLINOENSIS	58.8	7.06	5.88	8.82	21.76
CELTIS LAEVIGATA	100.0	32.94	26.47	24.12	83.53
CORNUS DRUMMONDII	17.6	2.35	0	0	2.35
DIOSPYROS VIRGINIANA	5.9	0	0.59	0	0.59
FRAXINUS PENNSYLVANICA	70.6	0.59	4.12	8.82	13.53
FRAXINUS PROFUNDA	17.6	0.59	0.59	2.35	3.53
ILEX DECIDUA	17.6	4.12	0	0	4.12
LIQUIDAMBAR STYRACIFLUA	29.4	0.59	0.59	5.88	7.06
MORUS RUBRA	11.8	1.18	0.59	0	1.76
PLATANUS OCCIDENTALIS	35.3	1.18	0	5.29	6.47
QUERCUS LYRATA	5.9	0	0.59	0	0.59
QUERCUS NIGRA	5.9	0.59	0	0	0.59
QUERCUS NUTTALLII	17.6	1.76	2.94	2.35	7.06
ULMUS AMERICANA	88.2	14.71	4.71	5.29	24.71
ULMUS CRASSIFOLIA	5.9	0	0.59	0	0.59
TOTAL	100.0	97.06	59.41	78.82	235.29
STD DEV		83.65	41.30	17.64	104.71

SUBTYPE: 48
NUMBER OF PLOTS: 7

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA AQUATICA	71.4	52.86	8.57	10.00	71.43
CELTIS LAEVIGATA	100.0	11.43	5.71	18.57	35.71
CEPHALANTHUS OCCIDENTALIS	14.3	1.43	0	0	1.43
DIOSPYROS VIRGINIANA	14.3	1.43	0	0	1.43
FORESTIERA ACUMINATA	57.1	30.00	1.43	0	31.43
FRAXINUS PENNSYLVANICA	100.0	54.29	15.71	5.71	75.71
PLANERA AQUATICA	14.3	2.86	0	0	2.86
QUERCUS LYRATA	100.0	42.86	42.86	35.71	121.43
QUERCUS NUTTALLII	57.1	4.29	4.29	4.29	12.86
ULMUS AMERICANA	28.6	1.43	1.43	0	2.86
TOTAL	100.0	202.86	80.00	74.29	357.14
STD DEV		155.32	23.80	30.47	143.26

SUBTYPE: 49
NUMBER OF PLOTS: 13

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	100.0	16.15	37.69	47.69	101.54
CARYA ILLINOENSIS	15.4	0.77	0	0.77	1.54
CELTIS LAEVIGATA	30.8	3.85	0.77	0.77	5.38
FORESTIERA ACUMINATA	30.8	8.46	4.62	0.77	13.85
MORUS RUBRA	23.1	3.85	0	0	3.85
PLATANUS OCCIDENTALIS	30.8	19.23	7.69	0.77	27.69
POPULUS DELTOIDES	53.8	7.69	1.54	3.85	13.08
SALIX INTERIOR	7.7	10.00	0	0	10.00
SALIX NIGRA	92.3	1.54	0	38.46	40.00
TOTAL	100.0	71.54	52.31	93.08	216.92
STD DEV		76.90	33.95	50.23	67.01

SUBTYPE: 50
NUMBER OF PLOTS: 16

SPECIES	CONSTANCY	DENSITY PER ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	68.8	16.88	7.50	5.63	30.00
ACER SACCHARINUM	62.5	30.63	2.50	9.38	42.50
ASIMINA TRILOBA	31.3	5.63	0	0	5.63
CARPINUS CAROLINIANA	6.3	0.63	0	0	0.63
CARYA ILLINOENSIS	37.5	0.63	1.88	2.50	5.00
CARYA LACINIOSA	18.8	1.88	3.75	3.75	9.38
CELTIS LAEVIGATA	93.8	15.00	10.00	11.88	36.88
CORNUS DRUMMONDII	6.3	0.63	0	0	0.63
DIOSPYROS VIRGINIANA	18.8	2.50	0	3.75	6.25
FORESTIERA ACUMINATA	12.5	8.13	0.63	0	8.75
FRAXINUS PENNSYLVANICA	68.8	11.88	2.50	13.13	27.50
GLEDITSIA AQUATICA	6.3	0	0	0.63	0.63
GLEDITSIA TRIACANTHOS	6.3	0	0	0.63	0.63
GYMNOCLADUS DIOICA	6.3	0	0	0.63	0.63
ILEX DECIDUA	12.5	3.75	0	0	3.75
LIQUIDAMBAR STYRACIFLUA	43.8	1.88	7.50	11.88	21.25
MORUS RUBRA	31.3	17.50	0	0	17.50
PLATANUS OCCIDENTALIS	43.8	10.00	0	5.63	15.63
POPULUS DELTOIDES	25.0	19.38	18.13	4.38	41.88
QUERCUS LYRATA	12.5	0.63	0	0.63	1.25
QUERCUS NUTTALLII	6.3	0	0	0.63	0.63
QUERCUS PAGODA	6.3	0.63	0	0	0.63
SALIX NIGRA	6.3	0	0.63	0	0.63
ULMUS AMERICANA	75.0	13.13	10.00	6.88	30.00
TOTAL	100.0	161.25	65.00	81.88	308.13
STD DEV		150.59	42.43	25.62	177.17

SUBTYPE: 51
NUMBER OF PLOTS: 18

SPECIES	CONSTANCY	DENSITY PER ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	83.3	67.22	25.56	0.56	93.33
CARYA AQUATICA	5.6	0	0	0.56	0.56
CARYA ILLINOENSIS	61.1	16.67	3.33	13.33	33.33
CELTIS LAEVIGATA	100.0	30.56	10.56	11.67	52.78
CORNUS DRUMMONDII	33.3	13.33	0	0	13.33
CRATAEGUS VIRIDUS	5.6	0.56	0	0	0.56
DIOSPYROS VIRGINIANA	22.2	0.56	1.67	1.67	3.89
FORESTIERA ACUMINATA	22.2	8.33	1.11	0	9.44
FRAXINUS PENNSYLVANICA	55.6	3.33	3.89	8.89	16.11
GLEDITSIA TRIACANTHOS	16.7	0	0.56	1.67	2.22
ILEX DECIDUA	11.1	3.33	0	0	3.33
LIQUIDAMBAR STYRACIFLUA	22.2	11.11	4.44	0.56	16.11
PLATANUS OCCIDENTALIS	50.0	12.22	12.22	7.22	31.67
POPULUS DELTOIDES	33.3	1.67	0.56	10.56	12.78
QUERCUS LYRATA	22.2	1.67	0.56	1.11	3.33
QUERCUS NIGRA	27.8	10.56	1.67	0	12.22
QUERCUS NUTTALLII	27.8	2.22	0.56	1.11	3.89
SALIX NIGRA	5.6	3.33	0	0	3.33
TAXODIUM DISTICHUM	27.8	6.11	1.67	0.56	8.33
ULMUS AMERICANA	72.2	14.44	3.89	1.11	19.44
TOTAL	100.0	207.22	72.22	60.56	340.00
STD DEV		81.37	56.83	24.37	100.47

SUBTYPE: 1
NUMBER OF PLOTS: 16

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.09	0.83	0	1.92
CARYA ILLINOENSIS	1.02	0.25	0	1.27
CELTIS LAEVIGATA	1.67	2.13	0	3.80
CORNUS DRUMMONDII	0.74	0	0	0.74
FRAXINUS PENNSYLVANICA	0.33	0	0.34	0.67
GLEDITSIA TRIACANTHOS	0.05	0	0	0.05
ILEX DECIDUA	0.07	0	0	0.07
LIQUIDAMBAR STYRACIFLUA	0.14	0	0	0.14
PLATANUS OCCIDENTALIS	0.16	0	0	0.16
POPULUS DELTOIDES	4.20	16.93	37.20	58.33
TOTAL	9.47	20.13	37.54	67.14
STD DEV	11.41	14.85	28.58	21.95

SUBTYPE: 2
NUMBER OF PLOTS: 7

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
DIOSPYROS VIRGINIANA	0.07	0	0	0.07
PLATANUS OCCIDENTALIS	10.69	35.12	5.78	51.59
TOTAL	10.76	35.12	5.78	51.66
STD DEV	5.50	17.70	6.64	16.51

SUBTYPE: 3
NUMBER OF PLOTS: 4

SPECIES	BASAL AREA - SQFT/ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA ILLINOENSIS	0	0	3.94	3.94
CELTIS LAEVIGATA	0.81	0	0	0.81
CORNUS DRUMMONDII	3.90	0	0	3.90
GLEDITSIA TRIACANTHOS	0.68	1.98	6.50	9.16
POPULUS DELTOIDES	0.25	0	0	0.25
SALIX INTERIOR	5.62	0	0	5.62
SALIX NIGRA	1.04	2.00	0	3.04
ULMUS AMERICANA	0.07	0	0	0.07
TOTAL	12.36	3.98	10.44	26.79
STD DEV	2.37	4.60	16.78	17.33

SUBTYPE: 4
NUMBER OF PLOTS: 10

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA AQUATICA	2.44	12.06	29.23	43.73
CARYA ILLINOENSIS	0	0.35	0	0.35
CELTIS LAEVIGATA	0.45	0.20	2.80	3.44
FORESTIERA ACUMINATA	5.35	3.67	6.15	15.17
FRAXINUS PENNSYLVANICA	0	0.44	0	0.44
GLEDITSIA AQUATICA	0.73	0.66	0	1.39
PLANERA AQUATICA	0.74	0.81	0.55	2.10
POPULUS DELTOIDES	0.67	0	0	0.67
QUERCUS LYRATA	0.89	1.06	2.97	4.93
SALIX INTERIOR	0.66	0	0	0.66
SALIX NIGRA	0.48	0.59	3.69	4.75
TAXODIUM DISTICHUM	0.03	0	0	0.03
TOTAL	12.43	19.83	45.38	77.64
STD DEV	8.50	18.46	36.22	52.69

SUBTYPE: 5
NUMBER OF PLOTS: 25

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.12	0.62	0.85	1.59
ACER SACCHARINUM	0.50	3.64	21.46	25.60
CARYA ILLINOENSIS	1.27	1.74	11.04	14.05
CELTIS LAEVIGATA	2.72	5.10	16.01	23.83
CORNUS DRUMMONDII	0.48	0	0	0.48
CRATAEGUS SP	0.03	0	0	0.03
DIOSPYROS VIRGINIANA	0.02	0.18	0	0.20
FORESTIERA ACUMINATA	1.63	0.49	0	2.17
FRAXINUS PENNSYLVANICA	0.18	0.19	0	0.37
GLEDITSIA TRIACANTHOS	0	0.75	5.33	6.08
ILEX DECIDUA	0.08	0	0	0.08
MACLURA POMIFERA	0.05	0.16	0.26	0.48
MORUS ALBA	0.05	0.08	0.31	0.45
MORUS RUBRA	0.28	0.39	0.44	1.11
PLATANUS OCCIDENTALIS	0.07	0.08	2.19	2.34
POPULUS DELTOIDES	0	0.14	28.89	29.03
QUERCUS LYRATA	0.03	0	0	0.03
SALIX NIGRA	0	0	4.91	4.91
ULMUS AMERICANA	0.84	2.07	2.71	5.62
TOTAL	8.43	15.63	94.40	118.45
STD DEV	4.99	9.34	57.92	56.30

SUBTYPE: 6
NUMBER OF PLOTS: 25

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	2.32	2.31	1.71	6.35
ACER SACCHARINUM	0.22	2.96	3.86	7.05
CARYA ILLINOENSIS	0.18	0.08	7.57	7.83
CELTIS LAEVIGATA	2.08	4.00	2.85	8.94
CORNUS DRUMMONDII	0.84	0	0	0.84
CRATAEGUS VIRIDUS	0.06	0	0	0.06
DIOSPYROS VIRGINIANA	0.09	0.33	0.26	0.67
FORESTIERA ACUMINATA	1.29	0.31	0	1.60
FRAXINUS PENNSYLVANICA	2.01	2.79	0.58	5.38
GLEDITSIA AQUATICA	0	0.32	0	0.32
ILEX DECIDUA	0.07	0	0	0.07
LIQUIDAMBAR STYRACIFLUA	0.44	3.05	17.06	20.55
MORUS RUBRA	0.05	0	0	0.05
PLATANUS OCCIDENTALIS	0.67	0.64	2.82	4.14
PCPULUS DELTOIDES	0.05	0.29	76.28	76.63
QUERCUS NIGRA	0.09	0.30	1.83	2.22
SALIX NIGRA	0.13	2.21	4.89	7.23
SAPIUM SEBIFERUM	0.05	0	0	0.05
ULMUS AMERICANA	0.44	0.32	0.65	1.41
TOTAL	11.09	19.91	120.38	151.38
STD DEV	7.48	14.64	93.05	93.31

SUBTYPE: 7
NUMBER OF PLOTS: 6

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA AQUATICA	0	0.33	14.35	14.68
GLEDITSIA AQUATICA	0	0.45	2.33	2.77
NYSSA AQUATICA	15.52	12.47	8.41	36.40
PLANERA AQUATICA	2.86	2.59	0	5.46
QUERCUS LYRATA	0	0	1.54	1.54
SALIX NIGRA	0.23	3.25	14.54	18.03
TAXODIUM DISTICHUM	0.31	0.33	41.49	42.12
TOTAL	18.92	19.42	82.66	121.00
STD DEV	23.57	14.60	49.08	23.39

SUBTYPE: 8
NUMBER OF PLOTS: 20

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	3.46	5.19	1.13	9.77
ACER RUBRUM	0.15	0.13	1.98	2.26
ACER SACCHARINUM	0.08	0	2.54	2.62
CARYA AQUATICA	0.65	3.04	15.33	19.02
CELTIS LAEVIGATA	0.59	0.35	9.73	10.68
DIOSPYROS VIRGINIANA	0	0	1.53	1.[illegible]
FORESTIERA ACUMINATA	2.66	2.45	0.55	5.[illegible]
FRAXINUS PENNSYLVANICA	0.63	2.84	10.58	14.04
GLEDITSIA AQUATICA	0	0	2.41	2.41
LIQUIDAMBAR STYRACIFLUA	0.07	0	5.99	6.06
MORUS RUBRA	0.01	0	0	0.01
NYSSA AQUATICA	0	0	1.77	1.77
PLANERA AQUATICA	0.50	2.86	0.33	3.68
PLATANUS OCCIDENTALIS	0	0	7.74	7.74
POPULUS DELTOIDES	0	0	1.52	1.52
QUERCUS LYRATA	0.10	0.17	2.70	2.97
SALIX NIGRA	0	0	0.53	0.53
TAXODIUM DISTICHUM	0.45	3.52	114.46	118.42
ULMUS AMERICANA	0.09	0.89	3.76	4.75
TOTAL	9.44	21.43	184.57	215.44
STD DEV	5.65	11.90	141.64	143.97

SUBTYPE: 9
NUMBER OF PLOTS: 12

SPECIES	BASAL AREA - SQFT/ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA ILLINOENSIS	0.10	0	0	0.10
CELTIS LAEVIGATA	0.31	1.33	0	1.64
CORNUS DRUMMONDII	0.02	0	0	0.02
FORESTIERA ACUMINATA	0.19	0	0	0.19
MORUS RUBRA	0.09	0	0	0.09
PLATANUS OCCIDENTALIS	0.40	0.22	2.00	2.63
QUERCUS NIGRA	0.08	0	0.55	0.63
SALIX NIGRA	1.44	20.18	110.90	132.53
TOTAL	2.64	21.73	113.45	137.83
STD DEV	1.67	11.24	41.32	47.06

SUBTYPE: 10
NUMBER OF PLOTS: 11

SPECIES	BASAL AREA - SQFT/ACRE			
	DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
AMORPHA FRUTICOSA	0.04	0	0	0.04
SALIX INTERIOR	1.91	0.54	0	2.44
SALIX NIGRA	15.70	21.69	7.66	45.05
TAXODIUM DISTICHUM	0.08	0.24	3.75	4.08
TOTAL	17.73	22.47	11.41	51.61
STD DEV	9.69	12.96	16.39	21.63

SUBTYPE: 11
NUMBER OF PLOTS: 7

	BASAL AREA - SQFT/ACRE			
SPECIES	DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER RUBRUM	0.19	0	0	0.19
CARYA AQUATICA	0	0.38	0	0.38
CARYA ILLINOENSIS	0.61	5.27	28.18	34.07
CELTIS LAEVIGATA	2.53	6.49	46.77	55.79
CORNUS DRUMMONDII	0.57	0	0	0.57
DIOSPYROS VIRGINIANA	0.44	0	0	0.44
MORUS RUBRA	0.46	0	0	0.46
PLATANUS OCCIDENTALIS	1.04	1.85	11.79	14.68
POPULUS DELTOIDES	0.12	0	5.77	5.90
QUERCUS LYRATA	0	0	4.78	4.78
SALIX NIGRA	0	0.50	3.97	4.46
ULMUS AMERICANA	0.39	0	15.15	15.54
TOTAL	6.35	14.50	116.42	137.27
STD DEV	3.81	12.19	51.72	53.06

SUBTYPE: 12
NUMBER OF PLOTS: 19

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.09	2.75	3.03	6.87
ACER RUBRUM	0.11	0	0.29	0.39
CARYA ILLINOENSIS	0.26	0.51	2.57	3.34
CELTIS LAEVIGATA	2.83	7.02	70.54	80.39
CORNUS DRUMMONDII	0.68	0.10	0	0.78
FORESTIERA ACUMINATA	1.04	0.14	0	1.18
FRAXINUS PENNSYLVANICA	0	0	0.56	0.56
ILEX DECIDUA	0.07	0	0	0.07
LIGUSTRUM SINENSE	0.01	0	0	0.01
MORUS RUBRA	0.05	0.10	0	0.16
PLATANUS OCCIDENTALIS	0.24	1.39	5.05	6.67
POPULUS DELTOIDES	0	0.18	3.68	3.87
QUERCUS NIGRA	0.06	0.23	0	0.29
QUERCUS VIRGINIANA	0.05	0.18	3.32	3.55
SALIX INTERIOR	0.12	0.43	0	0.55
SALIX NIGRA	0.12	0.69	7.99	8.80
TAXODIUM DISTICHUM	0	0	0.41	0.41
ULMUS AMERICANA	0.21	0.51	0.83	1.55
TOTAL	6.94	14.24	98.27	119.45
STD DEV	2.89	9.50	39.82	36.33

SUBTYPE: 13
NUMBER OF PLOTS: 51

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.09	0.12	0.11	0.32
CARYA ILLINOENSIS	0.09	0	0.36	0.45
CELTIS LAEVIGATA	1.18	1.47	3.37	6.02
CEPHALANTHUS OCCIDENTALIS	0.06	0	0	0.06
CORNUS DRUMMONDII	0.13	0	0	0.13
DIOSPYROS VIRGINIANA	0.01	0	0	0.01
FORESTIERA ACUMINATA	0.44	0	0	0.44
FRAXINUS PENNSYLVANICA	0.07	0.09	0	0.16
GLEDITSIA TRIACANTHOS	0.03	0	0	0.03
PLATANUS OCCIDENTALIS	0.16	0.27	1.04	1.47
POPULUS DELTOIDES	0.27	0	0.21	0.48
SALIX INTERIOR	0.61	0.12	0	0.72
SAMBUCUS CANADENSIS	0.02	0	0	0.02
SALIX NIGRA	6.36	23.14	60.21	89.71
SAPIUM SEBIFERUM	0.06	0.08	0	0.14
TAXODIUM DISTICHUM	0	0.04	0	0.04
ULMUS AMERICANA	0.03	0.05	0.35	0.43
TOTAL	9.58	25.37	65.64	100.59
STD DEV	10.19	17.38	43.30	40.58

SUBTYPE: 14
NUMBER OF PLOTS: 9

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.26	0	0	0.26
ACER RUBRUM	0.27	0.22	0.61	1.09
AMORPHA FRUTICOSA	0.09	0	0	0.09
CARYA ILLINOENSIS	0.53	0	0	0.53
CELTIS LAEVIGATA	1.92	4.45	4.46	10.83
CORNUS DRUMMONDII	0.21	0	0	0.21
FORESTIERA ACUMINATA	0.70	0	0	0.70
FRAXINUS PENNSYLVANICA	0	0.30	0.73	1.03
PLATANUS OCCIDENTALIS	0.72	0.95	3.96	5.63
POPULUS DELTOIDES	4.24	6.06	14.00	24.30
SALIX INTERIOR	1.61	0.22	0	1.83
SALIX NIGRA	7.66	6.30	6.47	20.43
SAPIUM SEBIFERUM	0.20	0	0	0.20
ULMUS AMERICANA	0.33	0.52	2.16	3.01
TOTAL	18.73	19.02	32.39	70.14
STD DEV	8.97	12.63	39.87	39.53

SUBTYPE: 15
NUMBER OF PLOTS: 15

SPECIES	BASAL AREA - SQFT/ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.32	2.83	4.10	8.25
CARYA ILLINOENSIS	2.81	5.36	12.73	20.91
CELTIS LAEVIGATA	2.44	2.72	17.70	22.86
CORNUS DRUMMONDII	1.01	0	0	1.01
DIOSPYROS VIRGINIANA	0.28	0.44	0	0.72
FORESTIERA ACUMINATA	0.11	0.31	0	0.42
LIQUIDAMBAR STYRACIFLUA	0.03	0	0	0.03
PLATANUS OCCIDENTALIS	1.22	3.42	18.99	23.63
POPULUS DELTOIDES	0.54	1.35	12.34	14.23
QUERCUS LYRATA	0	0	0.36	0.36
SALIX NIGRA	0.31	0.84	4.49	5.64
TAXODIUM DISTICHUM	0.06	0.29	0	0.35
ULMUS AMERICANA	0.56	0.13	0.52	1.22
TOTAL	10.70	17.68	71.24	99.62
STD DEV	3.74	7.63	38.30	36.33

SUBTYPE: 16
NUMBER OF PLOTS: 32

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.33	0.06	1.41	1.80
ACER RUBRUM	0.05	0	0	0.05
CARYA ILLINOENSIS	1.29	3.24	10.60	15.14
CELTIS LAEVIGATA	3.64	11.46	45.72	60.82
CORNUS DRUMMONDII	2.08	0.51	0	2.58
CRATAEGUS VIRIDUS	0.03	0	0	0.03
DIOSPYROS VIRGINIANA	0.04	0.06	0	0.10
FORESTIERA ACUMINATA	0.52	0	0	0.52
FRAXINUS PENNSYLVANICA	0	0	2.10	2.10
GLEDITSIA AQUATICA	0	0.45	0.45	0.90
GLEDITSIA TRIACANTHOS	0	0	1.05	1.05
ILEX DECIDUA	0.13	0	0	0.13
LIGUSTRUM SINENSE	0.01	0	0	0.01
LIGUSTRUM LUCIDUM	0.11	0	0	0.11
MORUS RUBRA	0.08	0.28	0	0.35
PLATANUS OCCIDENTALIS	0.22	0.77	8.72	9.71
POPULUS DELTOIDES	0	0	11.83	11.83
PRUNUS SEROTINA	0.03	0.06	0	0.09
QUERCUS LYRATA	0.03	0.25	0.17	0.45
QUERCUS NIGRA	0.05	0.22	0.17	0.44
QUERCUS VIRGINIANA	0.09	0.06	0	0.15
SALIX NIGRA	0.02	0.17	3.17	3.36
TAXODIUM DISTICHUM	0.09	0.11	0	0.19
ULMUS AMERICANA	0.28	0.14	0.34	0.77
TOTAL	9.12	17.85	85.73	112.70
STD DEV	5.62	11.11	60.09	56.93

SUBTYPE: 17
NUMBER OF PLOTS: 15

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER SACCHARINUM	0.32	0.13	0	0.45
CARYA ILLINOENSIS	0.15	0	0	0.15
CELTIS LAEVIGATA	0.72	0.60	0	1.32
FORESTIERA ACUMINATA	0.11	0	0	0.11
GLEDITSIA TRIACANTHOS	0.10	0	0	0.10
PLANERA AQUATICA	0.05	0	0	0.05
PLATANUS OCCIDENTALIS	0.20	1.61	1.41	3.23
POPULUS DELTOIDES	0.37	2.60	2.84	5.82
SALIX INTERIOR	0.15	0.72	0.44	1.31
SALIX NIGRA	15.64	20.07	92.45	128.16
TOTAL	17.82	25.73	97.15	140.70
STD DEV	20.67	23.27	85.15	59.27

SUBTYPE: 18
NUMBER OF PLOTS: 6

	BASAL AREA - SQFT/ACRE			
SPECIES	DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
MORUS RUBRA	0.09	0	0	0.09
POPULUS DELTOIDES	0.13	0.33	0	0.46
SALIX INTERIOR	4.24	0.98	0	5.22
SALIX NIGRA	28.60	42.13	13.69	84.42
TOTAL	33.06	43.44	13.69	90.19
STD DEV	14.88	30.91	18.21	31.98

SUBTYPE: 19
NUMBER OF PLOTS: 9

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.03	0	3.10	3.13
ACER SACCHARINUM	0.10	3.24	22.30	25.64
CELTIS LAEVIGATA	0.75	1.18	1.02	2.95
FORESTIERA ACUMINATA	0.10	0	0	0.10
FRAXINUS PENNSYLVANICA	0.05	0	0	0.05
MORUS RUBRA	0.05	0	0	0.05
PLATANUS OCCIDENTALIS	0.22	0	0	0.22
POPULUS DELTOIDES	0	1.77	37.80	39.57
SALIX INTERIOR	0.24	0.44	0.73	1.41
SALIX NIGRA	0.03	0.22	10.59	10.84
ULMUS AMERICANA	0	0.22	0	0.22
TOTAL	1.58	7.06	75.55	84.19
STD DEV	1.26	3.88	54.47	55.99

SUBTYPE: 20
NUMBER OF PLOTS: 27

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.17	4.29	10.03	15.49
CARYA ILLINOENSIS	0.65	1.17	1.53	3.40
CELTIS LAEVIGATA	2.24	8.42	25.86	36.52
CORNUS DRUMMONDII	2.17	0	0	2.17
DIOSPYROS VIRGINIANA	0	0.13	0	0.13
FORESTIERA ACUMINATA	0.19	0	0	0.19
FRAXINUS PENNSYLVANICA	0.04	0.17	0.92	1.13
GLEDITSIA TRIACANTHOS	0.10	0	0	0.10
ILEX DECIDUA	0.02	0	0	0.02
LIQUIDAMBAR STYRACIFLUA	0	0	0.40	0.40
PLATANUS OCCIDENTALIS	2.01	2.10	2.11	6.22
POPULUS DELTOIDES	0.01	0.33	32.73	33.07
QUERCUS NIGRA	0	0.27	1.57	1.84
SALIX NIGRA	0	0	1.07	1.07
ULMUS AMERICANA	0.41	1.63	2.33	4.37
TOTAL	9.01	18.51	78.60	106.12
STD DEV	9.65	9.15	50.54	48.48

SUBTYPE: 21
NUMBER OF PLOTS: 37

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.42	7.31	9.29	18.01
ACER RUBRUM	0.10	0.12	0.33	0.55
ACER SACCHARINUM	0.79	1.66	5.64	8.09
CARYA ILLINOENSIS	0.11	0.35	1.32	1.78
CELTIS LAEVIGATA	1.68	3.00	5.73	10.41
CORNUS DRUMMONDII	0.09	0	0	0.09
DIOSPYROS VIRGINIANA	0	0.12	0	0.12
FORESTIERA ACUMINATA	0.67	0.28	0.15	1.10
FRAXINUS PENNSYLVANICA	0.16	0.83	1.25	2.25
GLEDITSIA TRIACANTHOS	0.06	0	0.21	0.27
GYMNOCLADUS DIOICA	0	0.09	0.18	0.27
LIQUIDAMBAR STYRACIFLUA	0.01	0.42	1.48	1.91
MACLURA POMIFERA	0.05	0.07	0	0.12
MORUS RUBRA	0.45	0.27	0	0.72
PLATANUS OCCIDENTALIS	0.07	0.57	6.26	6.90
POPULUS DELTOIDES	2.13	0.51	68.40	71.04
QUERCUS PAGODA	0.01	0	0	0.01
SALIX NIGRA	0.01	0	3.75	3.76
ULMUS AMERICANA	0.43	1.13	2.30	3.86
TOTAL	8.24	16.74	106.28	131.25
STD DEV	7.95	12.49	48.50	45.98

SUBTYPE: 22
NUMBER OF PLOTS: 64

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.99	4.59	12.96	19.54
ACER RUBRUM	0.00	0.03	0	0.03
ACER SACCHARINUM	0.17	0.19	1.21	1.57
CARYA ILLINOENSIS	0.25	2.25	33.78	36.28
CELTIS LAEVIGATA	2.62	5.03	19.91	27.56
CORNUS DRUMMONDII	0.84	0	0	0.84
CRATAEGUS SP	0	0.07	0	0.07
DIOSPYROS VIRGINIANA	0	0.05	0	0.05
FORESTIERA ACUMINATA	0.65	0.15	0	0.80
FRAXINUS PENNSYLVANICA	0.03	0.53	2.34	2.90
GLEDITSIA TRIACANTHOS	0	0	0.37	0.37
GYMNOCLADUS DIOICA	0.03	0	0.19	0.22
ILEX DECIDUA	0.09	0.11	0	0.20
LIQUIDAMBAR STYRACIFLUA	0.03	0.42	1.86	2.31
MORUS RUBRA	0.24	0.26	0.58	1.09
PLATANUS OCCIDENTALIS	0.11	0.55	15.11	15.78
POPULUS DELTOIDES	0	0.04	1.85	1.89
QUERCUS LYRATA	0.01	0	0.72	0.73
QUERCUS NUTTALLII	0.03	0.13	0.41	0.58
RHUS COPPALINA	0.05	0.11	0	0.16
SALIX NIGRA	0	0	0.96	0.96
ULMUS AMERICANA	0.66	0.93	3.17	4.77
ULMUS CRASSIFOLIA	0.02	0.03	0	0.05
TOTAL	7.83	15.48	95.43	118.74
STD DEV	4.02	9.08	51.53	50.41

SUBTYPE: 23
NUMBER OF PLOTS: 16

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.68	1.96	5.75	8.39
ACER SACCHARINUM	5.85	4.43	18.20	28.48
ASIMINA TRILOBA	1.69	0	0	1.69
CARYA AQUATICA	0	C	0.67	0.67
CARYA ILLINOENSIS	0	0.77	27.33	28.10
CELTIS LAEVIGATA	3.29	3.44	7.95	14.67
CORNUS DRUMMONDII	0.27	0	0	0.27
DIOSPYROS VIRGINIANA	0	0.88	0.68	1.56
FORESTIERA ACUMINATA	0.99	0.29	0	1.28
FRAXINUS PENNSYLVANICA	0.82	0.25	1.86	2.92
GLEDITSIA TRIACANTHOS	0	0	1.36	1.36
GYMNOCLADUS DIOICA	0.03	0	0	0.03
ILEX DECIDUA	0.07	0	0	0.07
LIQUIDAMBAR STYRACIFLUA	0.17	1.79	28.72	30.68
MORUS RUBRA	0.07	0.12	0.49	0.69
PLATANUS OCCIDENTALIS	0	0.17	1.23	1.40
POPULUS DELTOIDES	0.05	0.39	0.34	0.78
QUERCUS LYRATA	0.28	0.22	0	0.50
QUERCUS PALUSTRIS	0	0	0.58	0.58
SALIX NIGRA	0.17	0.85	0	1.02
ULMUS AMERICANA	0.97	3.58	14.85	19.40
TOTAL	15.39	19.12	110.01	144.53
STD DEV	12.65	12.64	68.39	63.13

SUBTYPE: 24
NUMBER OF PLOTS: 14

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.03	0.19	0	0.27
ACER RUBRUM	0.30	0.64	1.03	1.97
ACER SACCHARINUM	0.02	0	0	0.02
CARYA AQUATICA	0.37	0.67	2.25	3.28
CARPINUS CAROLINIANA	0	0.25	0	0.25
CARYA ILLINOENSIS	0	0.46	3.91	4.37
CARYA LACINIOSA	0.07	0	2.12	2.19
CERCIS CANADENSIS	0.07	0	0	0.07
CELTIS LAEVIGATA	1.24	0.14	0	1.38
CORNUS DRUMMONDII	0.07	0	0	0.07
CRATAEGUS SP	0.02	0	0	0.02
DIOSPYROS VIRGINIANA	0.16	1.42	1.90	3.48
FRAXINUS PENNSYLVANICA	0	0	0.56	0.56
GLEDITSIA TRIACANTHOS	0	0.63	3.09	3.72
ILEX DECIDUA	0.13	0	0	0.13
LIQUIDAMBAR STYRACIFLUA	1.30	5.96	82.81	90.07
MORUS RUBRA	0.06	0	0	0.06
PLATANUS OCCIDENTALIS	0	0	2.63	2.63
QUERCUS LYRATA	0.34	0.86	1.73	2.93
QUERCUS MICHAUXII	0	0	1.89	1.89
QUERCUS NIGRA	0.78	0.90	3.17	4.85
QUERCUS NUTTALLII	0.04	0	0	0.04
QUERCUS PAGODA	0.16	0	0	0.16
QUERCUS PHELLOS	0.60	0.61	2.63	3.84
ULMUS AMERICANA	1.89	1.51	2.47	5.87
TOTAL	7.69	14.24	112.20	134.13
STD DEV	4.39	12.07	64.62	63.00

SUBTYPE: 25
NUMBER OF PLOTS: 10

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER RUBRUM	0.36	0	0	0.36
ACER SACCHARINUM	1.87	2.46	2.91	7.24
CARYA AQUATICA	0.16	0.64	4.72	5.52
CARYA ILLINOENSIS	0	0	3.71	3.71
CELTIS LAEVIGATA	1.91	0	0	1.91
CRATAEGUS VIRIDUS	0.16	0	0	0.16
DIOSPYROS VIRGINIANA	0	0.35	1.47	1.82
FORESTIERA ACUMINATA	0.08	0	0	0.08
FRAXINUS PENNSYLVANICA	0.22	0.64	0.79	1.65
ILEX DECIDUA	0.24	0	0	0.24
LIQUIDAMBAR STYRACIFLUA	1.34	1.05	7.12	9.51
PLANERA AQUATICA	0.03	0	0	0.03
QUERCUS LYRATA	0.61	2.20	29.82	32.63
QUERCUS NUTTALLII	0	0	16.49	16.49
QUERCUS PAGODA	0	0	11.37	11.37
QUERCUS PHELLOS	0.22	0.81	46.49	47.53
TAXODIUM DISTICHUM	0	0	9.81	9.81
ULMUS AMERICANA	0.64	0	0	0.64
TOTAL	7.86	8.15	134.69	150.70
STD DEV	5.93	9.29	60.13	54.08

SUBTYPE: 26
NUMBER OF PLOTS: 12

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA CORDIFORMIS	0.97	2.19	2.66	5.81
CARYA ILLINOENSIS	0	1.54	3.37	4.91
CARYA LACINIOSA	1.80	0.71	2.53	5.04
CERCIS CANADENSIS	0.13	0.33	0	0.46
CELTIS LAEVIGATA	0.44	0	0	0.44
CRATAEGUS VIRIDUS	0.04	0	0	0.04
DIOSPYROS VIRGINIANA	0.20	0.37	0.45	1.02
FRAXINUS PENNSYLVANICA	0.23	1.58	0	1.80
ILEX DECIDUA	0.12	0	0	0.12
LIQUIDAMBAR STYRACIFLUA	2.56	3.23	7.69	13.47
MORUS RUBRA	0.24	0.39	0	0.63
NYSSA SYLVATICA	0.30	0.53	0	0.83
PLATANUS OCCIDENTALIS	0.04	0	0	0.04
PRUNUS AMERICANA	0.11	0	0	0.11
QUERCUS NIGRA	0.14	2.41	26.22	28.76
QUERCUS PAGODA	0.11	0.88	9.75	10.75
QUERCUS PHELLOS	0.67	2.40	10.50	13.57
SASSAFRAS ALBIDUM	0.06	0	0	0.06
ULMUS AMERICANA	1.99	2.04	0	4.03
TOTAL	10.13	18.59	63.17	91.90
STD DEV	5.00	11.52	55.37	50.37

SUBTYPE: 27
NUMBER OF PLOTS: 36

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	2.53	5.03	6.96	14.52
ACER SACCHARINUM	0.05	0.05	2.79	2.90
CARYA AQUATICA	0	0	0.68	0.68
CARYA CORDIFORMIS	0.04	0	0	0.04
CARYA ILLINOENSIS	0.04	0.67	5.80	6.50
CELTIS LAEVIGATA	3.14	6.74	37.68	47.56
CORNUS DRUMMONDII	0.10	0	0	0.10
CRATAEGUS SP	0.07	0	0	0.07
DIOSPYROS VIRGINIANA	0.03	0.13	0	0.16
FORESTIERA ACUMINATA	0.96	0.24	0	1.20
FRAXINUS PENNSYLVANICA	1.72	3.36	32.79	37.86
GLEDITSIA AQUATICA	0	0	0.30	0.30
LIQUIDAMBAR STYRACIFLUA	0.09	0.15	1.46	1.70
MORUS RUBRA	0.09	0	0	0.09
PLANERA AQUATICA	0.04	0	0	0.04
PLATANUS OCCIDENTALIS	0.01	0.12	1.30	1.43
POPULUS DELTOIDES	0	0	4.79	4.79
QUERCUS LYRATA	0.18	0.69	6.10	6.98
QUERCUS NIGRA	0.08	0	1.20	1.28
QUERCUS NUTTALLII	0.08	0.20	1.75	2.03
TAXODIUM DISTICHUM	0.08	0.10	11.87	12.04
ULMUS AMERICANA	0.85	2.74	6.29	9.38
TOTAL	10.17	20.22	121.76	152.15
STD DEV	6.72	11.00	66.44	65.74

SUBTYPE: 28
NUMBER OF PLOTS: 61

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.18	4.08	11.37	16.63
ACER SACCHARINUM	0.02	0.06	0.15	0.23
CARYA AQUATICA	0	0.06	0.29	0.35
CARYA ILLINOENSIS	0.44	1.41	13.17	15.01
CELTIS LAEVIGATA	4.51	8.03	27.84	40.38
CORNUS DRUMMONDII	0.35	0.03	0	0.38
DIOSPYROS VIRGINIANA	0.05	0.64	1.23	1.33
FORESTIERA ACUMINATA	1.31	0.93	0	2.24
FRAXINUS PENNSYLVANICA	0.80	0.91	3.78	5.49
GLEDITSIA AQUATICA	0	0	0.22	0.22
GLEDITSIA TRIACANTHOS	0	0.10	0.89	0.99
ILEX DECIDUA	0.06	0	0	0.06
LINDERA BENZOIN	0.03	0	0	0.03
LIQUIDAMBAR STYRACIFLUA	0	0	2.79	2.79
MORUS RUBRA	0.05	0.04	0.38	0.48
PLATANUS OCCIDENTALIS	0.12	0.47	6.59	7.18
POPULUS DELTOIDES	0.01	0.14	7.92	8.07
QUERCUS LYRATA	0.03	0	0.11	0.14
QUERCUS NUTTALLII	0	0.15	0	0.15
RHUS COPPALINA	0.00	0	0	0.00
SALIX NIGRA	0	0.14	5.44	5.58
TAXODIUM DISTICHUM	0.05	0.03	0.76	0.84
ULMUS AMERICANA	0.49	1.06	3.24	4.79
TOTAL	9.51	17.69	86.15	113.35
STD DEV	5.98	9.88	43.85	40.55

SUBTYPE: 29
NUMBER OF PLOTS: 25

SPECIES	BASAL AREA - SQFT/ACRE: DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.80	4.69	3.12	9.61
ACER SACCHARINUM	4.45	5.56	7.63	17.64
ASIMINA TRILOBA	0.03	0	0	0.03
CARYA ILLINOENSIS	0.01	0.08	0	0.09
CELTIS LAEVIGATA	0.42	0.19	0	0.60
CORNUS DRUMMONDII	0.17	0	0	0.17
FRAXINUS PENNSYLVANICA	0.02	0	0	0.02
MORUS RUBRA	1.20	0.76	0	1.96
PLATANUS OCCIDENTALIS	0.72	1.88	19.28	21.88
POPULUS DELTOIDES	0.81	0.86	48.40	50.07
SALIX INTERIOR	1.73	0	0	1.73
SALIX NIGRA	1.92	1.71	29.58	33.22
ULMUS AMERICANA	2.19	2.23	0	4.43
TOTAL	15.46	17.97	108.00	141.44
STD DEV	12.64	12.19	67.94	61.71

SUBTYPE: 30
NUMBER OF PLOTS: 25

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	3.80	2.54	18.20	24.54
ACER SACCHARINUM	1.66	2.75	16.02	20.44
ASIMINA TRILOBA	1.19	0.14	0.96	2.29
CARYA ILLINOENSIS	0.04	0.08	0	0.12
CELTIS LAEVIGATA	2.02	1.36	1.43	4.81
CORNUS DRUMMONDII	0.11	0	0	0.11
FORESTIERA ACUMINATA	0.20	0	0	0.20
FRAXINUS PENNSYLVANICA	0.12	0.40	2.62	3.15
GYMNOCLADUS DIOICA	0.07	0	0.22	0.29
ILEX DECIDUA	0.02	0	0	0.02
JUGLANS NIGRA	0	0.08	0	0.08
LINDERA BENZOIN	0.02	0	0	0.02
MORUS RUBRA	0.68	0.33	0	1.01
PLATANUS OCCIDENTALIS	0.27	0.21	11.24	11.72
POPULUS DELTOIDES	0	0.67	59.95	60.62
SALIX NIGRA	0.03	2.16	17.25	19.44
ULMUS AMERICANA	0.99	1.38	5.86	8.23
TOTAL	11.24	12.10	133.75	157.09
STD DEV	5.59	7.91	62.96	57.36

SUBTYPE: 31
NUMBER OF PLOTS: 35

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.92	3.45	6.89	12.26
ACER SACCHARINUM	0.66	2.35	12.44	15.45
ASIMINA TRILOBA	0.26	0.06	0	0.31
CARYA ILLINOENSIS	0.06	0.35	1.13	1.54
CARYA LACINIOSA	0	0	0.19	0.19
CELTIS LAEVIGATA	3.31	6.78	29.73	39.82
CORNUS DRUMMONDII	0.39	0	0	0.39
DIOSPYROS VIRGINIANA	0.02	0.08	0.22	0.33
FORESTIERA ACUMINATA	0.08	0.08	0	0.15
FRAXINUS PENNSYLVANICA	0.32	1.25	4.91	6.48
GLEDITSIA TRIACANTHOS	0	0	1.05	1.05
GYMNOCLADUS DIOICA	0.02	0.13	0	0.16
ILEX DECIDUA	0.18	0	0	0.18
LIQUIDAMBAR STYRACIFLUA	0.30	2.01	9.12	11.43
MACLURA POMIFERA	0.10	0	0	0.10
MORUS RUBRA	0.54	0.27	0.70	1.50
PLATANUS OCCIDENTALIS	0.21	0.50	3.05	3.76
POPULUS DELTOIDES	0.12	0	3.89	4.01
POPULUS HETEROPHYLLA	0.01	0	0	0.01
QUERCUS NUTTALLII	0	0	1.14	1.14
ULMUS AMERICANA	1.57	2.51	3.81	7.90
TOTAL	10.06	19.81	78.28	108.15
STD DEV	6.55	9.42	52.35	53.14

SUBTYPE: 32
NUMBER OF PLOTS: 44

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	3.87	6.76	7.28	17.91
ACER RUBRUM	0.02	0	0	0.02
ACER SACCHARINUM	0.14	0.20	1.87	2.20
ASIMINA TRILOBA	0.14	0.04	0	0.19
CARPINUS CAROLINIANA	0.19	0.21	0	0.40
CARYA CORDIFORMIS	0	0	0.97	0.97
CARYA ILLINOENSIS	0.74	2.19	30.92	33.86
CARYA LACINIOSA	0	0.06	0	0.06
CELTIS LAEVIGATA	2.28	4.08	14.64	21.01
CORNUS DRUMMONDII	0.32	0	0	0.32
CRATAEGUS VIRIDUS	0.05	0	0	0.05
DIOSPYROS VIRGINIANA	0.36	0.44	0.42	1.22
FORESTIERA ACUMINATA	1.19	0.46	0.12	1.78
FRAXINUS PENNSYLVANICA	0.26	1.55	5.15	6.97
GLEDITSIA AQUATICA	0	0	1.59	1.59
GLEDITSIA TRIACANTHOS	0	0	0.66	0.66
ILEX DECIDUA	0.13	0	0	0.13
JUGLANS NIGRA	0	0	0.69	0.69
LINDERA BENZOIN	0.01	0	0	0.01
LIQUIDAMBAR STYRACIFLUA	0.04	0.10	4.17	4.31
MELIA AZEDARACH	0.01	0	0	0.01
MORUS RUBRA	0	0.26	0	0.26
PLATANUS OCCIDENTALIS	0.80	2.13	8.00	10.93
POPULUS DELTOIDES	0.02	0	3.35	3.38
QUERCUS NUTTALLII	0	0	0.44	0.44
QUERCUS PALUSTRIS	0	0	0.84	0.84
SALIX NIGRA	0.01	0	0.75	0.76
ULMUS AMERICANA	0.75	1.68	3.09	5.51
TOTAL	11.33	20.17	84.96	116.46
STD DEV	9.83	12.45	48.27	43.90

SUBTYPE: 33
NUMBER OF PLOTS: 9

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.97	2.55	28.89	33.41
ACER SACCHARINUM	0.18	0	2.10	2.28
ASIMINA TRILOBA	2.17	0	0	2.17
CARYA CORDIFORMIS	0	0	0.61	0.61
CARYA ILLINOENSIS	0.15	0	1.36	1.52
CARYA LACINIOSA	0	0	1.02	1.02
CELTIS LAEVIGATA	2.74	2.17	18.16	23.07
FRAXINUS PENNSYLVANICA	0.39	1.61	14.07	16.07
ILEX DECIDUA	0.03	0	0	0.03
JUGLANS NIGRA	0	0.49	0.73	1.22
LIQUIDAMBAR STYRACIFLUA	0.53	4.04	91.78	96.34
MORUS RUBRA	0.19	0.44	0	0.63
PLATANUS OCCIDENTALIS	0	0	9.22	9.22
POPULUS DELTOIDES	0	0	3.21	3.21
QUERCUS NIGRA	0.13	0	0	0.13
QUERCUS NUTTALLII	0	0	0.87	0.87
QUERCUS PALUSTRIS	0.03	0.30	4.42	4.75
ULMUS AMERICANA	0.89	3.90	0.61	5.40
ULMUS RUBRA	0.10	0	0	0.10
TOTAL	9.50	15.50	177.04	202.04
STD DEV	4.52	8.84	52.39	48.88

SUBTYPE: 34
NUMBER OF PLOTS: 7

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.73	3.26	2.34	6.34
ACER RUBRUM	0.19	0.50	9.33	10.03
ASIMINA TRILOBA	0.66	0	0	0.66
CARYA AQUATICA	0.19	0	0	0.19
CARYA CORDIFORMIS	0.12	0.28	0	0.41
CARYA ILLINOENSIS	0.12	0	0	0.12
CERCIS CANADENSIS	0.51	0.28	0	0.79
CELTIS LAEVIGATA	2.17	0	0	2.17
DIOSPYROS VIRGINIANA	0	0	3.57	3.57
FRAXINUS PENNSYLVANICA	0.65	0.94	6.09	7.69
FRAXINUS PROFUNDA	0.23	2.26	17.03	19.53
ILEX DECIDUA	0.08	0	0	0.08
JUGLANS NIGRA	0.07	0	6.05	6.12
LIQUIDAMBAR STYRACIFLUA	0	0.63	8.57	9.20
MORUS RUBRA	0.62	0	0	0.62
QUERCUS LYRATA	0.39	1.57	12.88	14.84
QUERCUS NUTTALLII	0	0.91	12.99	13.90
SASSAFRAS ALBIDUM	0.51	2.39	27.19	30.10
TAXODIUM DISTICHUM	0	1.01	4.12	5.13
ULMUS AMERICANA	0.19	1.43	2.10	3.72
TOTAL	7.47	15.47	112.27	135.21
STD DEV	1.80	7.37	30.18	33.77

SUBTYPE: 35
NUMBER OF PLOTS: 45

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	2.89	5.42	18.31	26.62
ACER RUBRUM	0.02	0.04	0.79	0.85
ACER SACCHARINUM	0.26	1.23	10.42	11.91
CARYA AQUATICA	0.16	0.24	2.00	2.40
CARYA ILLINOENSIS	0.27	0.06	2.04	2.37
CELTIS LAEVIGATA	1.85	4.94	20.76	27.56
CELTIS OCCIDENTALIS	0.01	0	0	0.01
CORNUS DRUMMONDII	0.37	0	0	0.37
CRATAEGUS SP	0.02	0	0	0.02
DIOSPYROS VIRGINIANA	0.10	0.04	0.27	0.41
FORESTIERA ACUMINATA	0.31	0	0	0.31
FRAXINUS PENNSYLVANICA	0.79	2.04	21.57	24.40
GLEDITSIA AQUATICA	0.01	0.13	0.85	0.99
GLEDITSIA TRIACANTHOS	0.01	0.10	1.66	1.77
GYMNOCLADUS DIOICA	0	0	0.20	0.20
ILEX DECIDUA	0.16	0	0	0.16
LIQUIDAMBAR STYRACIFLUA	0.34	0.70	4.44	5.48
MORUS RUBRA	0.08	0.48	0.69	1.24
PLANERA AQUATICA	0.16	0	0	0.16
PLATANUS OCCIDENTALIS	0.09	0.16	5.45	5.70
POPULUS DELTOIDES	0	0	5.12	5.12
QUERCUS LYRATA	0.06	0.09	2.23	2.38
QUERCUS NIGRA	0.02	0	0	0.02
QUERCUS NUTTALLII	0.20	1.01	3.29	4.50
TAXODIUM DISTICHUM	0	0	0.76	0.76
ULMUS AMERICANA	1.13	1.40	5.96	8.50
ULMUS CRASSIFOLIA	0.07	0.06	0.77	0.89
TOTAL	9.39	18.13	107.59	135.11
STD DEV	7.07	13.19	43.33	38.46

SUBTYPE: 36
NUMBER OF PLOTS: 21

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.35	3.37	14.00	18.73
ASIMINA TRILOBA	0.01	0	0	0.01
CARYA ILLINOENSIS	0.98	2.56	12.75	16.30
CELTIS LAEVIGATA	4.67	8.08	27.78	40.53
CORNUS DRUMMONDII	0.44	0	0	0.44
DIOSPYROS VIRGINIANA	0.06	0.72	0	0.79
FRAXINUS PENNSYLVANICA	0	0	5.18	5.18
GLEDITSIA TRIACANTHOS	0	0.17	0	0.17
ILEX DECIDUA	0.05	0	0	0.05
MORUS RUBRA	0	0.22	0.37	0.59
PLATANUS OCCIDENTALIS	0.21	1.65	10.53	12.39
POPULUS DELTOIDES	0	0	8.59	8.59
QUERCUS LYRATA	0	0.09	0	0.09
QUERCUS NIGRA	0	0	1.04	1.04
SALIX NIGRA	0	0.17	7.57	7.74
ULMUS AMERICANA	0.64	0.34	0.63	1.61
TOTAL	8.43	17.37	88.46	114.26
STD DEV	6.34	11.70	38.91	35.77

SUBTYPE: 37
NUMBER OF PLOTS: 15

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.08	4.54	12.00	17.63
ACER SACCHARINUM	0.42	0.59	6.89	7.90
ASIMINA TRILOBA	0.13	0	0	0.13
CARYA ILLINOENSIS	1.26	1.76	3.33	6.35
CELTIS LAEVIGATA	6.19	7.93	24.36	38.48
CORNUS DRUMMONDII	0.05	0	0	0.05
FORESTIERA ACUMINATA	0.25	0	0	0.25
FRAXINUS PENNSYLVANICA	0.24	1.21	3.15	4.59
ILEX DECIDUA	0.18	0	0	0.18
LINDERA BENZOIN	0.03	0	0	0.03
LIQUIDAMBAR STYRACIFLUA	0	0	5.20	5.20
MACLURA POMIFERA	0	0.29	0	0.29
MORUS RUBRA	0.11	0.60	0	0.71
PLATANUS OCCIDENTALIS	0.06	0.53	2.45	3.04
POPULUS DELTOIDES	0	0	52.86	52.86
SALIX NIGRA	0	0	7.28	7.28
ULMUS AMERICANA	0.63	1.53	4.29	6.46
TOTAL	10.65	18.98	121.80	151.42
STD DEV	5.21	8.23	56.91	61.72

SUBTYPE: 38
NUMBER OF PLOTS: 3

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA ILLINOENSIS	0.09	0	0	0.09
CELTIS LAEVIGATA	2 14	0	5.25	7.39
POPULUS DELTOIDES	1.04	12.05	72.90	85.99
SALIX INTERIOR	1.04	0	0	1.04
SALIX NIGRA	0	0	4.09	4.09
TOTAL	4.31	12.05	82.25	98.61
STD DEV	1.73	11.46	77.06	83.84

SUBTYPE: 39
NUMBER OF PLOTS: 3

SPECIES	BASAL AREA - SQFT/ACRE			
	DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.44	8.22	17.96	26.62
CELTIS LAEVIGATA	1.95	10.04	51.16	63.14
DIOSPYROS VIRGINIANA	0	0	4.65	4.65
FRAXINUS PENNSYLVANICA	0	0	9.89	9.89
ILEX DECIDUA	0.16	0	0	0.16
MORUS RUBRA	0.75	0	0	0.75
ULMUS AMERICANA	0.16	0.65	0	0.82
TOTAL	3.46	18.91	83.67	106.03
STD DEV	2.03	10.49	33.89	34.16

SUBTYPE: 40
NUMBER OF PLOTS: 12

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.68	8.76	10.66	20.10
ACER SACCHARINUM	0.11	0.70	34.01	34.82
CARYA ILLINOENSIS	0	1.63	44.95	46.58
CELTIS LAEVIGATA	2.89	4.30	20.79	27.99
CORNUS DRUMMONDII	0.84	0	0	0.84
DIOSPYROS VIRGINIANA	0	0	1.02	1.02
FRAXINUS PENNSYLVANICA	0.04	0	3.25	3.29
MORUS RUBRA	0	1.05	0.45	1.50
PLATANUS OCCIDENTALIS	0.19	0	0	0.19
ULMUS AMERICANA	0.60	0.59	2.10	3.29
TOTAL	5.35	17.02	117.24	139.61
STD DEV	5.85	9.89	63.86	58.17

SUBTYPE: 41
NUMBER OF PLOTS: 12

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.95	6.36	10.90	18.21
ACER SACCHARINUM	0.10	0.22	2.48	2.80
ASIMINA TRILOBA	0.13	0	0	0.13
CARYA ILLINOENSIS	1.29	0.78	4.44	6.51
CELTIS LAEVIGATA	2.23	5.44	33.35	41.01
CORNUS DRUMMONDII	0.02	0	0	0.02
DIOSPYROS VIRGINIANA	0	0	1.16	1.16
FRAXINUS PENNSYLVANICA	0.06	0.37	18.92	19.35
GLEDITSIA TRIACANTHOS	0	0	1.64	1.64
ILEX DECIDUA	0.09	0	0	0.09
LIQUIDAMBAR STYRACIFLUA	0.10	0.16	2.84	3.10
MORUS RUBRA	0	0.62	0	0.62
PLATANUS OCCIDENTALIS	0	0.22	0	0.22
QUERCUS LYRATA	0.02	0	4.79	4.81
QUERCUS NUTTALLII	0	0	3.82	3.82
TAXODIUM DISTICHUM	0	0	8.20	8.20
ULMUS AMERICANA	0.36	0.83	8.58	9.78
TOTAL	5.35	15.01	101.12	121.47
STD DEV	4.55	7.99	53.82	53.22

SUBTYPE: 42
NUMBER OF PLOTS: 8

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.92	9.14	16.90	26.96
CARYA ILLINOENSIS	0.76	3.42	11.72	15.91
CELTIS LAEVIGATA	5.47	15.84	30.40	51.71
CORNUS DRUMMONDII	0.59	0	0	0.59
MACLURA POMIFERA	0	0	0.82	0.82
MORUS RUBRA	0.17	0	0	0.17
PLATANUS OCCIDENTALIS	0.28	1.26	4.34	5.88
POPULUS DELTOIDES	0	2.22	34.18	36.41
QUERCUS NIGRA	0.22	0	0	0.22
ULMUS AMERICANA	1.39	1.36	0.82	3.58
TOTAL	9.80	33.25	99.20	142.25
STD DEV	6.45	13.75	34.81	35.44

SUBTYPE: 43
NUMBER OF PLOTS: 34

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.48	0.62	0	1.10
CARYA ILLINOENSIS	0.19	0.43	2.36	2.97
CELTIS LAEVIGATA	2.78	5.62	18.07	26.47
CEPHALANTHUS OCCIDENTALIS	0.02	0	0	0.02
FORESTIERA ACUMINATA	1.03	0.75	0	1.78
FRAXINUS PENNSYLVANICA	0.02	0	0.56	0.58
GLEDITSIA TRIACANTHOS	0	0	0.23	0.23
ILEX DECIDUA	0.04	0	0	0.04
PLANERA AQUATICA	0.37	0	0	0.37
PLATANUS OCCIDENTALIS	0.41	0.38	0.46	1.25
POPULUS DELTOIDES	2.36	1.69	27.95	32.00
SALIX NIGRA	3.02	3.58	94.86	101.46
TAXODIUM DISTICHUM	0	0	2.20	2.20
ULMUS AMERICANA	0	0	0.90	0.90
TOTAL	10.72	13.06	147.57	171.36
STD DEV	17.04	12.51	67.11	57.31

SUBTYPE: 44
NUMBER OF PLOTS: 24

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.76	0.86	6.08	7.70
ACER RUBRUM	0	0.11	0.38	0.50
ACER SACCHARINUM	0.47	1.64	8.06	10.17
ASIMINA TRILOBA	0.06	0	0	0.06
CARYA ILLINOENSIS	1.29	3.20	23.58	28.08
CELTIS LAEVIGATA	1.42	6.22	14.51	22.15
CORNUS DRUMMONDII	0.34	0	0	0.34
CRATAEGUS VIRIDUS	0.02	0	0	0.02
FORESTIERA ACUMINATA	0.98	0.19	0	1.17
FRAXINUS PENNSYLVANICA	0.85	0.98	16.10	17.94
FRAXINUS PROFUNDA	0	0.15	0	0.15
GLEDITSIA AQUATICA	0	0	1.66	1.66
ILEX DECIDUA	0.61	0	0	0.61
JUGLANS NIGRA	0	0	0.91	0.91
LIQUIDAMBAR STYRACIFLUA	0.07	0.33	1.21	1.61
MORUS RUBRA	0.11	0.26	0	0.37
PLANERA AQUATICA	0	0.11	0	0.11
PLATANUS OCCIDENTALIS	0.07	0.30	14.96	15.32
POPULUS DELTOIDES	0	0	5.16	5.16
SALIX NIGRA	0	0	1.00	1.00
TAXODIUM DISTICHUM	0	0	0.82	0.82
ULMUS AMERICANA	0.30	1.11	2.60	4.02
TOTAL	7.37	15.46	97.03	119.86
STD DEV	4.52	10.03	43.80	40.63

SUBTYPE: 45
NUMBER OF PLOTS: 15

SPECIES	BASAL AREA - SQFT/ACRE			
	DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	0.20	0.13	0.52	0.85
ACER RUBRUM	0.02	0.54	0	0.56
ASIMINA TRILOBA	0.02	0	0	0.02
CARPINUS CAROLINIANA	0.07	0	0	0.07
CARYA ILLINOENSIS	0.27	0.71	8.59	9.56
CELTIS LAEVIGATA	2.75	7.60	4.66	15.01
CORNUS DRUMMONDII	0.12	0	0	0.12
DIOSPYROS VIRGINIANA	0	0.82	0	0.82
GLEDITSIA TRIACANTHOS	0	0.29	3.95	4.24
ILEX DECIDUA	1.20	0	0	1.20
LIQUIDAMBAR STYRACIFLUA	1.24	3.67	28.01	32.91
MORUS RUBRA	0.12	0.54	0	0.66
NYSSA SYLVATICA	0.09	0	0	0.09
POPULUS DELTOIDES	0	0	5.82	5.82
QUERCUS LYRATA	0	0.13	0	0.13
QUERCUS MICHAUXII	0.43	0.54	3.25	4.21
QUERCUS NIGRA	3.72	3.11	13.77	20.59
QUERCUS NUTTALLII	0.11	0	3.92	4.03
ULMUS AMERICANA	0.37	1.39	4.91	6.67
TOTAL	10.71	19.47	77.39	107.57
STD DEV	5.42	9.72	36.74	34.66

SUBTYPE: 46
NUMBER OF PLOTS: 34

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.99	1.64	6.86	10.48
ACER RUBRUM	0.04	0	0	0.04
ACER SACCHARINUM	0.70	0.22	1.45	2.37
CARYA AQUATICA	0	0	1.58	1.58
CARYA ILLINOENSIS	0.20	0.68	1.26	2.14
CARYA LACINIOSA	0.06	0.10	0.62	0.79
CELTIS LAEVIGATA	3.27	5.72	39.60	48.59
CORNUS DRUMMONDII	0.04	0	0	0.04
CRATAEGUS SP	0.01	0	0	0.01
DIOSPYROS VIRGINIANA	0.01	0.13	0.36	0.50
FORESTIERA ACUMINATA	0.36	0.26	0	0.62
FRAXINUS PENNSYLVANICA	0.85	1.03	21.82	23.75
GLEDITSIA AQUATICA	0	0.21	0	0.21
GLEDITSIA TRIACANTHOS	0	0	0.36	0.36
GYMNOCLADUS DIOICA	0.02	0	0	0.02
ILEX DECIDUA	0.04	0	0	0.04
LIQUIDAMBAR STYRACIFLUA	0.01	0.08	0.78	0.87
MORUS RUBRA	0.20	0.10	0.16	0.46
PLATANUS OCCIDENTALIS	0.07	0.06	3.01	3.13
POPULUS DELTOIDES	0	0	10.21	10.21
QUERCUS LYRATA	0.08	0.08	0.93	1.09
QUERCUS NIGRA	0.03	0.12	0	0.14
QUERCUS NUTTALLII	0.01	0	4.99	5.00
SALIX NIGRA	0	0	3.65	3.65
TAXODIUM DISTICHUM	0.03	0	0.64	0.67
ULMUS AMERICANA	1.07	1.39	3.05	5.52
ULMUS CRASSIFOLIA	0.01	0.08	0.36	0.45
TOTAL	9.11	11.93	101.71	122.75
STD DEV	4.55	8.94	51.60	49.27

SUBTYPE: 47
NUMBER OF PLOTS: 17

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.79	3.88	8.50	14.17
ACER SACCHARINUM	0	0	10.06	10.06
CARYA CORDIFORMIS	0	0.21	0	0.21
CARYA ILLINOENSIS	0.51	1.69	14.58	16.77
CELTIS LAEVIGATA	2.48	7.02	24.42	33.91
CORNUS DRUMMONDII	0.10	0	0	0.10
DIOSPYROS VIRGINIANA	0	0.21	0	0.21
FRAXINUS PENNSYLVANICA	0.08	1.36	13.09	14.53
FRAXINUS PROFUNDA	0.03	0.21	4.34	4.58
ILEX DECIDUA	0.14	0	0	0.14
LIQUIDAMBAR STYRACIFLUA	0.03	0.26	10.54	10.83
MORUS RUBRA	0.10	0.12	0	0.22
PLATANUS OCCIDENTALIS	0.03	0	22.63	22.66
QUERCUS LYRATA	0	0.12	0	0.12
QUERCUS NIGRA	0.05	0	0	0.05
QUERCUS NUTTALLII	0.15	0.88	2.04	3.07
ULMUS AMERICANA	0.79	1.37	6.07	8.23
ULMUS CRASSIFOLIA	0	0.21	0	0.21
TOTAL	6.28	17.51	116.26	140.06
STD DEV	4.99	11.39	45.78	41.99

SUBTYPE: 48
NUMBER OF PLOTS: 7

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
CARYA AQUATICA	2.97	2.25	14.19	19.41
CELTIS LAEVIGATA	0.85	1.57	22.28	24.71
CEPHALANTHUS OCCIDENTALIS	0.07	0	0	0.07
DIOSPYROS VIRGINIANA	0.12	0	0	0.12
FORESTIERA ACUMINATA	2.15	0.28	0	2.43
FRAXINUS PENNSYLVANICA	3.30	4.18	5.26	12.74
PLANERA AQUATICA	0.11	0	0	0.11
QUERCUS LYRATA	3.34	12.49	41.06	56.90
QUERCUS NUTTALLII	0.29	1.19	6.24	7.72
ULMUS AMERICANA	0.04	0.50	0	0.54
TOTAL	13.25	22.46	89.04	124.75
STD DEV	8.74	6.50	38.85	30.36

SUBTYPE: 49
NUMBER OF PLOTS: 13

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.57	11.68	39.63	52.87
CARYA ILLINOENSIS	0.07	0	0.82	0.89
CELTIS LAEVIGATA	0.24	0.15	0.82	1.21
FORESTIERA ACUMINATA	0.73	1.28	0.42	2.43
MORUS RUBRA	0.32	0	0	0.32
PLATANUS OCCIDENTALIS	1.48	2.03	0.42	3.93
POPULUS DELTOIDES	0.34	0.42	8.10	8.86
SALIX INTERIOR	0.81	0	0	0.81
SALIX NIGRA	0.10	0	87.33	87.44
TOTAL	5.66	15.57	137.55	158.77
STD DEV	4.92	10.91	64.97	67.14

SUBTYPE: 50
NUMBER OF PLOTS: 16

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	1.14	1.93	5.89	8.96
ACER SACCHARINUM	1.71	0.89	17.79	20.40
ASIMINA TRILOBA	0.25	0	0	0.25
CARPINUS CAROLINIANA	0.09	0	0	0.09
CARYA ILLINOENSIS	0.09	0.57	4.17	4.82
CARYA LACINIOSA	0.13	1.02	3.93	5.08
CELTIS LAEVIGATA	1.01	2.66	15.30	18.96
CORNUS DRUMMONDII	0.03	0	0	0.03
DIOSPYROS VIRGINIANA	0.13	0	5.22	5.35
FORESTIERA ACUMINATA	0.52	0.12	0	0.64
FRAXINUS PENNSYLVANICA	0.73	0.67	22.55	23.96
GLEDITSIA AQUATICA	0	0	0.41	0.41
GLEDITSIA TRIACANTHOS	0	0	0.67	0.67
GYMNOCLADUS DIOICA	0	0	0.87	0.87
ILEX DECIDUA	0.18	0	0	0.18
LIQUIDAMBAR STYRACIFLUA	0.12	2.35	21.97	24.44
MORUS RUBRA	1.05	0	0	1.05
PLATANUS OCCIDENTALIS	0.59	0	9.79	10.38
POPULUS DELTOIDES	1.65	5.09	3.35	10.10
QUERCUS LYRATA	0.09	0	3.71	3.80
QUERCUS NUTTALLII	0	0	0.87	0.87
QUERCUS PAGODA	0.02	0	0	0.02
SALIX NIGRA	0	0.22	0	0.22
ULMUS AMERICANA	1.19	2.87	8.01	12.08
TOTAL	10.71	18.39	124.52	153.62
STD DEV	9.31	11.86	44.71	40.64

SUBTYPE: 51
NUMBER OF PLOTS: 18

SPECIES	BASAL AREA - SQFT/ACRE DBH 2-5.4 INCHES	DBH 5.5-9.4 INCHES	DBH >9.4 INCHES	TOTAL DBH >2.0 INCHES
ACER NEGUNDO	4.54	6.57	0.30	11.42
CARYA AQUATICA	0	0	0.37	0.37
CARYA ILLINOENSIS	1.25	1.01	23.23	25.49
CELTIS LAEVIGATA	1.45	3.41	13.19	18.05
CORNUS DRUMMONDII	0.53	0	0	0.53
CRATAEGUS VIRIDUS	0.02	0	0	0.02
DIOSPYROS VIRGINIANA	0.02	0.50	1.50	2.02
FORESTIERA ACUMINATA	0.46	0.22	0	0.68
FRAXINUS PENNSYLVANICA	0.19	1.10	13.95	15.24
GLEDITSIA TRIACANTHOS	0	0.19	1.83	2.02
ILEX DECIDUA	0.14	0	0	0.14
LIQUIDAMBAR STYRACIFLUA	0.89	1.13	0.30	2.32
PLATANUS OCCIDENTALIS	0.97	3.53	12.89	17.40
POPULUS DELTOIDES	0.07	0.25	17.52	17.83
QUERCUS LYRATA	0.23	0.19	0.96	1.38
QUERCUS NIGRA	0.64	0.41	0	1.06
QUERCUS NUTTALLII	0.16	0.11	2.89	3.15
SALIX NIGRA	0.30	0	0	0.30
TAXODIUM DISTICHUM	0.43	0.50	0.37	1.30
ULMUS AMERICANA	0.83	1.01	1.97	3.81
TOTAL	13.12	20.14	91.26	124.52
STD DEV	4.85	15.51	49.68	46.64

SUBTYPE: 1
NUMBER OF PLOTS: 16

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	125.00	43.8	1062.50	18.8	0	0
CELTIS LAEVIGATA	187.50	62.5	1000.00	31.3	0	0
CORNUS DRUMMONDII	131.25	43.8	375.00	12.5	0	0
GLEDITSIA TRIACANTHOS	6.25	6.3	0	0	0	0
ILEX DECIDUA	0	0	0	0	6.25	6.3
LIQUIDAMBAR STYRACIFLUA	6.25	6.3	0	0	0	0
PLATANUS OCCIDENTALIS	25.00	18.8	62.50	6.3	0	0
TAXODIUM DISTICHUM	6.25	6.3	0	0	0	0
ULMUS AMERICANA	18.75	18.8	62.50	6.3	0	0
TOTAL	506.25	87.5	2562.50	56.3	6.25	6.3
STD DEV	405.74		3265.35		25.00	

SUBTYPE: 2
NUMBER OF PLOTS: 7

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	0	0	428.57	28.6	0	0
ASIMINA TRILOBA	0	0	0	0	14.29	14.3
CELTIS LAEVIGATA	0	0	428.57	14.3	0	0
FRAXINUS PENNSYLVANICA	0	0	142.86	14.3	0	0
PLATANUS OCCIDENTALIS	14.29	14.3	0	0	0	0
POPULUS DELTOIDES	342.86	14.3	0	0	0	0
ULMUS AMERICANA	0	0	142.86	14.3	0	0
TOTAL	357.14	28.6	1142.86	28.6	14.29	14.3
STD DEV	901.59		2609.51		37.80	

SUBTYPE: 3
NUMBER OF PLOTS: 4

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	0	0	1750.00	25.0	0	0
AMORPHA FRUTICOSA	0	0	0	0	50.00	25.0
CELTIS LAEVIGATA	300.00	50.0	3250.00	50.0	0	0
CORNUS DRUMMONDII	800.00	50.0	0	0	0	0
POPULUS DELTOIDES	175.00	50.0	250.00	25.0	0	0
SALIX INTERIOR	2475.00	50.0	750.00	25.0	0	0
TOTAL	3750.00	100.0	6000.00	75.0	50.00	25.0
STD DEV	1864.58		4966.55		100.00	

SUBTYPE: 4
NUMBER OF PLOTS: 10

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
CELTIS LAEVIGATA	30.00	10.0	200.00	20.0	0	0
FRAXINUS PENNSYLVANICA	10.00	10.0	0	0	0	0
MALUS CORONARIA	0	0	100.00	10.0	0	0
PLANERA AQUATICA	10.00	10.0	700.00	30.0	0	0
POPULUS DELTOIDES	420.00	30.0	0	0	0	0
SALIX INTERIOR	1820.00	10.0	100.00	10.0	0	0
SALIX NIGRA	1500.00	20.0	0	0	0	0
TAXODIUM DISTICHUM	0	0	600.00	30.0	0	0
TOTAL	3490.00	50.0	1600.00	60.0	0	0
STD DEV	7480.41		1837.87		0	

SUBTYPE: 5
NUMBER OF PLOTS: 25

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	8.00	4.0	40.00	4.0	0	0
CELTIS LAEVIGATA	108.00	40.0	1160.00	28.0	0	0
CELTIS OCCIDENTALIS	4.00	4.0	0	0	0	0
CORNUS DRUMMONDII	20.00	8.0	0	0	0	0
DIOSPYROS VIRGINIANA	0	0	40.00	4.0	0	0
FORESTIERA ACUMINATA	0	0	0	0	4.00	4.0
FRAXINUS PENNSYLVANICA	0	0	40.00	4.0	0	0
ILEX DECIDUA	0	0	0	0	16.00	4.0
MORUS RUBRA	8.00	8.0	0	0	0	0
SAMBUCUS CANADENSIS	0	0	0	0	4.00	4.0
TOTAL	148.00	60.0	1280.00	36.0	24.00	12.0
STD DEV	204.37		2491.99		83.07	

SUBTYPE: 6
NUMBER OF PLOTS: 25

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	4.00	4.0	360.00	8.0	0	0
ACER SACCHARINUM	0	0	920.00	8.0	0	0
ASIMINA TRILOBA	0	0	0	0	8.00	4.0
CELTIS LAEVIGATA	116.00	36.0	4200.00	52.0	0	0
CELTIS OCCIDENTALIS	8.00	4.0	120.00	4.0	0	0
CORNUS DRUMMONDII	72.00	24.0	440.00	12.0	0	0
CRATAEGUS VIRIDUS	0	0	0	0	12.00	4.0
DIOSPYROS VIRGINIANA	0	0	40.00	4.0	0	0
FORESTIERA ACUMINATA	0	0	0	0	16.00	8.0
FRAXINUS PENNSYLVANICA	96.00	24.0	240.00	20.0	0	0
LIQUIDAMBAR STYRACIFLUA	8.00	8.0	0	0	0	0
MORUS RUBRA	0	0	40.00	4.0	0	0
PLATANUS OCCIDENTALIS	4.00	4.0	0	0	0	0
ULMUS AMERICANA	24.00	8.0	520.00	20.0	0	0
TOTAL	332.00	60.0	6880.00	88.0	36.00	16.0
STD DEV	475.85		11741.38		86.02	

SUBTYPE: 7
NUMBER OF PLOTS: 6

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER SACCHARINUM	0	0	333.33	16.7	0	0
N'SSA AQUATICA	266.67	33.3	1500.00	33.3	0	0
PLANERA AQUATICA	100.00	83.3	333.33	16.7	0	0
TAXODIUM DISTICHUM	0	0	3666.67	33.3	0	0
TOTAL	366.67	100.0	5833.33	33.3	0	0
STD DEV	454.61		9474.53		0	

SUBTYPE: 8
NUMBER OF PLOTS: 20

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	140.00	35.0	0	0	0	0
ACER SACCHARINUM	10.00	5.0	0	0	0	0
ASIMINA TRILOBA	0	0	0	0	5.00	5.0
CELTIS LAEVIGATA	25.00	20.0	1000.00	15.0	0	0
CEPHALANTHUS OCCIDENTALIS	0	0	0	0	35.00	5.0
CORNUS DRUMMONDII	5.00	5.0	0	0	0	0
DIOSPYROS VIRGINIANA	0	0	50.00	5.0	0	0
FORESTIERA ACUMINATA	0	0	0	0	5.00	5.0
FRAXINUS PENNSYLVANICA	615.00	35.0	50.00	5.0	0	0
FRAXINUS PROFUNDA	20.00	5.0	0	0	0	0
ILEX DECIDUA	0	0	0	0	5.00	5.0
LIQUIDAMBAR STYRACIFLUA	5.00	5.0	0	0	0	0
MORUS RUBRA	10.00	10.0	0	0	0	0
PLANERA AQUATICA	20.00	5.0	1250.00	20.0	0	0
TAXODIUM DISTICHUM	0	0	250.00	10.0	0	0
ULMUS AMERICANA	20.00	20.0	50.00	5.0	0	0
TOTAL	870.00	60.0	2650.00	45.0	50.00	20.0
STD DEV	1465.43		4815.27		157.28	

SUBTYPE: 9
NUMBER OF PLOTS: 12

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
AMORPHA FRUTICOSA	0	0	0	0	175.00	16.7
CELTIS LAEVIGATA	8.33	8.3	333.33	25.0	0	0
CORNUS DRUMMONDII	0	0	166.67	8.3	0	0
FORESTIERA ACUMINATA	0	0	0	0	8.33	8.3
MORUS RUBRA	100.00	8.3	1250.00	16.7	0	0
SALIX NIGRA	25.00	16.7	0	0	0	0
SAPIUM SEBIFERUM	0	0	333.33	25.0	0	0
TOTAL	133.33	25.0	2083.33	50.0	183.33	25.0
STD DEV	372.54		4209.48		516.69	

SUBTYPE: 10
NUMBER OF PLOTS: 11

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
AMORPHA FRUTICOSA	0	0	0	0	36.36	18.2
SALIX INTERIOR	9.09	9.1	181.82	9.1	0	0
SAMBUCUS CANADENSIS	0	0	0	0	54.55	9.1
SALIX NIGRA	563.64	54.5	181.82	9.1	0	0
TOTAL	572.73	63.6	363.64	18.2	90.91	27.3
STD DEV	726.76		809.04		186.84	

SUBTYPE: 11
NUMBER OF PLOTS: 7

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	28.57	14.3	0	0	0	0
AMORPHA FRUTICOSA	0	0	0	0	114.29	28.6
CELTIS LAEVIGATA	42.86	28.6	285.71	14.3	0	0
CORNUS DRUMMONDII	100.00	28.6	0	0	0	0
DIOSPYROS VIRGINIANA	28.57	14.3	0	0	0	0
MORUS RUBRA	71.43	28.6	285.71	14.3	0	0
PLATANUS OCCIDENTALIS	28.57	14.3	0	0	0	0
ULMUS AMERICANA	14.29	14.3	0	0	0	0
TOTAL	314.29	85.7	571.43	14.3	114.29	28.6
STD DEV	254.48		1511.86		226.78	

SUBTYPE: 12
NUMBER OF PLOTS: 19

SPECIES	SAPLINGS		SEEDLINGS		SHRUBS	
	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY
ACER NEGUNDO	21.05	21.1	52.63	5.3	0	0
AMORPHA FRUTICOSA	0	0	0	0	5.26	5.3
CELTIS LAEVIGATA	42.11	21.1	1526.32	15.8	0	0
CORNUS DRUMMONDII	26.32	21.1	0	0	0	0
FORESTIERA ACUMINATA	0	0	0	0	21.05	15.8
ILEX DECIDUA	0	0	0	0	5.26	5.3
LIGUSTRUM SINENSE	0	0	0	0	21.05	10.5
MORUS RUBRA	5.26	5.3	0	0	0	0
PLATANUS OCCIDENTALIS	5.26	5.3	0	0	0	0
SAMBUCUS CANADENSIS	0	0	0	0	215.79	26.3
ULMUS AMERICANA	0	0	52.63	5.3	0	0
TOTAL	100.00	63.2	1631.58	26.3	268.42	52.6
STD DEV	105.41		5927.44		492.22	

SUBTYPE: 13
NUMBER OF PLOTS: 51

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	3.92	3.9	0	0	0	0
AMORPHA FRUTICOSA	0	0	0	0	94.12	15.7
CELTIS LAEVIGATA	47.06	23.5	745.10	9.8	0	0
CELTIS OCCIDENTALIS	0	0	19.61	2.0	0	0
CEPHALANTHUS OCCIDENTALIS	0	0	0	0	23.53	5.9
CORNUS DRUMMONDII	39.22	9.8	58.82	3.9	0	0
FORESTIERA ACUMINATA	0	0	0	0	68.63	9.8
FRAXINUS PENNSYLVANICA	7.84	3.9	0	0	0	0
HIBISCUS MILITARIS	0	0	0	0	9.80	2.0
MORUS RUBRA	9.80	2.0	19.61	2.0	0	0
PLATANUS OCCIDENTALIS	5.88	5.9	0	0	0	0
POPULUS DELTOIDES	9.80	3.9	0	0	0	0
SALIX INTERIOR	3.92	2.0	117.65	2.0	0	0
SAMBUCUS CANADENSIS	0	0	0	0	7.84	2.0
SALIX NIGRA	39.22	17.6	78.43	3.9	0	0
SAPIUM SEBIFERUM	9.80	7.8	19.61	2.0	0	0
TAXODIUM DISTICHUM	0	0	58.82	3.9	0	0
TOTAL	176.47	60.8	1117.65	25.5	203.92	29.4
STD DEV	205.51		3185.26		476.22	

SUBTYPE: 14
NUMBER OF PLOTS: 9

SPECIES	SAPLINGS		SEEDLINGS		SHRUBS	
	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY
ACER NEGUNDO	166.67	33.3	111.11	11.1	0	0
ACER RUBRUM	11.11	11.1	111.11	11.1	0	0
CELTIS LAEVIGATA	66.67	22.2	0	0	0	0
CORNUS DRUMMONDII	22.22	11.1	0	0	0	0
FORESTIERA ACUMINATA	0	0	0	0	55.56	11.1
FRAXINUS PENNSYLVANICA	0	0	111.11	11.1	0	0
PLATANUS OCCIDENTALIS	11.11	11.1	0	0	0	0
SALIX INTERIOR	511.11	22.2	0	0	0	0
SALIX NIGRA	144.44	22.2	0	0	0	0
SAPIUM SEBIFERUM	0	0	111.11	11.1	0	0
TOTAL	933.33	88.9	444.44	33.3	55.56	11.1
STD DEV	1422.15		726.48		166.67	

SUBTYPE: 15
NUMBER OF PLOTS: 15

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	40.00	20.0	0	0	0	0
CELTIS LAEVIGATA	73.33	26.7	533.33	20.0	0	0
CORNUS DRUMMONDII	13.33	6.7	0	0	0	0
DIOSPYROS VIRGINIANA	6.67	6.7	0	0	0	0
TOTAL	133.33	53.3	533.33	20.0	0	0
STD DEV	167.62		1355.76		0	

SUBTYPE: 16
NUMBER OF PLOTS: 32

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	59.38	25.0	468.75	18.8	0	0
ACER RUBRUM	15.63	6.3	0	0	0	0
CELTIS LAEVIGATA	81.25	34.4	2250.00	40.6	0	0
CORNUS DRUMMONDII	6.25	6.3	0	0	0	0
FORESTIERA ACUMINATA	0	0	0	0	28.13	9.4
ILEX DECIDUA	0	0	0	0	3.13	3.1
LIGUSTRUM SINENSE	0	0	0	0	56.25	6.3
LIGUSTRUM LUCIDUM	0	0	0	0	6.25	3.1
MORUS RUBRA	18.75	3.1	0	0	0	0
PLATANUS OCCIDENTALIS	25.00	6.3	0	0	0	0
PRUNUS SEROTINA	3.13	3.1	0	0	0	0
SAMBUCUS CANADENSIS	0	0	0	0	37.50	9.4
SALIX NIGRA	0	0	31.25	3.1	0	0
TOTAL	209.38	59.4	2750.00	50.0	131.25	25.0
STD DEV	308.34		8860.93		334.51	

SUBTYPE: 17
NUMBER OF PLOTS: 15

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER SACCHARINUM	20.00	6.7	0	0	0	0
CEPHALANTHUS OCCIDENTALIS	0	0	0	0	6.67	6.7
GLEDITSIA TRIACANTHOS	0	0	66.67	6.7	0	0
PLANERA AQUATICA	6.67	6.7	0	0	0	0
PLATANUS OCCIDENTALIS	20.00	6.7	0	0	0	0
POPULUS DELTOIDES	0	0	3600.00	20.0	0	0
SALIX INTERIOR	40.00	6.7	0	0	0	0
SALIX NIGRA	173.33	26.7	5066.67	13.3	0	0
TOTAL	260.00	46.7	8733.33	26.7	6.67	6.7
STD DEV	609.21		26320.73		25.82	

SUBTYPE: 18
NUMBER OF PLOTS: 6

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
CELTIS LAEVIGATA	16.67	16.7	500.00	16.7	0	0
MORUS RUBRA	33.33	16.7	0	0	0	0
TOTAL	50.00	16.7	500.00	16.7	0	0
STD DEV	122.47		1224.74		0	

SUBTYPE: 19
NUMBER OF PLOTS: 9

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	0	0	333.33	11.1	0	0
ACER SACCHARINUM	0	0	111.11	11.1	0	0
CELTIS LAEVIGATA	44.44	22.2	111.11	11.1	0	0
FRAXINUS PENNSYLVANICA	22.22	11.1	0	0	0	0
PLATANUS OCCIDENTALIS	11.11	11.1	0	0	0	0
SALIX NIGRA	22.22	11.1	0	0	0	0
TOTAL	100.00	55.6	555.56	11.1	0	0
STD DEV	100.00		1666.67		0	

SUBTYPE: 20
NUMBER OF PLOTS: 27

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	37.04	18.5	185.19	7.4	0	0
CELTIS LAEVIGATA	37.04	22.2	814.81	29.6	0	0
CORNUS DRUMMONDII	66.67	18.5	0	0	0	0
FORESTIERA ACUMINATA	0	0	0	0	3.70	3.7
FRAXINUS PENNSYLVANICA	7.41	3.7	74.07	3.7	0	0
PLATANUS OCCIDENTALIS	11.11	7.4	0	0	0	0
POPULUS DELTOIDES	0	0	185.19	3.7	0	0
ULMUS AMERICANA	11.11	3.7	37.04	3.7	0	0
TOTAL	170.37	55.6	1296.30	33.3	3.70	3.7
STD DEV	231.74		2446.58		19.25	

SUBTYPE: 21
NUMBER OF PLOTS: 37

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	16.22	5.4	54.05	2.7	0	0
ACER RUBRUM	10.81	2.7	0	0	0	0
ACER SACCHARINUM	29.73	13.5	189.19	13.5	0	0
ARUNDINARIA GIGANTEA	0	0	0	0	21.62	2.7
CELTIS LAEVIGATA	140.54	37.8	513.51	27.0	0	0
CELTIS OCCIDENTALIS	2.70	2.7	0	0	0	0
CORNUS DRUMMONDII	18.92	13.5	27.03	2.7	0	0
FORESTIERA ACUMINATA	0	0	0	0	32.43	13.5
FRAXINUS PENNSYLVANICA	18.92	10.8	108.11	5.4	0	0
MORUS RUBRA	16.22	8.1	0	0	0	0
PLATANUS OCCIDENTALIS	32.43	2.7	54.05	2.7	0	0
POPULUS DELTOIDES	83.78	10.8	0	0	0	0
SALIX NIGRA	8.11	2.7	0	0	0	0
ULMUS AMERICANA	21.62	8.1	108.11	8.1	0	0
TOTAL	400.00	70.3	1054.05	51.4	54.05	16.2
STD DEV	510.45		1432.67		174.16	

SUBTYPE: 22
NUMBER OF PLOTS: 64

SPECIES	SAPLINGS		SEEDLINGS		SHRUBS	
	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY
ACER NEGUNDO	18.75	15.6	62.50	6.3	0	0
ACER SACCHARINUM	0	0	515.63	6.3	0	0
ARUNDINARIA GIGANTEA	0	0	0	0	132.81	4.7
CELTIS LAEVIGATA	67.19	26.6	1875.00	35.9	0	0
CORNUS DRUMMONDII	35.94	15.6	15.63	1.6	0	0
CRATAEGUS VIRIDUS	0	0	0	0	1.56	1.6
DIOSPYROS VIRGINIANA	0	0	15.63	1.6	0	0
FORESTIERA ACUMINATA	0	0	0	0	3.13	3.1
FRAXINUS PENNSYLVANICA	32.81	10.9	125.00	9.4	0	0
GLEDITSIA TRIACANTHOS	0	0	31.25	3.1	0	0
ILEX DECIDUA	0	0	0	0	7.81	1.6
LINDERA BENZOIN	0	0	0	0	1.56	1.6
LIQUIDAMBAR STYRACIFLUA	1.56	1.6	46.88	1.6	0	0
MORUS RUBRA	1.56	1.6	31.25	3.1	0	0
RHUS COPPALINA	0	0	0	0	1.56	1.6
ULMUS AMERICANA	23.44	10.9	78.13	4.7	0	0
ULMUS CRASSIFOLIA	1.56	1.6	0	0	0	0
TOTAL	182.81	57.8	2796.88	53.1	148.44	14.1
STD DEV	265.21		4947.92		683.36	

SUBTYPE: 23
NUMBER OF PLOTS: 16

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	25.00	12.5	1000.00	12.5	0	0
ACER SACCHARINUM	6.25	6.3	5187.50	25.0	0	0
ARUNDINARIA GIGANTEA	0	0	0	0	868.75	18.8
ASIMINA TRILOBA	0	0	0	0	118.75	25.0
CELTIS LAEVIGATA	106.25	50.0	562.50	37.5	0	0
CELTIS OCCIDENTALIS	12.50	6.3	0	0	0	0
CORNUS DRUMMONDII	6.25	6.3	0	0	0	0
FRAXINUS PENNSYLVANICA	12.50	6.3	0	0	0	0
ILEX DECIDUA	0	0	0	0	6.25	6.3
MACLURA POMIFERA	0	0	62.50	6.3	0	0
SAMBUCUS CANADENSIS	0	0	0	0	12.50	6.3
TAXODIUM DISTICHUM	0	0	1562.50	31.3	0	0
ULMUS AMERICANA	0	0	187.50	12.5	0	0
TOTAL	168.75	62.5	8562.50	75.0	1006.25	37.5
STD DEV	227.21		12334.07		2321.63	

SUBTYPE: 24
NUMBER OF PLOTS: 14

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER RUBRUM	14.29	14.3	0	0	0	0
ARUNDINARIA GIGANTEA	0	0	0	0	14.29	7.1
CELTIS LAEVIGATA	342.86	71.4	428.57	21.4	0	0
CELTIS OCCIDENTALIS	7.14	7.1	0	0	0	0
CORNUS DRUMMONDII	78.57	21.4	71.43	7.1	0	0
ILEX DECIDUA	0	0	0	0	107.14	42.9
LIQUIDAMBAR STYRACIFLUA	14.29	14.3	0	0	0	0
MORUS RUBRA	14.29	14.3	0	0	0	0
ULMUS AMERICANA	28.57	21.4	214.29	14.3	0	0
TOTAL	500.00	100.0	714.29	35.7	121.43	42.9
STD DEV	365.85		1382.78		184.72	

SUBTYPE: 25
NUMBER OF PLOTS: 10

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER RUBRUM	60.00	20.0	300.00	20.0	0	0
ACER SACCHARINUM	0	0	2000.00	40.0	0	0
CELTIS LAEVIGATA	200.00	40.0	100.00	10.0	0	0
DIOSPYROS VIRGINIANA	0	0	400.00	10.0	0	0
FRAXINUS PENNSYLVANICA	20.00	20.0	200.00	10.0	0	0
ILEX DECIDUA	0	0	0	0	60.00	30.0
LIQUIDAMBAR STYRACIFLUA	20.00	10.0	0	0	0	0
NYSSA AQUATICA	0	0	100.00	10.0	0	0
PLANERA AQUATICA	0	0	400.00	30.0	0	0
TAXODIUM DISTICHUM	0	0	100.00	10.0	0	0
ULMUS AMERICANA	30.00	30.0	300.00	20.0	0	0
TOTAL	330.00	50.0	3900.00	80.0	60.00	30.0
STD DEV	510.01		3478.51		107.50	

SUBTYPE: 26
NUMBER OF PLOTS: 12

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ARUNDINARIA GIGANTEA	0	0	0	0	91.67	25.0
CERCIS CANADENSIS	16.67	16.7	333.33	8.3	0	0
CELTIS LAEVIGATA	108.33	58.3	666.67	16.7	0	0
CORNUS DRUMMONDII	16.67	8.3	0	0	0	0
DIOSPYROS VIRGINIANA	8.33	8.3	0	0	0	0
FRAXINUS PENNSYLVANICA	0	0	83.33	8.3	0	0
ILEX DECIDUA	0	0	0	0	208.33	75.0
LIQUIDAMBAR STYRACIFLUA	41.67	16.7	0	0	0	0
MORUS RUBRA	0	0	83.33	8.3	0	0
PLATANUS OCCIDENTALIS	8.33	8.3	0	0	0	0
ULMUS AMERICANA	83.33	33.3	0	0	0	0
TOTAL	283.33	66.7	1166.67	33.3	300.00	75.0
STD DEV	329.83		1992.41		359.29	

SUBTYPE: 27
NUMBER OF PLOTS: 36

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	5.56	5.6	0	0	0	0
ACER SACCHARINUM	0	0	27.78	2.8	0	0
ARUNDINARIA GIGANTEA	0	0	0	0	138.89	11.1
CELTIS LAEVIGATA	77.78	33.3	1138.89	22.2	0	0
CORNUS DRUMMONDII	2.78	2.8	0	0	0	0
DIOSPYROS VIRGINIANA	0	0	27.78	2.8	0	0
FORESTIERA ACUMINATA	0	0	0	0	5.56	5.6
FRAXINUS PENNSYLVANICA	61.11	11.1	222.22	5.6	0	0
GLEDITSIA AQUATICA	0	0	111.11	8.3	0	0
ILEX DECIDUA	0	0	0	0	2.78	2.8
LINDERA BENZOIN	0	0	0	0	2.78	2.8
MORUS RUBRA	2.78	2.8	55.56	5.6	0	0
PLANERA AQUATICA	0	0	55.56	2.8	0	0
TAXODIUM DISTICHUM	0	0	111.11	8.3	0	0
ULMUS ALATA	8.33	8.3	0	0	0	0
TOTAL	158.33	55.6	1750.00	36.1	150.00	19.4
STD DEV	321.94		3651.81		684.73	

SUBTYPE: 28
NUMBER OF PLOTS: 61

SPECIES	SAPLINGS		SEEDLINGS		SHRUBS	
	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY
ACER NEGUNDO	18.03	8.2	278.69	9.8	0	0
CELTIS LAEVIGATA	77.05	23.0	2754.10	31.1	0	0
CEPHALANTHUS OCCIDENTALIS	0	0	0	0	1.64	1.6
CORNUS DRUMMONDII	21.31	8.2	81.97	6.6	0	0
DIOSPYROS VIRGINIANA	0	0	213.11	6.6	0	0
FORESTIERA ACUMINATA	0	0	0	0	8.20	6.6
FRAXINUS PENNSYLVANICA	36.07	11.5	65.57	6.6	0	0
GLEDITSIA TRIACANTHOS	0	0	16.39	1.6	0	0
ILEX DECIDUA	0	0	0	0	4.92	3.3
LINDERA BENZOIN	0	0	0	0	27.87	8.2
MALUS CORONARIA	0	0	49.18	1.6	0	0
MORUS RUBRA	1.64	1.6	81.97	8.2	0	0
RHUS COPPALINA	0	0	0	0	4.92	3.3
SALIX INTERIOR	6.56	1.6	0	0	0	0
SAMBUCUS CANADENSIS	0	0	0	0	3.28	3.3
ULMUS AMERICANA	4.92	4.9	32.79	3.3	0	0
TOTAL	163.93	42.6	3557.38	49.2	50.82	14.8
STD DEV	301.13		7210.00		146.77	

SUBTYPE: 29
NUMBER OF PLOTS: 25

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	20.00	20.0	320.00	8.0	0	0
ACER SACCHARINUM	52.00	24.0	4200.00	44.0	0	0
CELTIS LAEVIGATA	8.00	8.0	0	0	0	0
CORNUS DRUMMONDII	8.00	4.0	0	0	0	0
FRAXINUS PENNSYLVANICA	0	0	40.00	4.0	0	0
MORUS RUBRA	12.00	12.0	120.00	8.0	0	0
PLATANUS OCCIDENTALIS	4.00	4.0	0	0	0	0
POPULUS DELTOIDES	8.00	4.0	0	0	0	0
SALIX NIGRA	8.00	4.0	0	0	0	0
ULMUS AMERICANA	4.00	4.0	0	0	0	0
TOTAL	124.00	52.0	4680.00	48.0	0	0
STD DEV	150.78		12209.01		0	

SUBTYPE: 30
NUMBER OF PLOTS: 25

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	36.00	20.0	120.00	12.0	0	0
ACER SACCHARINUM	20.00	12.0	120.00	8.0	0	0
ASIMINA TRILOBA	0	0	0	0	144.00	24.0
CELTIS LAEVIGATA	32.00	16.0	200.00	8.0	0	0
FORESTIERA ACUMINATA	0	0	0	0	4.00	4.0
FRAXINUS PENNSYLVANICA	0	0	80.00	4.0	0	0
GYMNOCLADUS DIOICA	0	0	40.00	4.0	0	0
LINDERA BENZOIN	0	0	0	0	16.00	12.0
ULMUS AMERICANA	4.00	4.0	0	0	0	0
TOTAL	92.00	36.0	560.00	28.0	164.00	36.0
STD DEV	152.53		1193.04		359.26	

SUBTYPE: 31
NUMBER OF PLOTS: 35

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	37.14	17.1	142.86	11.4	0	0
ACER SACCHARINUM	8.57	5.7	1057.14	37.1	0	0
ASIMINA TRILOBA	0	0	0	0	25.71	8.6
BROUSONETIA PAPYRIFERA	2.86	2.9	0	0	0	0
CELTIS LAEVIGATA	131.43	42.9	3228.57	51.4	0	0
CORNUS DRUMMONDII	11.43	8.6	0	0	0	0
FORESTIERA ACUMINATA	0	0	0	0	8.57	5.7
ILEX DECIDUA	0	0	0	0	5.71	5.7
LINDERA BENZOIN	0	0	0	0	22.86	11.4
MORUS RUBRA	8.57	5.7	0	0	0	0
PLATANUS OCCIDENTALIS	2.86	2.9	0	0	0	0
ULMUS AMERICANA	5.71	5.7	0	0	0	0
TOTAL	208.57	68.6	4428.57	62.9	62.86	22.9
STD DEV	234.36		6531.76		147.70	

SUBTYPE: 32
NUMBER OF PLOTS: 44

	SAPLINGS		SEEDLINGS		SHRUBS	
SPECIES	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY
ACER NEGUNDO	45.45	20.5	727.27	15.9	0	0
ACER SACCHARINUM	0	0	136.36	4.5	0	0
ASIMINA TRILOBA	0	0	0	0	9.09	4.5
CELTIS LAEVIGATA	145.45	40.9	1522.73	40.9	0	0
CELTIS OCCIDENTALIS	2.27	2.3	0	0	0	0
CORNUS DRUMMONDII	322.73	27.3	204.55	13.6	0	0
CRATAEGUS SP	0	0	0	0	4.55	4.5
DIOSPYROS VIRGINIANA	0	0	22.73	2.3	0	0
FRAXINUS PENNSYLVANICA	4.55	4.5	0	0	0	0
GLEDITSIA TRIACANTHOS	2.27	2.3	68.18	2.3	0	0
ILEX DECIDUA	0	0	0	0	70.45	18.2
LINDERA BENZOIN	0	0	0	0	22.73	6.8
LIQUIDAMBAR STYRACIFLUA	0	0	90.91	4.5	0	0
MORUS RUBRA	2.27	2.3	0	0	0	0
PLATANUS OCCIDENTALIS	2.27	2.3	0	0	0	0
SAMBUCUS CANADENSIS	0	0	0	0	6.32	4.5
SALIX NIGRA	4.55	2.3	0	0	0	0
ULMUS AMERICANA	15.91	11.4	22.73	2.3	0	0
TOTAL	547.73	72.7	2795.45	61.4	113.64	34.1
STD DEV	1054.22		4106.60		241.69	

SUBTYPE: 33
NUMBER OF PLOTS: 9

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	11.11	11.1	0	0	0	0
ACER SACCHARINUM	0	0	111.11	11.1	0	0
ARUNDINARIA GIGANTEA	0	0	0	0	322.22	22.2
ASIMINA TRILOBA	0	0	0	0	144.44	44.4
CELTIS LAEVIGATA	100.00	77.8	16666.67	66.7	0	0
FRAXINUS PENNSYLVANICA	0	0	111.11	11.1	0	0
ILEX DECIDUA	0	0	0	0	11.11	11.1
LINDERA BENZOIN	0	0	0	0	33.33	33.3
TOTAL	111.11	77.8	16388.89	66.7	511.11	77.8
STD DEV	92.80		32107.03		641.18	

SUBTYPE: 34
NUMBER OF PLOTS: 7

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	28.57	28.6	0	0	0	0
ACER RUBRUM	28.57	14.3	285.71	14.3	0	0
ARUNDINARIA GIGANTEA	0	0	0	0	257.14	42.9
ASIMINA TRILOBA	0	0	0	0	71.43	42.9
CELTIS LAEVIGATA	657.14	71.4	142.86	14.3	0	0
CORNUS DRUMMONDII	14.29	14.3	0	0	0	0
ILEX DECIDUA	0	0	0	0	14.29	14.3
LINDERA BENZOIN	0	0	0	0	85.71	28.6
ULMUS AMERICANA	0	0	142.86	14.3	0	0
TOTAL	728.57	85.7	571.43	42.9	428.57	42.9
STD DEV	758.76		786.80		596.42	

SUBTYPE: 35
NUMBER OF PLOTS: 45

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	28.89	11.1	222.22	17.8	0	0
ACER RUBRUM	4.44	2.2	0	0	0	0
ACER SACCHARINUM	0	0	355.56	8.9	0	0
CELTIS LAEVIGATA	86.67	28.9	2177.78	22.2	0	0
CELTIS OCCIDENTALIS	0	0	44.44	4.4	0	0
CORNUS DRUMMONDII	28.89	6.7	66.67	2.2	0	0
FORESTIERA ACUMINATA	0	0	0	0	6.67	2.2
FRAXINUS PENNSYLVANICA	11.11	11.1	88.89	4.4	0	0
ILEX DECIDUA	0	0	0	0	6.67	6.7
LINDERA BENZOIN	0	0	0	0	6.67	2.2
LIQUIDAMBAR STYRACIFLUA	4.44	4.4	0	0	0	0
MORUS RUBRA	8.89	6.7	0	0	0	0
POPULUS DELTOIDES	0	0	22.22	2.2	0	0
ULMUS AMERICANA	8.89	6.7	200.00	8.9	0	0
TOTAL	182.22	48.9	3177.78	53.3	20.00	11.1
STD DEV	291.77		7625.58		66.06	

SUBTYPE: 36
NUMBER OF PLOTS: 21

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	14.29	9.5	47.62	4.8	0	0
ASIMINA TRILOBA	0	0	0	0	14.29	4.8
CELTIS LAEVIGATA	100.00	28.6	1047.62	38.1	0	0
CORNUS DRUMMONDII	57.14	19.0	238.10	19.0	0	0
FORESTIERA ACUMINATA	0	0	0	0	4.76	4.8
FRAXINUS PENNSYLVANICA	23.81	4.8	666.67	4.8	0	0
MORUS RUBRA	4.76	4.8	285.71	19.0	0	0
TOTAL	200.00	47.6	2285.71	61.9	19.05	9.5
STD DEV	301.66		3480.56		67.96	

SUBTYPE: 37
NUMBER OF PLOTS: 15

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	53.33	6.7	466.67	20.0	0	0
ACER SACCHARINUM	0	0	133.33	13.3	0	0
ASIMINA TRILOBA	0	0	0	0	33.33	26.7
CELTIS LAEVIGATA	60.00	40.0	533.33	26.7	0	0
CORNUS DRUMMONDII	0	0	66.67	6.7	0	0
FRAXINUS PENNSYLVANICA	13.33	6.7	0	0	0	0
LINDERA BENZOIN	0	0	0	0	26.67	13.3
ULMUS AMERICANA	6.67	6.7	0	0	0	0
TOTAL	133.33	46.7	1200.00	46.7	60.00	33.3
STD DEV	216.02		2210.37		129.84	

SUBTYPE: 38
NUMBER OF PLOTS: 3

SPECIES	SAPLINGS		SEEDLINGS		SHRUBS	
	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY
CELTIS LAEVIGATA	0	0	333.33	33.3	0	0
POPULUS DELTOIDES	866.67	33.3	0	0	0	0
SALIX INTERIOR	900.00	66.7	0	0	0	0
SALIX NIGRA	166.67	33.3	0	0	0	0
TOTAL	2933.33	66.7	666.67	66.7	0	0
STD DEV	2663.33		577.35		0	

SUBTYPE: 40
NUMBER OF PLOTS: 12

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	33.33	8.3	583.33	33.3	0	0
CELTIS LAEVIGATA	16.67	16.7	2333.33	50.0	0	0
CELTIS OCCIDENTALIS	0	0	250.00	8.3	0	0
CORNUS DRUMMONDII	108.33	41.7	166.67	16.7	0	0
DIOSPYROS VIRGINIANA	8.33	8.3	0	0	0	0
FRAXINUS PENNSYLVANICA	8.33	8.3	583.33	25.0	0	0
ULMUS AMERICANA	16.67	8.3	0	0	0	0
TOTAL	191.67	50.0	3916.67	83.3	0	0
STD DEV	227.47		5712.16		0	

SUBTYPE: 41
NUMBER OF PLOTS: 12

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	0	0	4083.33	16.7	0	0
ACER SACCHARINUM	0	0	33.33	8.3	0	0
ASIMINA TRILOBA	0	0	0	0	25.00	16.7
CELTIS LAEVIGATA	58.33	33.3	5833.33	66.7	0	0
CORNUS DRUMMONDII	16.67	8.3	0	0	0	0
FRAXINUS PENNSYLVANICA	8.33	8.3	83.33	8.3	0	0
ILEX DECIDUA	0	0	0	0	41.67	25.0
LIQUIDAMBAR STYRACIFLUA	8.33	8.3	0	0	0	0
MORUS RUBRA	0	0	83.33	8.3	0	0
TOTAL	91.67	41.7	10166.67	100.0	66.67	33.3
STD DEV	124.01		9456.44		107.31	

SUBTYPE: 42
NUMBER OF PLOTS: 8

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
CELTIS LAEVIGATA	50.00	50.0	250.00	12.5	0	0
TOTAL	62.50	62.5	375.00	25.0	0	0
STD DEV	51.75		744.02		0	

SUBTYPE: 43
NUMBER OF PLOTS: 34

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER SACCHARINUM	0	0	911.76	11.8	0	0
CELTIS LAEVIGATA	32.35	17.6	4617.65	23.5	0	0
CEPHALANTHUS OCCIDENTALIS	0	0	0	0	5.88	2.9
FORESTIERA ACUMINATA	0	0	0	0	91.18	20.6
GLEDITSIA TRIACANTHOS	2.94	2.9	0	0	0	0
PLANERA AQUATICA	5.88	2.9	205.88	5.9	0	0
POPULUS DELTOIDES	23.53	8.8	0	0	0	0
SALIX NIGRA	38.24	11.8	0	0	0	0
TAXODIUM DISTICHUM	2.94	2.9	58.82	2.9	0	0
TOTAL	105.88	35.3	5794.12	41.2	97.06	23.5
STD DEV	228.22		18320.02		252.84	

SUBTYPE: 44
NUMBER OF PLOTS: 24

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	4.17	4.2	0	0	0	0
ACER SACCHARINUM	16.67	12.5	458.33	25.0	0	0
ASIMINA TRILOBA	0	0	0	0	25.00	8.3
CERCIS CANADENSIS	8.33	4.2	0	0	0	0
CELTIS LAEVIGATA	70.83	29.2	12166.67	45.8	0	0
CORNUS DRUMMONDII	54.17	20.8	83.33	4.2	0	0
FORESTIERA ACUMINATA	0	0	0	0	12.50	12.5
FRAXINUS PENNSYLVANICA	204.17	41.7	41.67	4.2	0	0
GLEDITSIA TRIACANTHOS	12.50	8.3	0	0	0	0
ILEX DECIDUA	0	0	0	0	125.00	37.5
LINDERA BENZOIN	0	0	0	0	75.00	12.5
MORUS RUBRA	8.33	8.3	83.33	8.3	0	0
OSTRYA VIRGINIANA	4.17	4.2	0	0	0	0
TAXODIUM DISTICHUM	0	0	208.33	4.2	0	0
ULMUS AMERICANA	37.50	20.8	1291.67	8.3	0	0
TOTAL	420.83	83.3	14333.33	54.2	237.50	54.2
STD DEV	489.88		21926.09		344.92	

SUBTYPE: 45
NUMBER OF PLOTS: 15

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	20.00	13.3	133.33	13.3	0	0
ACER RUBRUM	0	0	133.33	13.3	0	0
ASIMINA TRILOBA	0	0	0	0	160.00	26.7
CELTIS LAEVIGATA	6.67	6.7	3733.33	46.7	0	0
CORNUS DRUMMONDII	26.67	26.7	133.33	6.7	0	0
CRATAEGUS VIRIDUS	0	0	0	0	6.67	6.7
DIOSPYROS VIRGINIANA	0	0	133.33	6.7	0	0
FRAXINUS PENNSYLVANICA	33.33	13.3	0	0	0	0
GLEDITSIA TRIACANTHOS	0	0	66.67	6.7	0	0
ILEX DECIDUA	0	0	0	0	6.67	6.7
LIGUSTRUM SINENSE	0	0	0	0	6.67	6.7
LIQUIDAMBAR STYRACIFLUA	60.00	20.0	0	0	0	0
MORUS RUBRA	0	0	66.67	6.7	0	0
ULMUS AMERICANA	6.67	6.7	0	0	0	0
TOTAL	153.33	60.0	4400.00	73.3	180.00	40.0
STD DEV	219.96		6009.52		422.92	

SUBTYPE: 46
NUMBER OF PLOTS: 34

SPECIES	SAPLINGS		SEEDLINGS		SHRUBS	
	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY
ACER NEGUNDO	76.47	14.7	29.41	2.9	0	0
ACER RUBRUM	8.82	5.9	0	0	0	0
ACER SACCHARINUM	2.94	2.9	764.71	29.4	0	0
ARUNDINARIA GIGANTEA	0	0	0	0	258.82	8.8
CELTIS LAEVIGATA	182.35	47.1	8176.47	67.6	0	0
CORNUS DRUMMONDII	0	0	29.41	2.9	0	0
FRAXINUS PENNSYLVANICA	79.41	11.8	176.47	11.8	0	0
GYMNOCLADUS DIOICA	2.94	2.9	0	0	0	0
ILEX DECIDUA	0	0	0	0	11.76	8.8
MORUS RUBRA	0	0	58.82	5.9	0	0
TAXODIUM DISTICHUM	0	0	147.06	5.9	0	0
ULMUS AMERICANA	20.59	11.8	29.41	2.9	0	0
TOTAL	373.53	82.4	9411.76	73.5	270.59	17.6
STD DEV	477.56		19123.39		981.81	

SUBTYPE: 47
NUMBER OF PLOTS: 17

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	17.65	17.6	0	0	0	0
ACER SACCHARINUM	0	0	235.29	11.8	0	0
CELTIS LAEVIGATA	58.82	23.5	4235.29	35.3	0	0
CORNUS DRUMMONDII	11.76	11.8	0	0	0	0
FRAXINUS PENNSYLVANICA	17.65	17.6	176.47	11.8	0	0
ILEX DECIDUA	0	0	0	0	23.53	11.8
LINDERA BENZOIN	0	0	0	0	5.88	5.9
MORUS RUBRA	11.76	11.8	0	0	0	0
ULMUS AMERICANA	41.18	17.6	0	0	0	0
TOTAL	158.82	58.8	4647.06	58.8	29.41	11.8
STD DEV	206.33		9867.50		84.89	

SUBTYPE: 48
NUMBER OF PLOTS: 7

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	0	0	142.86	14.3	0	0
CELTIS LAEVIGATA	42.86	42.9	8571.43	100.0	0	0
FRAXINUS PENNSYLVANICA	271.43	57.1	142.86	14.3	0	0
FRAXINUS PROFUNDA	14.29	14.3	0	0	0	0
TOTAL	328.57	71.4	8857.14	100.0	0	0
STD DEV	460.85		4810.70		0	

SUBTYPE: 49
NUMBER OF PLOTS: 13

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	84.62	30.8	76.92	7.7	0	0
CELTIS LAEVIGATA	15.38	7.7	76.92	7.7	0	0
FORESTIERA ACUMINATA	0	0	0	0	153.85	7.7
MORUS RUBRA	7.69	7.7	76.92	7.7	0	0
PLATANUS OCCIDENTALIS	30.77	15.4	0	0	0	0
POPULUS DELTOIDES	30.77	7.7	0	0	0	0
SALIX INTERIOR	0	0	76.92	7.7	0	0
TOTAL	169.23	30.8	307.69	23.1	153.85	7.7
STD DEV	388.13		630.43		554.70	

SUBTYPE: 50
NUMBER OF PLOTS: 16

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	12.50	12.5	62.50	6.3	0	0
ACER SACCHARINUM	12.50	12.5	375.00	18.8	0	0
ARUNDINARIA GIGANTEA	0	0	0	0	606.25	31.3
ASIMINA TRILOBA	0	0	0	0	131.25	25.0
CELTIS LAEVIGATA	56.25	31.3	1687.50	50.0	0	0
FORESTIERA ACUMINATA	0	0	0	0	6.25	6.3
FRAXINUS PENNSYLVANICA	50.00	12.5	0	0	0	0
ILEX DECIDUA	0	0	0	0	37.50	18.8
LINDERA BENZOIN	0	0	0	0	62.50	12.5
TAXODIUM DISTICHUM	0	0	1312.50	25.0	0	0
ULMUS AMERICANA	6.25	6.3	0	0	0	0
TOTAL	137.50	56.3	3437.50	62.5	843.75	62.5
STD DEV	202.90		5632.86		1364.78	

SUBTYPE: 51
NUMBER OF PLOTS: 18

SPECIES	SAPLINGS DENSITY PER ACRE	SAPLINGS CONSTANCY	SEEDLINGS DENSITY PER ACRE	SEEDLINGS CONSTANCY	SHRUBS DENSITY PER ACRE	SHRUBS CONSTANCY
ACER NEGUNDO	116.67	16.7	55.56	5.6	0	0
AMORPHA FRUTICOSA	0	0	0	0	11.11	5.6
CELTIS LAEVIGATA	55.56	27.8	277.78	16.7	0	0
CORNUS DRUMMONDII	16.67	11.1	0	0	0	0
CRATAEGUS VIRIDUS	0	0	0	0	11.11	5.6
FORESTIERA ACUMINATA	0	0	0	0	5.56	5.6
GLEDITSIA TRIACANTHOS	0	0	277.78	11.1	0	0
ILEX DECIDUA	0	0	0	0	50.00	16.7
ULMUS ALATA	5.56	5.6	0	0	0	0
ULMUS AMERICANA	33.33	16.7	0	0	0	0
TOTAL	227.78	72.2	611.11	27.8	77.78	33.3
STD DEV	411.32		1289.73		135.28	

SUBTYPE: 1
NUMBER OF PLOTS: 16

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	1.25	18.8
AMPELOPSIS ARBOREA	18.75	6.3	0	0	0	0
AMBROSIA TRIFIDA	0	0	0	0	0.94	6.3
AMPELOPSIS CORDATA	12.50	12.5	0	0	0	0
ASTER SIMPLEX	0	0	0	0	6.72	31.3
BIGNONIA CAPREOLATA	6.25	6.3	18.75	12.5	0.47	18.8
BOEHMERIA CYLINDRICA	0	0	0	0	2.03	18.8
BRUNNICHIA CIRRHOSA	56.25	18.8	68.75	25.0	4.69	31.3
CARDIOSPERMUM HALICACABUM	0	0	0	0	7.34	25.0
CARYA ILLINOENSIS	0	0	0	0	0.16	6.3
CELTIS LAEVIGATA	0	0	0	0	7.50	31.3
COCCULUS CAROLINUS	0	0	0	0	0.16	6.3
CORNUS DRUMMONDII	0	0	0	0	0.94	6.3
COMMELINA DIFFUSA	0	0	0	0	3.91	6.3
CROTON SP	0	0	0	0	0.16	6.3
CYNODON DACTYLON	0	0	0	0	0.94	6.3
CYPERUS ROTUNDUS	0	0	0	0	9.38	25.0
DESMODIUM PANICULATUM	0	0	0	0	0.16	6.3
GEUM CANADENSE	0	0	0	0	0.94	6.3
HACKLIA VIRGINIANA	0	0	0	0	0.94	6.3
IPOMOEA SP	0	0	12.50	12.5	1.09	12.5
LEERSIA VIRGINICA	0	0	0	0	0.31	12.5
LIPPIA LANCEOLATA	0	0	0	0	4.06	12.5
MATELEA GONOCARPA	0	0	62.50	18.8	0.16	6.3
MENISPERMUM CANADENSE	0	0	0	0	1.09	12.5
OPLISMENUS SETARIUS	0	0	0	0	0.16	6.3
PANICUM CAPILLARE	0	0	0	0	4.69	12.5
PARTHENOCISSUS QUINQUEFOLIA	118.75	18.8	218.75	31.3	5.78	50.0
PHYSALIS ANGULATA	0	0	0	0	1.09	12.5
PLATANUS OCCIDENTALIS	0	0	0	0	0.94	6.3
POLYGONUM COCCINEUM	0	0	0	0	0.16	6.3
POLYGONUM VIRGINIANUM	0	0	0	0	0.16	6.3
PRUNELLA VULGARIS	0	0	0	0	0.16	6.3
TOXICODENDRON RADICANS	87.50	18.8	425.00	50.0	22.97	56.3
RUBUS TRIVIALIS	0	0	0	0	8.75	50.0
SETARIA GENICULATA	0	0	0	0	2.19	25.0

SMILAX BONA-NOX	0	0	0	0	0.16	6.3
SOLIDAGO CANADENSIS	0	0	0	0	7.34	25.0
SORGHUM HALEPENSE	0	0	0	0	6.25	12.5
STACHYS TENUIFOLIA	0	0	0	0	5.31	6.3
ULMUS AMERICANA	0	0	0	0	0.16	6.3
VICIA SP	0	0	0	0	0.16	6.3
VIOLA PAPILIONACEA	0	0	0	0	0.16	6.3
VITIS RIPARIA	37.50	12.5	43.75	18.8	0.16	6.3
XANTHIUM STRUMARIUM	0	0	0	0	0.31	12.5
TOTAL	337.50	43.8	850.00	87.5	122.34	100.0
STD DEV	497.83		1135.49			

SUBTYPE: 2
NUMBER OF PLOTS: 7

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.36	14.3
ACER NEGUNDO	0	0	0	0	0.71	28.6
AMPELOPSIS ARBOREA	28.57	14.3	257.14	14.3	2.14	14.3
AMBROSIA TRIFIDA	0	0	0	0	0.36	14.3
AMPELOPSIS CORDATA	42.86	14.3	0	0	0.71	28.6
BOEHMERIA CYLINDRICA	0	0	0	0	25.00	57.1
BRUNNICHIA CIRRHOSA	0	0	0	0	0.36	14.3
CARYA ILLINOENSIS	0	0	0	0	0.36	14.3
CAMPSIS RADICANS	85.71	42.9	100.00	42.9	13.21	42.9
CELTIS LAEVIGATA	0	0	0	0	0.36	14.3
COMMELINA VIRGINICA	0	0	0	0	0.36	14.3
ECLIPTA PROSTRATA	0	0	0	0	0	0.0
ELYMUS VIRGINICUS	0	0	0	0	0.36	14.3
FRAXINUS PENNSYLVANICA	0	0	0	0	0.36	14.3
IRESINE RHIZOMATOSA	0	0	0	0	2.14	14.3
PASSIFLORA LUTEA	0	0	0	0	0.36	14.3
PARTHENOCISSUS QUINQUEFOLIA	0	0	0	0	2.14	14.3
POLYGONUM DENSIFLORUM	0	0	0	0	0.36	14.3
POLYGONUM PUNCTATUM	0	0	0	0	16.43	42.9
POLYGONUM VIRGINIANUM	0	0	0	0	2.14	14.3
TOXICODENDRON RADICANS	0	0	0	0	0.36	14.3
RUELLIA STREPENS	0	0	0	0	0.71	28.6
RUBUS TRIVIALIS	0	0	0	0	1.07	42.9
SENECIO GLABELLUS	0	0	0	0	0.71	28.6
SORGHUM HALEPENSE	0	0	0	0	0.36	14.3
TEUCRIUM CANADENSE	0	0	0	0	5.36	14.3
ULMUS AMERICANA	0	0	0	0	0.36	14.3
VERNONIA GIGANTEA	0	0	0	0	0.36	14.3
VIOLA PAPILIONACEA	0	0	0	0	5.00	57.1
TOTAL	157.14	42.9	357.14	42.9	82.50	100.0
STD DEV	229.91		774.29			

SUBTYPE: 3
NUMBER OF PLOTS: 4

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	0.63	25.0
CARYA ILLINOENSIS	0	0	0	0	0.63	25.0
CELTIS LAEVIGATA	0	0	0	0	1.25	50.0
CYPERUS SP	0	0	0	0	4.38	50.0
PANICUM SP	0	0	0	0	0.63	25.0
PARTHENOCISSUS QUINQUEFOLIA	250.00	25.0	1300.00	50.0	0.63	25.0
POPULUS DELTOIDES	0	0	0	0	0.63	25.0
POLYGONUM VIRGINIANUM	0	0	0	0	0.63	25.0
TOXICODENDRON RADICANS	0	0	0	0	0.63	25.0
RUBUS TRIVIALIS	0	0	0	0	1.25	50.0
SALIX INTERIOR	0	0	0	0	3.75	25.0
VIOLA PAPILIONACEA	0	0	0	0	0.63	25.0
VITIS RIPARIA	0	0	0	0	0.63	25.0
TOTAL	250.00	25.0	1300.00	50.0	16.25	75.0
STD DEV	500.00		2468.47			

SUBTYPE: 4
NUMBER OF PLOTS: 10

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.50	20.0
AMPELOPSIS ARBOREA	70.00	20.0	50.00	10.0	10.00	20.0
ASCLEPIAS PERENNIS	0	0	0	0	2.00	30.0
ASTER SIMPLEX	0	0	0	0	6.75	30.0
BERCHEMIA SCANDENS	0	0	0	0	0.25	10.0
BIDENS FRONDOSA	0	0	0	0	0.25	10.0
BRUNNICHIA CIRRHOSA	40.00	10.0	80.00	20.0	1.75	20.0
CARYA AQUATICA	0	0	0	0	1.00	40.0
CARDIOSPERMUM HALICACABUM	0	0	20.00	10.0	0.25	10.0
CELTIS LAEVIGATA	0	0	0	0	0.50	20.0
CEPHALANTHUS OCCIDENTALIS	0	0	0	0	0.75	30.0
CLEMATIS CRISPA	0	0	0	0	0.75	30.0
COCCULUS CAROLINUS	30.00	20.0	70.00	30.0	0.50	20.0
DIODIA VIRGINIANA	0	0	0	0	0.25	10.0
ECLIPTA PROSTRATA	0	0	0	0	0.25	10.0
IPOMOEA LACUNOSA	0	0	0	0	0.25	10.0
LEERSIA LENTICULARIS	0	0	0	0	17.50	40.0
LEERSIA VIRGINICA	0	0	0	0	0.75	30.0
LINDERNIA DUBIA	0	0	0	0	0.50	20.0
LIPPIA LANCEOLATA	0	0	0	0	0.50	20.0
MALUS CORONARIA	0	0	0	0	0.25	10.0
PLANERA AQUATICA	0	0	0	0	0.75	30.0
QUERCUS LYRATA	0	0	0	0	0.75	30.0
TOXICODENDRON RADICANS	0	0	0	0	0.25	10.0
SENECIO GLABELLUS	0	0	0	0	0.25	10.0
SICYOS ANGULATUS	0	0	0	0	0.25	10.0
SIDA SPINOSA	0	0	0	0	0.25	10.0
SPERMACOCE GLABRA	0	0	0	0	0.75	30.0
TAXODIUM DISTICHUM	0	0	0	0	0.75	30.0
TRACHELOSPERMUM DIFFORME	0	0	40.00	20.0	1.75	20.0
VITIS PALMATA	30.00	20.0	40.00	10.0	2.50	50.0
VITIS RIPARIA	40.00	10.0	0	0	0	0
XANTHIUM STRUMARIUM	[illegible]	0	0	0	0.50	20.0
TOTAL	210.00	50.0	280.00	50.0	54.00	90.0
STD DEV	276.69		449.20			

SUBTYPE: 5
NUMBER OF PLOTS: 25

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.10	4.0
ACER NEGUNDO	0	0	0	0	0.10	4.0
AMPELOPSIS ARBOREA	4.00	4.0	0	0	1.00	40.0
AMBROSIA TRIFIDA	0	0	0	0	0.20	8.0
AMPELOPSIS CORDATA	0	0	0	0	0.10	4.0
ASTER SIMPLEX	0	0	0	0	3.10	28.0
BERCHEMIA SCANDENS	0	0	4.00	4.0	0	0
BIDENS SP	0	0	0	0	0.20	8.0
BOEHMERIA CYLINDRICA	0	0	0	0	2.10	8.0
BRUNNICHIA CIRRHOSA	20.00	8.0	20.00	8.0	3.70	32.0
CARYA ILLINOENSIS	0	0	0	0	0.10	4.0
CAMPSIS RADICANS	12.00	8.0	20.00	8.0	5.20	52.0
CELTIS LAEVIGATA	0	0	0	0	1.20	28.0
CHENOPODIUM ALBUM	0	0	0	0	0.90	16.0
COCCULUS CAROLINUS	0	0	40.00	12.0	0.90	16.0
CYNANCHUM LAEVE	0	0	0	0	0.10	4.0
CYPERUS ROTUNDUS	0	0	0	0	0.10	4.0
DIOSPYROS VIRGINIANA	0	0	0	0	0.10	4.0
EUPATORIUM MACULATUM	0	0	0	0	0.30	12.0
FORESTIERA ACUMINATA	0	0	0	0	0.10	4.0
FRAXINUS PENNSYLVANICA	0	0	0	0	0.10	4.0
UNKNOWN GRAMINOID	0	0	0	0	1.40	16.0
IPOMOEA SP	0	0	0	0	0.10	4.0
IPOMOEA HEDERACEA	0	0	0	0	0.60	4.0
IPOMOEA LACUNOSA	0	0	0	0	0.20	8.0
IPOMOEA PURPUREA	0	0	0	0	0.10	4.0
JUSTICIA OVATA	0	0	0	0	0.40	16.0
LAPORTEA CANADENSIS	0	0	0	0	4.30	20.0
LEERSIA LENTICULARIS	0	0	0	0	0.60	4.0
LEERSIA VIRGINICA	0	0	0	0	1.00	20.0
MATELEA GONOCARPA	0	0	0	0	0.10	4.0
MIKANIA SCANDENS	0	0	0	0	0.10	4.0
MOLLUGO VERTICILLATA	0	0	0	0	0.10	4.0
OXALIS STRICTA	0	0	0	0	0.40	16.0
PARTHENOCISSUS QUINQUEFOLIA	8.00	4.0	212.00	28.0	3.00	24.0
PRUNELLA VULGARIS	0	0	0	0	0.60	4.0

TOXICODENDRON RADICANS	100.00	24.0	296.00	44.0	22.20	68.0
RUELLIA STREPENS	0	0	0	0	0.10	4.0
RUBUS TRIVIALIS	0	0	0	0	2.90	40.0
SAMBUCUS CANADENSIS	0	0	0	0	0.10	4.0
SENECIO GLABELLUS	0	0	0	0	0.30	12.0
SETARIA GENICULATA	0	0	0	0	0.10	4.0
SICYOS ANGULATUS	0	0	24.00	8.0	0.30	12.0
SMILAX BONA-NOX	0	0	72.00	12.0	2.00	40.0
SMILAX HISPIDA	0	0	52.00	8.0	0	0
SMILAX ROTUNDIFOLIA	0	0	96.00	24.0	0.80	12.0
SOLANUM AMERICANUM	0	0	0	0	0.10	4.0
SOLIDAGO CANADENSIS	0	0	0	0	0.20	8.0
SORGHUM HALEPENSE	0	0	0	0	0.20	8.0
SPILANTHES AMERICANA	0	0	0	0	0.20	8.0
TEUCRIUM CANADENSE	0	0	0	0	0.10	4.0
TRITICUM AESTIVALIS	0	0	0	0	0.10	4.0
TRACHELOSPERMUM DIFFORME	0	0	16.00	8.0	0.30	12.0
VERNONIA GIGANTEA	0	0	0	0	0.10	4.0
VICIA SP	0	0	0	0	0.20	8.0
VIOLA SP	0	0	0	0	1.70	12.0
VITIS RIPARIA	84.00	24.0	40.00	12.0	1.40	16.0
TOTAL	228.00	52.0	892.00	80.0	66.10	100.0
STD DEV	369.14		846.03			

SUBTYPE: 6
NUMBER OF PLOTS: 25

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.30	12.0
ACER NEGUNDO	0	0	0	0	0.20	8.0
ACER SACCHARINUM	0	0	0	0	0.20	8.0
AMPELOPSIS ARBOREA	12.00	8.0	16.00	8.0	2.40	36.0
AMPELOPSIS CORDATA	16.00	8.0	0	0	0.20	8.0
APIOS AMERICANA	0	0	0	0	0.10	4.0
ARUNDINARIA GIGANTEA	0	0	0	0	0.60	4.0
ASTER SIMPLEX	0	0	0	0	1.60	24.0
BERCHEMIA SCANDENS	24.00	4.0	32.00	12.0	0.50	20.0
BOEHMERIA CYLINDRICA	0	0	0	0	2.60	8.0
BRUNNICHIA CIRRHOSA	92.00	20.0	64.00	16.0	1.40	16.0
CARDIOSPERMUM HALICACABUM	0	0	0	0	0.40	16.0
CAMPSIS RADICANS	80.00	28.0	124.00	28.0	5.00	44.0
CAREX SP	0	0	0	0	0.20	8.0
CELTIS LAEVIGATA	0	0	0	0	3.00	44.0
CELTIS OCCIDENTALIS	0	0	0	0	1.50	4.0
COCCULUS CAROLINUS	0	0	28.00	16.0	0.20	8.0
CORNUS DRUMMONDII	0	0	0	0	1.60	8.0
COMMELINA DIFFUSA	0	0	0	0	0.20	8.0
COMMELINA VIRGINICA	0	0	0	0	0.70	8.0
CUSCUTA SP	0	0	0	0	0.60	4.0
DIOSPYROS VIRGINIANA	0	0	0	0	0.10	4.0
ECLIPTA PROSTRATA	0	0	0	0	0.10	4.0
FORESTIERA ACUMINATA	0	0	0	0	0.20	8.0
FRAXINUS PENNSYLVANICA	0	0	0	0	0.70	8.0
ILEX DECIDUA	0	0	0	0	0.10	4.0
IPOMOEA SP	0	0	0	0	0.30	12.0
IPOMOEA LACUNOSA	0	0	0	0	0.20	8.0
JUSTICIA OVATA	0	0	0	0	0.10	4.0
LACTUCA CANADENSIS	0	0	0	0	0.10	4.0
LEERSIA LENTICULARIS	0	0	0	0	0.20	8.0
LEERSIA VIRGINICA	0	0	0	0	3.70	16.0
MATELEA GONOCARPA	0	0	8.00	4.0	0	0
MORUS RUBRA	0	0	0	0	0.10	4.0
PASSIFLORA LUTEA	0	0	0	0	0.20	8.0
PANICUM SP	0	0	0	0	0.20	8.0

PARTHENOCISSUS QUINQUEFOLIA	8.00	4.0	180.00	24.0	0.90	16.0
PHYTOLACCA AMERICANA	0	0	0	0	0.10	4.0
PHYSALIS PUBESCENS	0	0	0	0	0.10	4.0
PILEA PUMILA	0	0	0	0	0.20	8.0
POLYGONUM HYDROPIPEROIDES	0	0	0	0	0.10	4.0
POLYGONUM VIRGINIANUM	0	0	0	0	0.20	8.0
QUERCUS NIGRA	0	0	0	0	0.10	4.0
TOXICODENDRON RADICANS	72.00	36.0	248.00	36.0	10.10	44.0
RUBUS SP	0	0	0	0	0.10	4.0
RUBUS TRIVIALIS	0	0	0	0	1.20	23.0
SANICULA CANADENSIS	0	0	0	0	0.10	4.0
SAURURUS CERNUUS	0	0	0	0	3.10	8.0
SENECIO GLABELLUS	0	0	0	0	0.10	4.0
SICYOS ANGULATUS	0	0	12.00	8.0	0	0
SMILAX BONA-NOX	0	0	16.00	4.0	0.10	4.0
SMILAX HISPIDA	0	0	0	0	0.30	12.0
SMILAX ROTUNDIFOLIA	0	0	0	0	0.20	8.0
SOLIDAGO CANADENSIS	0	0	0	0	0.20	8.0
SPERMACOCE GLABRA	0	0	0	0	0.20	8.0
STROPHOSTYLES HELVOLA	0	0	0	0	0.10	4.0
TEUCRIUM CANADENSE	0	0	0	0	3.50	8.0
TRACHELOSPERMUM DIFFORME	0	0	0	0	0.10	4.0
ULMUS AMERICANA	0	0	0	0	0.40	16.0
URTICA DIOICA	0	0	0	0	0.40	16.0
VIOLA SP	0	0	0	0	0.10	4.0
VIOLA PAPILIONACEA	0	0	0	0	0.10	4.0
VITIS PALMATA	0	0	0	0	0.20	8.0
VITIS RIPARIA	28.00	16.0	40.00	12.0	0.70	28.0
TOTAL	332.00	68.0	768.00	76.0	52.80	100.0
STD DEV	400.75		695.65			

SUBTYPE: 7
NUMBER OF PLOTS: 6

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER SACCHARINUM	0	0	0	0	0.42	16.7
BIDENS FRONDOSA	0	0	0	0	0.42	16.7
BRUNNICHIA CIRRHOSA	66.67	33.3	166.67	33.3	0.42	16.7
CAMPSIS RADICANS	0	0	0	0	0.42	16.7
COCCULUS CAROLINUS	16.67	16.7	0	0	0	0
NYSSA AQUATICA	0	0	0	0	0.83	33.3
PLANERA AQUATICA	0	0	0	0	0.42	16.7
TAXODIUM DISTICHUM	0	0	0	0	0.83	33.3
TOTAL	83.33	33.3	166.67	33.3	3.75	33.3
STD DEV	160.21		265.83			

SUBTYPE: 8
NUMBER OF PLOTS: 20

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
AMPELOPSIS ARBOREA	0	0	0	0	0.25	10.0
ASCLEPIAS PERENNIS	0	0	0	0	0.13	5.0
ASIMINA TRILOBA	0	0	0	0	0.13	5.0
ASTER SIMPLEX	0	0	0	0	2.00	10.0
BERCHEMIA SCANDENS	0	0	10.00	5.0	0	0
BOEHMERIA CYLINDRICA	0	0	0	0	1.25	25.0
BRUNNICHIA CIRRHOSA	0	0	40.00	25.0	1.75	20.0
CARYA AQUATICA	0	0	0	0	1.25	25.0
CAMPSIS RADICANS	15.00	10.0	40.00	5.0	4.75	25.0
CELTIS LAEVIGATA	0	0	0	0	0.13	5.0
CLEMATIS CRISPA	0	0	0	0	0.13	5.0
COMMELINA DIFFUSA	0	0	0	0	0.13	5.0
COMMELINA VIRGINICA	0	0	0	0	0.13	5.0
DIODIA VIRGINIANA	0	0	0	0	0.13	5.0
DIOSPYROS VIRGINIANA	0	0	0	0	0.13	5.0
FORESTIERA ACUMINATA	0	0	0	0	0.13	5.0
ILEX DECIDUA	0	0	0	0	0.25	10.0
IMPATIENS CAPENSIS	0	0	0	0	0.13	5.0
IPOMOEA LACUNOSA	0	0	0	0	0.13	5.0
LACTUCA CANADENSIS	0	0	0	0	0.13	5.0
LEERSIA VIRGINICA	0	0	0	0	8.50	30.0
LINDERNIA DUBIA	0	0	0	0	0.25	10.0
LIPPIA LANCEOLATA	0	0	0	0	0.13	5.0
LONICERA JAPONICA	0	0	60.00	5.0	0.13	5.0
PANICUM SP	0	0	0	0	0.25	10.0
PARTHENOCISSUS QUINQUEFOLIA	25.00	10.0	70.00	20.0	0.75	5.0
PILEA PUMILA	0	0	0	0	1.00	15.0
PLANERA AQUATICA	0	0	0	0	0.50	20.0
QUERCUS LYRATA	0	0	0	0	0.13	5.0
TOXICODENDRON RADICANS	40.00	15.0	40.00	15.0	0.75	30.0
RUBUS SP	0	0	0	0	0.38	15.0
RUBUS TRIVIALIS	0	0	0	0	0.38	15.0
SAURURUS CERNUUS	0	0	0	0	1.25	25.0
SICYOS ANGULATUS	0	0	5.00	5.0	0	0
SMILAX HISPIDA	25.00	5.0	20.00	10.0	0	0
SMILAX ROTUNDIFOLIA	0	0	5.00	5.0	0.13	5.0

TAXODIUM DISTICHUM	0	0	0	0	0.13	5.0
URTICA DIOICA	0	0	0	0	0.25	10.0
VIOLA PAPILIONACEA	0	0	0	0	0.13	5.0
VITIS PALMATA	25.00	10.0	20.00	15.0	0.38	15.0
VITIS RIPARIA	0	0	20.00	10.0	0.38	15.0
TOTAL	130.00	35.0	330.00	50.0	28.75	90.0
STD DEV	234.18		506.90			

SUBTYPE: 9
NUMBER OF PLOTS: 12

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.21	8.3
AMPELOPSIS ARBOREA	0	0	33.33	16.7	1.46	16.7
AMPELOPSIS CORDATA	8.33	8.3	8.33	8.3	1.46	16.7
AMARANTHUS PALMERI	0	0	0	0	0.21	8.3
APIOS AMERICANA	0	0	66.67	16.7	10.63	25.0
ASTER SIMPLEX	0	0	0	0	10.00	41.7
BOEHMERIA CYLINDRICA	0	0	0	0	2.92	33.3
BRUNNICHIA CIRRHOSA	0	0	0	0	1.46	16.7
CAMPSIS RADICANS	16.67	8.3	250.00	25.0	13.33	50.0
CELTIS LAEVIGATA	0	0	0	0	0.63	25.0
CORNUS DRUMMONDII	0	0	0	0	0.21	8.3
COMMELINA VIRGINICA	0	0	0	0	1.25	8.3
CYPERUS ERYTHRORHIZOS	0	0	0	0	0.21	8.3
CYPERUS SP	0	0	0	0	0	0.0
DIODIA VIRGINIANA	0	0	0	0	0.42	16.7
ECLIPTA PROSTRATA	0	0	0	0	0.83	33.3
EUPATORIUM COELESTINUM	0	0	0	0	0.42	16.7
FORESTIERA ACUMINATA	0	0	0	0	0.21	8.3
HELIOTROPIUM INDICUM	0	0	0	0	0.21	8.3
LEERSIA VIRGINICA	0	0	0	0	0.21	8.3
LINDERNIA ANAGALLIDEA	0	0	0	0	0.21	8.3
LIPPIA LANCEOLATA	0	0	0	0	0.42	16.7
LYGODIUM JAPONICUM	0	0	0	0	0.21	8.3
MIKANIA SCANDENS	0	0	0	0	2.50	16.7
MORUS RUBRA	0	0	0	0	0.42	16.7
PANICUM ANCEPS	0	0	0	0	3.13	8.3
PANICUM CAPILLARE	0	0	0	0	5.21	8.3
PANICUM DICHOTIMOFLORUM	0	0	0	0	1.25	8.3
PELTANDRA VIRGINICA	0	0	0	0	5.21	8.3
PHYSALIS ANGULATA	0	0	0	0	1.25	8.3
POLYGONUM HYDROPIPEROIDES	0	0	0	0	1.25	8.3
TOXICODENDRON RADICANS	16.67	8.3	0	0	5.00	41.7
SAPIUM SEBIFERUM	0	0	0	0	0.63	25.0
SAURURUS CERNUUS	0	0	0	0	9.38	16.7
SENECIO GLABELLUS	0	0	0	0	1.88	33.3
SICYOS ANGULATUS	0	0	25.00	8.3	0	0

SOLANUM AMERICANUM	0	0	0	0	0.21	8.3
SOLIDAGO CANADENSIS	0	0	0	0	0.42	16.7
SPILANTHES AMERICANA	0	0	0	0	0.21	8.3
TEUCRIUM CANADENSE	0	0	0	0	2.71	25.0
VITIS RIPARIA	33.33	8.3	150.00	16.7	8.54	25.0
TOTAL	75.00	33.3	533.33	58.3	96.25	100.0
STD DEV	128.81		658.28			

SUBTYPE: 10
NUMBER OF PLOTS: 11

SPECIES	CANOPY VINES		SUBCANOPY VINES		GROUND COVER	
	DENSITY PER ACRE	CONSTANCY	DENSITY PER ACRE	CONSTANCY	PERCENT COVER	CONSTANCY
ALTERNANTHERA PHILOXEROIDES	0	0	0	0	0.23	9.1
ARTEMISIA SP	0	0	0	0	0.23	9.1
ASTER SIMPLEX	0	0	0	0	9.32	27.3
BRUNNICHIA CIRRHOSA	0	0	36.36	9.1	0	0
CARYA ILLINOENSIS	0	0	0	0	0.23	9.1
COMMELINA VIRGINICA	0	0	0	0	0.23	9.1
CYNODON DACTYLON	0	0	0	0	0.23	9.1
CYPERUS STRIGOSUS	0	0	0	0	0.23	9.1
CYPERUS SP	0	0	0	0	3.64	18.2
ECLIPTA PROSTRATA	0	0	0	0	0.23	9.1
EUPATORIUM COELESTINUM	0	0	0	0	4.77	18.2
HIBISCUS MILITARIS	0	0	0	0	1.36	9.1
LEERSIA VIRGINICA	0	0	0	0	0.45	18.2
LINDERNIA DUBIA	0	0	0	0	1.59	18.2
LIPPIA LANCEOLATA	0	0	0	0	1.59	18.2
LUDWIGIA DECURRENS	0	0	0	0	0.23	9.1
LYCOPUS RUBELLUS	0	0	0	0	1.36	9.1
MIKANIA SCANDENS	0	0	181.82	18.2	4.32	36.4
PASPALUM SP	0	0	0	0	0.23	9.1
PLUCHEA CAMPHORATA	0	0	0	0	0.45	18.2
RORIPPA SESSILIFLORA	0	0	0	0	0.23	9.1
ROTALA RAMOSIOR	0	0	0	0	0.23	9.1
SALIX INTERIOR	0	0	0	0	1.36	9.1
SALIX NIGRA	0	0	0	0	0.23	9.1
SAURURUS CERNUUS	0	0	0	0	1.36	9.1
SPILANTHES AMERICANA	0	0	0	0	1.59	18.2
TEUCRIUM CANADENSE	0	0	0	0	1.36	9.1
XANTHIUM STRUMARIUM	0	0	0	0	0.23	9.1
TOTAL	0	0	218.18	18.2	37.50	81.8
STD DEV	0		485.42			

SUBTYPE: 11
NUMBER OF PLOTS: 7

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
AMPELOPSIS ARBOREA	0	0	28.57	14.3	0	0
ASTER SIMPLEX	0	0	0	0	8.57	71.4
BOEHMERIA CYLINDRICA	0	0	0	0	0.36	14.3
BRUNNICHIA CIRRHOSA	14.29	14.3	185.71	42.9	2.50	28.6
CAMPSIS RADICANS	28.57	14.3	57.14	42.9	18.57	71.4
CELTIS LAEVIGATA	0	0	0	0	0.36	14.3
MORUS RUBRA	0	0	0	0	2.14	14.3
TOXICODENDRON RADICANS	214.29	42.9	357.14	57.1	22.50	85.7
RUBUS TRIVIALIS	0	0	0	0	5.36	71.4
SMILAX BONA-NOX	0	0	14.29	14.3	0	0
SMILAX HISPIDA	0	0	42.86	14.3	2.14	14.3
SPILANTHES AMERICANA	0	0	0	0	0.36	14.3
TEUCRIUM CANADENSE	0	0	0	0	2.14	14.3
TOTAL	257.14	71.4	685.71	100.0	65.00	100.0
STD DEV	257.28		338.77			

SUBTYPE: 12
NUMBER OF PLOTS: 19

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	0.79	5.3
AMPELOPSIS ARBOREA	0	0	0	0	0.13	5.3
AMPELOPSIS CORDATA	10.53	10.5	5.26	5.3	0	0
ASTER SIMPLEX	0	0	0	0	13.95	57.9
BERCHEMIA SCANDENS	0	0	26.32	5.3	0	0
BOEHMERIA CYLINDRICA	0	0	0	0	2.11	31.6
BRUNNICHIA CIRRHOSA	0	0	36.84	10.5	0.26	10.5
CAMPSIS RADICANS	5.26	5.3	26.32	10.5	3.16	21.1
CELTIS LAEVIGATA	0	0	0	0	1.05	15.8
CLEMATIS CRISPA	0	0	0	0	0.26	10.5
COCCULUS CAROLINUS	0	0	5.26	5.3	0	0
CYNANCHUM LAEVE	0	0	0	0	0.26	10.5
FORESTIERA ACUMINATA	0	0	0	0	0.26	10.5
HIBISCUS MILITARIS	0	0	0	0	1.97	5.3
ILEX DECIDUA	0	0	0	0	0.13	5.3
JUSTICIA OVATA	0	0	0	0	0.39	15.8
LACTUCA SP	0	0	0	0	0.13	5.3
LEERSIA LENTICULARIS	0	0	0	0	0.26	10.5
LEERSIA VIRGINICA	0	0	0	0	0.92	10.5
LIGUSTRUM SINENSE	0	0	0	0	0.79	5.3
LONICERA JAPONICA	0	0	84.21	10.5	4.34	21.1
LYGODIUM JAPONICUM	0	0	52.63	5.3	0	0
MATELEA GONOCARPA	0	0	0	0	0.79	5.3
OPLISMENUS SETARIUS	0	0	0	0	0.13	5.3
PANICUM ANCEPS	0	0	0	0	0.13	5.3
QUERCUS VIRGINIANA	0	0	0	0	0.13	5.3
TOXICODENDRON RADICANS	26.32	15.8	257.89	36.8	9.47	47.4
RUBUS TRIVIALIS	0	0	0	0	18.55	68.4
SAMBUCUS CANADENSIS	0	0	0	0	6.18	21.1
SENECIO GLABELLUS	0	0	0	0	0.13	5.3
SMILAX BONA-NOX	0	0	0	0	1.18	21.1
SMILAX ROTUNDIFOLIA	0	0	21.05	5.3	0	0
SPILANTHES AMERICANA	0	0	0	0	0.26	10.5
ULMUS AMERICANA	0	0	0	0	0.13	5.3
URTICA CHAMAEDRYOIDES	0	0	0	0	0.13	5.3
VICIA SP	0	0	0	0	0.39	15.8

VIOLA PAPILIONACEA	0	0	0	0	0.79	5.3
VITIS RIPARIA	5.26	5.3	0	0	0.13	5.3
TOTAL	47.37	36.8	515.79	68.4	69.74	100.0
STD DEV	77.23		617.58			

SUBTYPE: 13
NUMBER OF PLOTS: 51

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.29	2.0
ALTERNANTHERA PHILOXEROIDES	0	0	0	0	2.94	23.5
AMPELOPSIS ARBOREA	21.57	3.9	29.41	13.7	1.27	21.6
AMPELOPSIS CORDATA	13.73	7.8	11.76	5.9	0.74	9.8
AMORPHA FRUTICOSA	0	0	0	0	0.34	3.9
AMARANTHUS PALMERI	0	0	0	0	0.05	2.0
APIOS AMERICANA	0	0	156.86	23.5	6.62	23.5
ASTER SIMPLEX	0	0	0	0	17.70	47.1
BERCHEMIA SCANDENS	0	0	0	0	0.05	2.0
BOEHMERIA CYLINDRICA	0	0	0	0	0.69	17.6
BRUNNICHIA CIRRHOSA	50.98	11.8	339.22	33.3	2.35	25.5
CARYA ILLINOENSIS	0	0	0	0	0.44	7.8
CAMPSIS RADICANS	37.25	9.8	243.14	39.2	9.75	43.1
CELTIS LAEVIGATA	0	0	0	0	0.98	11.8
CELTIS OCCIDENTALIS	0	0	0	0	0.29	2.0
CEPHALANTHUS OCCIDENTALIS	0	0	0	0	1.47	3.9
CORNUS DRUMMONDII	0	0	0	0	0.10	3.9
COMMELINA DIFFUSA	0	0	0	0	0.29	2.0
COMMELINA VIRGINICA	0	0	0	0	1.91	9.8
CYNODON DACTYLON	0	0	0	0	0.05	2.0
CYPERUS ERYTHRORHIZOS	0	0	0	0	0.10	3.9
CYNANCHUM LAEVE	0	0	88.24	23.5	1.13	15.7
CYNOCTONUM MITREOLA	0	0	0	0	0.10	3.9
DIODIA VIRGINIANA	0	0	0	0	0.34	3.9
ECHINOCHLOA COLONUM	0	0	0	0	0.05	2.0
ECLIPTA PROSTRATA	0	0	0	0	0.20	7.8
EICHHORNIA CRASSIPES	0	0	0	0	1.62	7.8
ERAGROSTIS HYPNOIDES	0	0	0	0	0.10	3.9
ERAGROSTIS SPECTABILIS	0	0	0	0	0.05	2.0
EUPATORIUM COELESTINUM	0	0	0	0	1.13	15.7
EUPATORIUM SEROTINUM	0	0	0	0	0.05	2.0
FIMBRISTYLIS AUTUMNALIS	0	0	0	0	0.05	2.0
FORESTIERA ACUMINATA	0	0	0	0	0.44	7.8
HIBISCUS MILITARIS	0	0	0	0	0.05	2.0
HYDROCOTYL SP	0	0	0	0	0.05	2.0
IPOMOEA LACUNOSA	0	0	0	0	0.20	7.8

IVA ANNUA	0	0	0	0	0.29	2.0
JUSTICIA OVATA	0	0	0	0	0.69	17.6
LEERSIA HEXANDRA	0	0	0	0	0.74	2.0
LEERSIA LENTICULARIS	0	0	0	0	3.24	31.4
LEERSIA VIRGINICA	0	0	0	0	0.15	5.9
LINDERNIA DUBIA	0	0	0	0	0.34	3.9
LIPPIA LANCEOLATA	0	0	0	0	0.15	5.9
LUDWIGIA DECURRENS	0	0	0	0	0.10	3.9
LYTHRUM ALATUM	0	0	0	0	0.05	2.0
MATELEA GONOCARPA	0	0	0	0	0.05	2.0
MAZUS JAPONICUS	0	0	0	0	0.05	2.0
MIKANIA SCANDENS	0	0	70.59	3.9	0.54	11.8
MIMOSA STRILLIGOSA	0	0	0	0	0.05	2.0
MORUS RUBRA	0	0	0	0	0.05	2.0
PANICUM ANCEPS	0	0	0	0	0.15	5.9
PANICUM DICHOTIMOFLORUM	0	0	0	0	0.05	2.0
PELTANDRA VIRGINICA	0	0	0	0	1.62	7.8
PENTHORUM SEDOIDES	0	0	0	0	0.05	2.0
PHYSALIS ANGULATA	0	0	0	0	0.05	2.0
PISTIA STRATIOTES	0	0	0	0	0.39	5.9
PLUCHEA CAMPHORATA	0	0	0	0	2.06	15.7
POLYGONUM HYDROPIPEROIDES	0	0	0	0	1.96	3.9
QUERCUS NIGRA	0	0	0	0	0.05	2.0
TOXICODENDRON RADICANS	80.39	11.8	478.43	35.3	9.90	39.2
RORIPPA SESSILIFLORA	0	0	0	0	0.10	3.9
RORIPPA SINUATA	0	0	0	0	0.05	2.0
RUBUS TRIVIALIS	0	0	0	0	3.14	13.7
SALIX INTERIOR	0	0	0	0	0.05	2.0
SAMBUCUS CANADENSIS	0	0	0	0	0.29	2.0
SAMOLUS VALERANDI	0	0	0	0	0.05	2.0
SALIX NIGRA	0	0	0	0	0.10	3.9
SAPIUM SEBIFERUM	0	0	0	0	0.05	2.0
SENECIO GLABELLUS	0	0	0	0	0.05	2.0
SICYOS ANGULATUS	0	0	315.69	17.6	4.07	11.8
SMILAX BONA-NOX	0	0	11.76	2.0	0.05	2.0
SOLIDAGO CANADENSIS	0	0	0	0	0.25	9.8
SPHENOPHOLIS OBTUSATA	0	0	0	0	0.05	2.0
SPILANTHES AMERICANA	0	0	0	0	5.69	21.6
TAXODIUM DISTICHUM	0	0	0	0	0.10	3.9
TEUCRIUM CANADENSE	0	0	0	0	5.10	17.6
VITIS RIPARIA	5.88	3.9	15.69	5.9	1.18	9.8
XANTHIUM STRUMARIUM	0	0	0	0	1.23	11.8
TOTAL	209.80	21.6	1760.78	74.5	93.28	98.0
STD DEV	511.96		1760.12			

SUBTYPE: 14
NUMBER OF PLOTS: 9

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	0.28	11.1
ACER RUBRUM	0	0	0	0	0.28	11.1
AMPELOPSIS ARBOREA	0	0	55.56	11.1	0.28	11.1
APIOS AMERICANA	0	0	444.44	11.1	9.44	11.1
ASTER SIMPLEX	0	0	0	0	39.44	100.0
BOEHMERIA CYLINDRICA	0	0	0	0	6.39	44.4
BRUNNICHIA CIRRHOSA	0	0	422.22	33.3	1.94	22.2
CARYA ILLINOENSIS	0	0	0	0	0.28	11.1
CAMPSIS RADICANS	0	0	33.33	11.1	1.11	44.4
CEPHALANTHUS OCCIDENTALIS	0	0	0	0	1.67	11.1
COCCULUS CAROLINUS	0	0	33.33	22.2	1.67	11.1
COMMELINA VIRGINICA	0	0	0	0	0.28	11.1
CYNANCHUM LAEVE	0	0	22.22	11.1	0	0
DESMODIUM PANICULATUM	0	0	0	0	1.67	11.1
EQUISETUM HYEMALE	0	0	0	0	9.44	11.1
EUPATORIUM COELESTINUM	0	0	0	0	0.28	11.1
FRAXINUS PENNSYLVANICA	0	0	0	0	0.28	11.1
IVA ANNUA	0	0	0	0	2.22	33.3
LEERSIA LENTICULARIS	0	0	0	0	0.28	11.1
TOXICODENDRON RADICANS	22.22	11.1	644.44	66.7	20.00	66.7
RUBUS TRIVIALIS	0	0	0	0	1.39	55.6
SAMBUCUS CANADENSIS	0	0	0	0	4.17	11.1
SAPIUM SEBIFERUM	0	0	0	0	0.28	11.1
SICYOS ANGULATUS	0	0	0	0	0.28	11.1
SPILANTHES AMERICANA	0	0	0	0	0.56	22.2
TEUCRIUM CANADENSE	0	0	0	0	0.28	11.1
TRACHELOSPERMUM DIFFORME	0	0	11.11	11.1	0	0
TOTAL	22.22	11.1	1666.67	100.0	104.17	100.0
STD DEV	66.67		1877.50			

SUBTYPE: 15
NUMBER OF PLOTS: 15

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.17	6.7
ACER NEGUNDO	0	0	0	0	0.17	6.7
AMPELOPSIS ARBOREA	20.00	13.3	6.67	6.7	0.17	6.7
AMPELOPSIS CORDATA	6.67	6.7	0	0	0.17	6.7
ASTER SIMPLEX	0	0	0	0	31.50	60.0
BERCHEMIA SCANDENS	0	0	0	0	1.00	6.7
BOEHMERIA CYLINDRICA	0	0	0	0	1.67	33.3
BRUNNICHIA CIRRHOSA	0	0	60.00	33.3	1.33	20.0
CARYA ILLINOENSIS	0	0	0	0	0.17	6.7
CAMPSIS RADICANS	40.00	13.3	46.67	20.0	2.67	40.0
CELTIS LAEVIGATA	0	0	0	0	0.50	20.0
COCCULUS CAROLINUS	0	0	113.33	13.3	1.33	20.0
EUPATORIUM COELESTINUM	0	0	0	0	0.17	6.7
IRIS FULVA	0	0	0	0	0.17	6.7
JUSTICIA OVATA	0	0	0	0	0.33	13.3
LEERSIA LENTICULARIS	0	0	0	0	0.33	13.3
LEERSIA VIRGINICA	0	0	0	0	0.17	6.7
TOXICODENDRON RADICANS	213.33	33.3	640.00	66.7	14.17	53.3
RORIPPA SESSILIFLORA	0	0	0	0	0.17	6.7
RUBUS TRIVIALIS	0	0	0	0	12.17	66.7
SENECIO GLABELLUS	0	0	0	0	1.00	6.7
SMILAX HISPIDA	0	0	13.33	6.7	0	0
VITIS RIPARIA	0	0	6.67	6.7	0.33	13.3
TOTAL	280.00	46.7	886.67	80.0	69.83	100.0
STD DEV	629.29		1146.34			

SUBTYPE: 16
NUMBER OF PLOTS: 32

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	0.47	18.8
AMPELOPSIS ARBOREA	12.50	12.5	56.25	15.6	1.25	18.8
AMPELOPSIS CORDATA	18.75	15.6	0	0	0.08	3.1
APIOS AMERICANA	0	0	40.63	3.1	0	0
ASTER SIMPLEX	0	0	0	0	14.92	46.9
BERCHEMIA SCANDENS	9.38	6.3	3.13	3.1	0.47	3.1
BOEHMERIA CYLINDRICA	0	0	0	0	2.58	40.6
BRUNNICHIA CIRRHOSA	31.25	6.3	200.00	28.1	2.34	18.8
CARDIOSPERMUM HALICACABUM	0	0	0	0	0.08	3.1
CARYA ILLINOENSIS	0	0	0	0	0.16	6.3
CAMPSIS RADICANS	3.13	3.1	3.13	3.1	0.31	12.5
CELTIS LAEVIGATA	0	0	0	0	1.33	37.5
CHAEROPHYLLUM SP	0	0	0	0	0.08	3.1
CLEMATIS VIRGINIANA	0	0	0	0	0.16	6.3
COCCULUS CAROLINUS	3.13	3.1	28.13	15.6	0.55	21.9
CUSCUTA SP	0	0	0	0	0.08	3.1
EUPATORIUM COELESTINUM	0	0	0	0	0.47	3.1
EUPATORIUM RUGOSUM	0	0	0	0	0.08	3.1
FORESTIERA ACUMINATA	0	0	0	0	0.08	3.1
GALIUM APARINE	0	0	0	0	0.47	3.1
HETERANTHERA LIMOSA	0	0	0	0	0.08	3.1
ILEX DECIDUA	0	0	0	0	0.47	3.1
IPOMOEA LACUNOSA	0	0	0	0	0.08	3.1
JUSTICIA OVATA	0	0	0	0	0.55	21.9
LEERSIA LENTICULARIS	0	0	0	0	1.09	12.5
LEERSIA VIRGINICA	0	0	0	0	0.31	12.5
LIGUSTRUM SINENSE	0	0	0	0	0.08	3.1
LONICERA JAPONICA	0	0	56.25	9.4	2.81	21.9
OPLISMENUS SETARIUS	0	0	0	0	0.16	6.3
PANICUM ANCEPS	0	0	0	0	0.08	3.1
PARTHENOCISSUS QUINQUEFOLIA	3.13	3.1	50.00	6.3	0.16	6.3
PILEA PUMILA	0	0	0	0	0.23	9.4
QUERCUS NIGRA	0	0	0	0	0.16	6.3
QUERCUS VIRGINIANA	0	0	0	0	0.08	3.1
TOXICODENDRON RADICANS	100.00	18.8	421.88	37.5	13.05	59.4
RUBUS TRIVIALIS	0	0	0	0	13.52	81.3

SAMBUCUS CANADENSIS	0	0	0	0	1.02	9.4
SALIX NIGRA	0	0	0	0	0.08	3.1
SAURURUS CERNUUS	0	0	0	0	1.64	6.3
SENECIO GLABELLUS	0	0	0	0	2.19	12.5
SICYOS ANGULATUS	0	0	0	0	0.47	3.1
SMILAX BONA-NOX	0	0	0	0	1.09	12.5
SMILAX HISPIDA	0	0	40.63	9.4	0.94	6.3
SOLIDAGO CANADENSIS	0	0	0	0	0.31	12.5
SPILANTHES AMERICANA	0	0	0	0	0.08	3.1
STACHYS TENUIFOLIA	0	0	0	0	1.17	3.1
TEUCRIUM CANADENSE	0	0	0	0	0.08	3.1
VICIA SP	0	0	0	0	0.39	15.6
VITIS RIPARIA	50.00	21.9	12.50	3.1	0.23	9.4
XANTHIUM STRUMARIUM	0	0	0	0	0.55	6.3
TOTAL	231.25	56.3	912.50	78.1	69.06	100.0
STD DEV	361.39		1136.42			

SUBTYPE: 17
NUMBER OF PLOTS: 15

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.33	13.3
AMPELOPSIS ARBOREA	0	0	0	0	1.00	6.7
AMARANTHUS PALMERI	0	0	0	0	0.50	20.0
ASTER SIMPLEX	0	0	0	0	0.17	6.7
BIDENS SP	0	0	0	0	0.33	13.3
BIDENS FRONDOSA	0	0	0	0	0.17	6.7
BOEHMERIA CYLINDRICA	0	0	0	0	0.67	26.7
BRUNNICHIA CIRRHOSA	20.00	6.7	20.00	13.3	0.17	6.7
CAMPSIS RADICANS	13.33	6.7	33.33	6.7	0	0
COMMELINA COMMUNIS	0	0	0	0	0.17	6.7
COMMELINA DIFFUSA	0	0	0	0	0.17	6.7
COMMELINA VIRGINICA	0	0	0	0	0.17	6.7
CYPERUS SP	0	0	0	0	0.83	33.3
ECLIPTA PROSTRATA	0	0	0	0	0	0.0
EUPHORBIA MACULATA	0	0	0	0	0.17	6.7
FORESTIERA ACUMINATA	0	0	0	0	0.17	6.7
GEUM CANADENSE	0	0	0	0	0.17	6.7
GLEDITSIA TRIACANTHOS	0	0	0	0	0.17	6.7
GRATIOLA SP	0	0	0	0	0.17	6.7
IPOMOEA SP	0	0	0	0	0.17	6.7
IPOMOEA LACUNOSA	0	0	6.67	6.7	1.00	6.7
IPOMOEA PURPUREA	0	0	80.00	6.7	13.17	20.0
JUSTICIA OVATA	0	0	0	0	1.00	6.7
LEERSIA LENTICULARIS	0	0	0	0	0.17	6.7
LEERSIA VIRGINICA	0	0	0	0	0.50	20.0
LIPPIA LANCEOLATA	0	0	0	0	2.67	13.3
LUDWIGIA SP	0	0	0	0	0.17	6.7
MATELEA GONOCARPA	33.33	6.7	20.00	6.7	0.17	6.7
MAZUS JAPONICUS	0	0	0	0	0.17	6.7
MOLLUGO VERTICILLATA	0	0	0	0	0.50	20.0
PANICUM SP	0	0	0	0	0.17	6.7
PASPALUM FLORIDANUM	0	0	0	0	0.17	6.7
PHYSALIS PUBESCENS	0	0	0	0	0.17	6.7
POPULUS DELTOIDES	0	0	0	0	1.33	20.0
POLYGONUM VIRGINIANUM	0	0	0	0	1.00	6.7
TOXICODENDRON RADICANS	86.67	13.3	120.00	13.3	5.00	13.3

RORIPPA SESSILIFLORA	0	0	0	0	0.33	13.3
RUBUS TRIVIALIS	0	0	0	0	0.50	20.0
SALIX NIGRA	0	0	0	0	4.33	13.3
SICYOS ANGULATUS	0	0	26.67	6.7	7.50	46.7
TEUCRIUM CANADENSE	0	0	0	0	0.17	6.7
VERONICA PEREGRINA	0	0	0	0	0.17	6.7
VITIS RIPARIA	20.00	13.3	60.00	13.3	0.17	6.7
XANTHIUM STRUMARIUM	0	0	0	0	1.50	26.7
TOTAL	173.33	33.3	366.67	46.7	47.67	100.0
STD DEV	369.30		564.00			

SUBTYPE: 18
NUMBER OF PLOTS: 6

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.83	33.3
ASTER SIMPLEX	0	0	0	0	12.50	33.3
BIDENS SP	0	0	0	0	0.42	16.7
CELTIS LAEVIGATA	0	0	0	0	0.42	16.7
IPOMOEA SP	0	0	0	0	22.03	83.3
LAPORTEA CANADENSIS	0	0	0	0	0.83	33.3
LEMNA MINOR	0	0	0	0	0.83	33.3
PANICUM SP	0	0	0	0	0.42	16.7
RUBUS TRIVIALIS	0	0	0	0	0.42	16.7
VITIS RIPARIA	83.33	33.3	100.00	16.7	2.92	33.3
XANTHIUM STRUMARIUM	0	0	0	0	0.42	16.7
TOTAL	83.33	33.3	100.00	16.7	42.08	100.0
STD DEV	132.92		244.95			

SUBTYPE: 19
NUMBER OF PLOTS: 9

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.56	22.2
ACER NEGUNDO	0	0	0	0	0.28	11.1
ACER SACCHARINUM	0	0	0	0	0.28	11.1
AMPELOPSIS ARBOREA	155.56	22.2	166.67	22.2	1.94	22.2
ASCLEPIAS PERENNIS	0	0	0	0	0.28	11.1
ASTER SIMPLEX	0	0	0	0	0.56	22.2
CAMPSIS RADICANS	0	0	44.44	11.1	3.33	22.2
CELTIS LAEVIGATA	0	0	0	0	0.28	11.1
COMMELINA VIRGINICA	0	0	0	0	0.28	11.1
IPOMOEA SP	0	0	77.78	11.1	7.78	44.4
LAPORTEA CANADENSIS	0	0	0	0	0.56	33.3
LEERSIA VIRGINICA	0	0	0	0	8.61	33.3
LIPPIA LANCEOLATA	0	0	0	0	0.28	11.1
MIKANIA SCANDENS	0	0	55.56	11.1	0	0
PHYSALIS PUBESCENS	0	0	0	0	0.28	11.1
PILEA PUMILA	0	0	0	0	0.00	11.1
TOXICODENDRON RADICANS	44.44	11.1	33.33	11.1	66.67	88.9
RUBUS TRIVIALIS	0	0	0	0	0.28	11.1
SICYOS ANGULATUS	0	0	0	0	0.28	11.1
VITIS RIPARIA	155.56	22.2	77.78	22.2	1.11	44.4
XANTHIUM STRUMARIUM	0	0	0	0	15.00	22.2
TOTAL	355.56	33.3	455.56	44.4	108.61	100.0
STD DEV	622.72		671.03			

SUBTYPE: 20
NUMBER OF PLOTS: 27

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	0.19	7.4
AMPELOPSIS ARBOREA	14.81	7.4	7.41	3.7	1.67	29.6
ASTER SIMPLEX	0	0	0	0	0.37	14.8
BERCHEMIA SCANDENS	0	0	7.41	3.7	0.09	3.7
BOEHMERIA CYLINDRICA	0	0	0	0	0.09	3.7
BRUNNICHIA CIRRHOSA	14.81	3.7	225.93	11.1	3.33	25.9
CARDIOSPERMUM HALICACABUM	0	0	0	0	1.11	7.4
CAMPSIS RADICANS	7.41	7.4	270.37	25.9	7.69	59.3
CAREX SP	0	0	0	0	0.09	3.7
CELTIS LAEVIGATA	0	0	0	0	0.56	22.2
COCCULUS CAROLINUS	0	0	0	0	0.28	11.1
COMMELINA VIRGINICA	0	0	0	0	0.83	14.8
CYNANCHUM LAEVE	0	0	51.85	7.4	0.09	3.7
ECHINOCHLOA CRUS-GALLI	0	0	0	0	0.09	3.7
FRAXINUS PENNSYLVANICA	0	0	0	0	0.09	3.7
HIBISCUS MILITARIS	0	0	0	0	3.98	18.5
IPOMOEA SP	0	0	29.63	3.7	0.28	11.1
IPOMOEA LACUNOSA	0	0	0	0	0.28	11.1
LEERSIA VIRGINICA	0	0	0	0	0.09	3.7
PANICUM SP	0	0	0	0	0.46	18.5
PARTHENOCISSUS QUINQUEFOLIA	25.93	11.1	40.74	11.1	0.28	11.1
POLYGONUM VIRGINIANUM	0	0	0	0	14.07	18.5
TOXICODENDRON RADICANS	100.00	25.9	233.33	37.0	5.65	63.0
RUBUS SP	0	0	0	0	6.67	37.0
RUELLIA STREPENS	0	0	0	0	0.09	3.7
RUBUS TRIVIALIS	0	0	0	0	1.30	33.3
SAURURUS CERNUUS	0	0	0	0	1.67	14.8
SICYOS ANGULATUS	0	0	0	0	0.65	7.4
SMILAX BONA-NOX	0	0	0	0	0.09	3.7
SMILAX HISPIDA	0	0	0	0	0.09	3.7
SOLANUM ROSTRATUM	0	0	0	0	0.09	3.7
STROPHOSTYLES HELVOLA	0	0	0	0	0.09	3.7
TRADESCANTIA VIRGINIANA	0	0	0	0	1.39	18.5
ULMUS AMERICANA	0	0	0	0	0.09	3.7
URTICA DIOICA	0	0	0	0	0.19	7.4
VIOLA PAPILIONACEA	0	0	0	0	0.46	18.5

VITIS RIPARIA	29.63	18.5	14.81	7.4	1.11	25.9
VITIS ROTUNDIFOLIA	7.41	7.4	0	0	0	0
XANTHIUM STRUMARIUM	0	0	0	0	1.85	18.5
TOTAL	200.00	48.1	881.48	59.3	57.50	100.0
STD DEV	311.32		1993.27			

SUBTYPE: 21
NUMBER OF PLOTS: 37

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.14	5.4
ACER NEGUNDO	0	0	0	0	0.14	5.4
ACER SACCHARINUM	0	0	0	0	0.07	2.7
AMPELOPSIS ARBOREA	0	0	16.22	2.7	0.20	8.1
AMPELOPSIS CORDATA	2.70	2.7	0	0	0	0
ARTEMISIA ANNUA	0	0	0	0	0.07	2.7
ARUNDINARIA GIGANTEA	0	0	0	0	0.07	2.7
ASTER LATERIFLORUS	0	0	0	0	0	0.0
ASTER SIMPLEX	0	0	0	0	1.01	27.0
BIDENS FRONDOSA	0	0	0	0	0.07	2.7
BOEHMERIA CYLINDRICA	0	0	0	0	2.09	8.1
BRUNNICHIA CIRRHOSA	0	0	162.16	24.3	1.96	24.3
CARDIOSPERMUM HALICACABUM	0	0	0	0	0.14	5.4
CARYA ILLINOENSIS	0	0	0	0	0.07	2.7
CAMPSIS RADICANS	45.95	10.8	24.32	16.2	13.45	51.4
CAREX SP	0	0	0	0	0.20	8.1
CELTIS LAEVIGATA	0	0	0	0	0.47	18.9
CLEMATIS SP	0	0	0	0	0.07	2.7
COCCULUS CAROLINUS	0	0	37.84	8.1	0.61	10.8
CORNUS DRUMMONDII	0	0	0	0	0.07	2.7
COMMELINA VIRGINICA	0	0	0	0	4.19	24.3
CUSCUTA SP	0	0	0	0	0.61	10.8
CYNANCHUM LAEVE	0	0	5.41	2.7	0	0
CYPERUS SP	0	0	0	0	0.07	2.7
DIGITARIA SANGUINALIS	0	0	0	0	0.07	2.7
ECLIPTA PROSTRATA	0	0	0	0	0.14	5.4
ELEPHANTOPUS CAROLINIANUS	0	0	0	0	0.14	5.4
FORESTIERA ACUMINATA	0	0	0	0	0.07	2.7
FRAXINUS PENNSYLVANICA	0	0	0	0	0.81	5.4
ILEX DECIDUA	0	0	0	0	0.14	5.4
IPOMOEA SP	0	0	5.41	2.7	0.14	5.4
IPOMOEA LACUNOSA	0	0	0	0	0.47	18.9
IRESINE RHIZOMATOSA	0	0	0	0	0.14	5.4
LACTUCA CANADENSIS	0	0	0	0	0.07	2.7
LAPORTEA CANADENSIS	0	0	0	0	3.04	18.9
LEERSIA LENTICULARIS	0	0	0	0	0.07	2.7

LEERSIA VIRGINICA	0	0	0	0	0.41	16.2
LINDERNIA SP	0	0	0	0	0.07	2.7
LINDERNIA DUBIA	0	0	0	0	0.07	2.7
LIPPIA LANCEOLATA	0	0	0	0	0.07	2.7
MATELEA GONOCARPA	0	0	2.70	2.7	0.07	2.7
MENISPERMUM CANADENSE	0	0	0	0	0.20	8.1
PANICUM SP	0	0	0	0	0.14	5.4
PARTHENOCISSUS QUINQUEFOLIA	27.03	5.4	143.24	16.2	1.96	24.3
PILEA PUMILA	0	0	0	0	0.81	18.9
PLATANUS OCCIDENTALIS	0	0	0	0	0.07	2.7
PLUCHEA CAMPHORATA	0	0	0	0	0.07	2.7
POLYGONUM VIRGINIANUM	0	0	0	0	0.47	5.4
TOXICODENDRON RADICANS	54.05	16.2	135.14	24.3	14.32	59.5
RUBUS SP	0	0	0	0	0.14	5.4
RUELLIA STREPENS	0	0	0	0	0.14	5.4
RUBUS TRIVIALIS	0	0	0	0	1.89	21.6
SAURURUS CERNUUS	0	0	0	0	1.55	10.8
SICYOS ANGULATUS	0	0	45.95	13.5	1.55	21.6
SMILAX BONA-NOX	0	0	0	0	0.07	2.7
SMILAX HISPIDA	0	0	83.78	5.4	1.01	13.5
SMILAX ROTUNDIFOLIA	0	0	5.41	2.7	0	0
SOLANUM AMERICANUM	0	0	0	0	0.41	2.7
TRACHELOSPERMUM DIFFORME	0	0	0	0	0.07	2.7
TRADESCANTIA VIRGINIANA	0	0	0	0	0.14	5.4
UNKNOWN FORB	0	0	0	0	0.14	5.4
ULMUS AMERICANA	0	0	0	0	0.47	5.4
URTICA DIOICA	0	0	0	0	0.20	8.1
VITIS CINEREA	0	0	18.92	5.4	0.81	5.4
VIOLA SP	0	0	0	0	0.47	5.4
VIOLA PAPILIONACEA	0	0	0	0	0.34	13.5
VITIS RIPARIA	13.51	10.8	54.05	21.6	0.74	16.2
VITIS ROTUNDIFOLIA	2.70	2.7	5.41	2.7	0	0
TOTAL	145.95	37.8	745.95	67.6	59.86	97.3
STD DEV	252.32		1021.87			

SUBTYPE: 22
NUMBER OF PLOTS: 64

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.74	7.8
ACER NEGUNDO	0	0	0	0	0.16	6.3
ACER SACCHARINUM	0	0	0	0	0.12	4.7
AMPELOPSIS ARBOREA	3.13	1.6	0	0	0.04	1.6
AMPELOPSIS CORDATA	6.25	3.1	0	0	0.04	1.6
APIOS AMERICANA	0	0	0	0	0.04	1.6
ASIMINA TRILOBA	0	0	0	0	0.31	4.7
ASTER SIMPLEX	0	0	0	0	3.01	15.6
BERCHEMIA SCANDENS	0	0	10.94	4.7	0.08	3.1
BIDENS FRONDOSA	0	0	0	0	0.35	6.3
BOEHMERIA CYLINDRICA	0	0	0	0	3.16	21.9
BRUNNICHIA CIRRHOSA	3.13	1.6	14.06	7.8	0.66	18.8
CAREX CRUS-CORVI	0	0	0	0	0.04	1.6
CARDIOSPERMUM HALICACABUM	0	0	0	0	0.04	1.6
CARYA ILLINOENSIS	0	0	0	0	1.33	15.6
CAMPSIS RADICANS	7.81	4.7	37.50	21.9	4.38	40.6
CAREX SP	0	0	0	0	0.04	1.6
CELTIS LAEVIGATA	0	0	0	0	0.82	32.8
COCCULUS CAROLINUS	0	0	71.88	17.2	0.43	9.4
CORNUS DRUMMONDII	0	0	0	0	0.04	1.6
COMMELINA VIRGINICA	0	0	0	0	1.72	9.4
CUSCUTA SP	0	0	0	0	0.04	1.6
DESMODIUM CANESCENS	0	0	0	0	0.04	1.6
DICLIPTERA BRACHIATA	0	0	0	0	0.04	1.6
DIOSPYROS VIRGINIANA	0	0	0	0	0.04	1.6
ECLIPTA PROSTRATA	0	0	0	0	0.04	1.6
ELEPHANTOPUS CAROLINIANUS	0	0	0	0	0.04	1.6
FORESTIERA ACUMINATA	0	0	0	0	0.04	1.6
FRAXINUS PENNSYLVANICA	0	0	0	0	0.23	9.4
GEUM CANADENSE	0	0	0	0	0.04	1.6
GEUM CANADENSE	0	0	0	0	0.27	3.1
GLEDITSIA TRIACANTHOS	0	0	0	0	0.08	3.1
HIBISCUS MILITARIS	0	0	0	0	0.04	1.6
ILEX DECIDUA	0	0	0	0	0.12	4.7
IPOMOEA LACUNOSA	0	0	0	0	0.04	1.6
IPOMOEA PURPUREA	0	0	0	0	0.04	1.6

JUSTICIA OVATA	0	0	0	0	0.35	6.3
LACTUCA CANADENSIS	0	0	0	0	6.88	29.7
LAPORTEA CANADENSIS	0	0	0	0	0.35	6.3
LEERSIA LENTICULARIS	0	0	0	0	0.39	7.8
LEERSIA VIRGINICA	0	0	0	0	0.20	7.8
LINDERA BENZOIN	0	0	0	0	0.04	1.6
LIQUIDAMBAR STYRACIFLUA	0	0	0	0	0.04	1.6
MATELEA GONOCARPA	0	0	12.50	4.7	0.27	3.1
MORUS RUBRA	0	0	0	0	0.08	3.1
PASSIFLORA LUTEA	0	0	0	0	0.04	1.6
PARTHENOCISSUS QUINQUEFOLIA	101.56	32.8	660.94	48.4	3.01	28.1
PHYSALIS ANGULATA	0	0	0	0	0.23	1.6
PHYSALIS PUBESCENS	0	0	0	0	0.08	3.1
PILEA PUMILA	0	0	0	0	0.27	3.1
POLYGONUM VIRGINIANUM	0	0	0	0	7.66	39.1
RHUS COPPALINA	0	0	0	0	0.04	1.6
TOXICODENDRON RADICANS	145.31	28.1	318.75	29.7	7.23	48.4
RUBUS SP	0	0	0	0	0.82	25.0
RUBUS TRIVIALIS	0	0	0	0	3.40	37.5
SAMBUCUS CANADENSIS	0	0	0	0	0.04	1.6
SANICULA CANADENSIS	0	0	0	0	0.04	1.6
SAURURUS CERNUUS	0	0	0	0	0.35	6.3
SENECIO GLABELLUS	0	0	0	0	0.04	1.6
SICYOS ANGULATUS	0	0	1.56	1.6	0.04	1.6
SIDA SPINOSA	0	0	0	0	0.04	1.6
SMILAX BONA-NOX	0	0	3.13	3.1	0.08	3.1
SMILAX HISPIDA	0	0	3.13	1.6	0.55	14.1
SMILAX ROTUNDIFOLIA	0	0	4.69	3.1	0.20	7.8
SPERMACOCE GLABRA	0	0	0	0	0.04	1.6
TEUCRIUM CANADENSE	0	0	0	0	0.04	1.6
TRACHELOSPERMUM DIFFORME	0	0	7.81	3.1	2.19	6.3
TRADESCANTIA VIRGINIANA	0	0	0	0	0.70	6.3
ULMUS AMERICANA	0	0	0	0	0.08	3.1
URTICA DIOICA	0	0	0	0	0.16	6.3
URTICA CHAMAEDRYOIDES	0	0	0	0	0.16	6.3
VERNONIA ALTISSIMA	0	0	0	0	0.04	1.6
VICIA SP	0	0	0	0	0.04	1.6
VIOLA SP	0	0	0	0	1.25	12.5
VIOLA PAPILIONACEA	0	0	0	0	1.29	21.9
VITIS RIPARIA	45.31	25.0	9.38	4.7	0.08	3.1
VITIS ROTUNDIFOLIA	1.56	1.6	3.13	1.6	0.04	1.6
TOTAL	314.06	65.6	1159.38	81.3	57.50	100.0
STD DEV	390.71		1520.83			

SUBTYPE: 23
NUMBER OF PLOTS: 16

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.31	12.5
ACER NEGUNDO	0	0	0	0	2.50	12.5
ACER SACCHARINUM	0	0	0	0	0.63	25.0
AMPELOPSIS ARBOREA	0	0	0	0	0.16	6.3
AMBROSIA TRIFIDA	0	0	0	0	0.16	6.3
ARUNDINARIA GIGANTEA	0	0	0	0	0.16	6.3
ASIMINA TRILOBA	0	0	0	0	0.16	6.3
ASTER SIMPLEX	0	0	0	0	0.78	31.3
BIDENS SP	0	0	0	0	1.56	31.3
BOEHMERIA CYLINDRICA	0	0	0	0	0.16	6.3
BRUNNICHIA CIRRHOSA	0	0	25.00	6.3	0.31	12.5
CARYA ILLINOENSIS	0	0	0	0	0.31	12.5
CAMPSIS RADICANS	6.25	6.3	0	0	0.94	37.5
CAREX SP	0	0	0	0	0.31	12.5
CELTIS LAEVIGATA	0	0	0	0	2.34	31.3
COCCULUS CAROLINUS	0	0	0	0	0.16	6.3
COMMELINA VIRGINICA	0	0	0	0	0.16	6.3
DICLIPTERA BRACHIATA	0	0	0	0	0.94	6.3
ELEPHANTOPUS CAROLINIANUS	0	0	0	0	0.31	12.5
EUPATORIUM SEROTINUM	0	0	0	0	0.16	6.3
FORESTIERA ACUMINATA	0	0	0	0	0.16	6.3
ILEX DECIDUA	0	0	0	0	1.09	12.5
IPOMOEA SP	0	0	18.75	12.5	2.34	31.3
IPOMOEA HEDERACEA	0	0	0	0	0.63	25.0
LAPORTEA CANADENSIS	0	0	0	0	5.47	37.5
LEERSIA VIRGINICA	0	0	0	0	0.16	6.3
MACLURA POMIFERA	0	0	0	0	0.16	6.3
PANICUM SP	0	0	0	0	0.63	25.0
PARTHENOCISSUS QUINQUEFOLIA	12.50	12.5	43.75	18.8	0.94	6.3
POLYGONUM VIRGINIANUM	0	0	0	0	2.19	25.0
TOXICODENDRON RADICANS	268.75	37.5	243.75	31.3	7.66	37.5
RUBUS TRIVIALIS	0	0	0	0	0.31	12.5
SAMBUCUS CANADENSIS	0	0	0	0	0.16	6.3
SANICULA CANADENSIS	0	0	0	0	0.16	6.3
SICYOS ANGULATUS	0	0	0	0	1.25	18.8
SMILAX HISPIDA	0	0	12.50	6.3	0.16	6.3

SMILAX ROTUNDIFOLIA	0	0	6.25	6.3	0	0
TAXODIUM DISTICHUM	0	0	0	0	0.78	31.3
ULMUS AMERICANA	0	0	0	0	0.16	6.3
URTICA CHAMAEDRYOIDES	0	0	0	0	0.31	12.5
VITIS CINEREA	6.25	6.3	0	0	0	0
VIOLA SP	0	0	0	0	0.31	12.5
VIOLA PAPILIONACEA	0	0	0	0	1.56	31.3
VITIS RIPARIA	43.75	12.5	12.50	6.3	0.31	12.5
TOTAL	337.50	43.8	362.50	50.0	39.33	100.0
STD DEV	531.51		658.15			

SUBTYPE: 24
NUMBER OF PLOTS: 14

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
AMPELOPSIS ARBOREA	7.14	7.1	14.29	7.1	0	0
AMPELOPSIS CORDATA	0	0	0	0	0.18	7.1
BERCHEMIA SCANDENS	42.86	21.4	21.43	7.1	0.18	7.1
BIGNONIA CAPREOLATA	0	0	7.14	7.1	0.36	14.3
BOEHMERIA CYLINDRICA	0	0	0	0	0.18	7.1
BRUNNICHIA CIRRHOSA	0	0	0	0	0.36	14.3
CARYA AQUATICA	0	0	0	0	0.36	14.3
CARYA ILLINOENSIS	0	0	0	0	0.54	21.4
CARYA LACINIOSA	0	0	0	0	1.25	14.3
CAMPSIS RADICANS	0	0	0	0	1.61	28.6
CAREX SP	0	0	0	0	0.36	14.3
CELTIS LAEVIGATA	0	0	0	0	0.54	21.4
CEPHALANTHUS OCCIDENTALIS	0	0	0	0	0.18	7.1
COCCULUS CAROLINUS	0	0	35.71	7.1	0	0
CORNUS DRUMMONDII	0	0	0	0	0.18	7.1
DIOSCOREA QUATERNATA	0	0	0	0	0.36	14.3
DIODIA VIRGINIANA	0	0	0	0	0.18	7.1
ERICHTITES HIERACIFOLIA	0	0	0	0	0.18	7.1
ILEX DECIDUA	0	0	0	0	0.54	21.4
IMPATIENS CAPENSIS	0	0	0	0	0.18	7.1
JUSTICIA OVATA	0	0	0	0	0.18	7.1
LEERSIA VIRGINICA	0	0	0	0	0.18	7.1
LIGUSTRUM SINENSE	0	0	0	0	0.18	7.1
LUDWIGIA ALTERNIFOLIA	0	0	0	0	0.36	14.3
MIKANIA SCANDENS	0	0	0	0	1.25	14.3
PARTHENOCISSUS QUINQUEFOLIA	0	0	28.57	14.3	1.25	14.3
PENTHORUM SEDOIDES	0	0	0	0	2.68	7.1
POLYGONUM HYDROPIPEROIDES	0	0	0	0	0.18	7.1
QUERCUS NUTTALLII	0	0	0	0	0.36	14.3
TOXICODENDRON RADICANS	307.14	35.7	71.43	28.6	15.89	64.3
RUELLIA STREPENS	0	0	0	0	0.18	7.1
SAURURUS CERNUUS	0	0	0	0	0.18	7.1
SENECIO GLABELLUS	0	0	0	0	0.36	14.3
SMILAX BONA-NOX	0	0	28.57	14.3	0.18	7.1
SMILAX ROTUNDIFOLIA	0	0	335.71	57.1	2.68	35.7
SPILANTHES AMERICANA	0	0	0	0	0.18	7.1

TEUCRIUM CANADENSE	0	0	0	0	0.18	7.1
TRACHELOSPERMUM DIFFORME	0	0	0	0	1.25	14.3
ULMUS AMERICANA	0	0	0	0	0.18	7.1
VIOLA SP	0	0	0	0	0.18	7.1
VITIS RIPARIA	21.43	21.4	35.71	21.4	1.43	21.4
VITIS ROTUNDIFOLIA	14.29	7.1	0	0	0	0
TOTAL	392.86	64.3	578.57	85.7	37.14	92.9
STD DEV	788.83		501.04			

SUBTYPE: 25
NUMBER OF PLOTS: 10

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER RUBRUM	0	0	0	0	0.50	20.0
ACER SACCHARINUM	0	0	0	0	2.25	40.0
AMPELOPSIS ARBOREA	0	0	0	0	0.25	10.0
AMPELOPSIS CORDATA	0	0	0	0	0.50	20.0
BERCHEMIA SCANDENS	20.00	20.0	50.00	10.0	0	0
BIDENS ARISTOSA	0	0	0	0	0.50	20.0
BOEHMERIA CYLINDRICA	0	0	0	0	0.25	10.0
BRUNNICHIA CIRRHOSA	0	0	110.00	10.0	2.25	40.0
CARYA AQUATICA	0	0	0	0	0.25	10.0
CAMPSIS RADICANS	0	0	10.00	10.0	6.50	70.0
CAREX TORTA	0	0	0	0	2.00	30.0
CAREX SP	0	0	0	0	0.25	10.0
CELTIS LAEVIGATA	0	0	0	0	0.25	10.0
CEPHALANTHUS OCCIDENTALIS	0	0	0	0	0.25	10.0
COCCULUS CAROLINUS	0	0	0	0	0.25	10.0
GALACTIA MOHLENBROCKII	0	0	0	0	0.25	10.0
DIOSCOREA QUATERNATA	0	0	0	0	0.25	10.0
DIOSPYROS VIRGINIANA	0	0	0	0	0.25	10.0
FRAXINUS PENNSYLVANICA	0	0	0	0	0.25	10.0
LEERSIA LENTICULARIS	0	0	0	0	3.50	40.0
LEERSIA VIRGINICA	0	0	0	0	0.25	10.0
LYCOPUS RUBELLUS	0	0	0	0	0.25	10.0
MORUS RUBRA	0	0	0	0	0.25	10.0
NYSSA AQUATICA	0	0	0	0	0.25	10.0
PARTHENOCISSUS QUINQUEFOLIA	0	0	0	0	0.50	20.0
PLANERA AQUATICA	0	0	0	0	0.75	30.0
QUERCUS NUTTALLII	0	0	0	0	0.25	10.0
TOXICODENDRON RADICANS	70.00	10.0	130.00	40.0	8.50	60.0
STYRAX AMERICANA	0	0	0	0	1.50	10.0
TAXODIUM DISTICHUM	0	0	0	0	0.25	10.0
TRACHELOSPERMUM DIFFORME	0	0	0	0	1.50	60.0
TRIADENUM WALTERI	0	0	0	0	3.75	10.0
ULMUS AMERICANA	0	0	0	0	1.75	20.0
VITIS PALMATA	20.00	10.0	0	0	4.50	40.0
VITIS RIPARIA	20.00	20.0	0	0	0.25	10.0
TOTAL	130.00	40.0	300.00	60.0	45.25	100.0
STD DEV	226.32		473.76			

SUBTYPE: 26
NUMBER OF PLOTS: 12

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ARISAEMA DRACONTIUM	0	0	0	0	0.21	8.3
BERCHEMIA SCANDENS	25.00	8.3	75.00	33.3	0.42	16.7
BIGNONIA CAPREOLATA	0	0	33.33	16.7	2.08	83.3
BRUNNICHIA CIRRHOSA	0	0	0	0	0.21	8.3
CARYA CORDIFORMIS	0	0	0	0	0.21	8.3
CARYA LACINIOSA	0	0	0	0	0.42	16.7
CAMPSIS RADICANS	0	0	0	0	1.25	50.0
CAREX SP	0	0	0	0	0.83	33.3
CERCIS CANADENSIS	0	0	0	0	0.21	8.3
CELTIS LAEVIGATA	0	0	0	0	0.42	16.7
COCCULUS CAROLINUS	0	0	16.67	8.3	0.42	16.7
GALACTIA MOHLENBROCKII	0	0	0	0	3.75	33.3
DIOSCOREA QUATERNATA	0	0	0	0	0.63	25.0
ILEX DECIDUA	0	0	0	0	0.21	8.3
IPOMOEA LACUNOSA	0	0	0	0	0.21	8.3
MORUS RUBRA	0	0	0	0	0.21	8.3
PARTHENOCISSUS QUINQUEFOLIA	0	0	8.33	8.3	0.42	16.7
QUERCUS NUTTALLII	0	0	0	0	0.21	8.3
QUERCUS PHELLOS	0	0	0	0	0.21	8.3
TOXICODENDRON RADICANS	16.67	16.7	258.33	66.7	22.29	91.7
RUELLIA STREPENS	0	0	0	0	0.63	25.0
SMILAX GLAUCA	0	0	0	0	0.63	25.0
SMILAX HISPIDA	0	0	16.67	8.3	0	0
SMILAX ROTUNDIFOLIA	0	0	16.67	8.3	0.42	16.7
TRACHELOSPERMUM DIFFORME	0	0	0	0	1.04	41.7
VIOLA SP	0	0	0	0	0.83	33.3
VITIS RIPARIA	58.33	25.0	16.67	16.7	0	0
VITIS ROTUNDIFOLIA	16.67	8.3	0	0	0.42	16.7
TOTAL	116.67	50.0	441.67	91.7	38.75	100.0
STD DEV	180.07		328.79			

SUBTYPE: 27
NUMBER OF PLOTS: 36

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.28	11.1
ACER SACCHARINUM	0	0	0	0	0.07	2.8
AMPELOPSIS ARBOREA	5.56	5.6	13.89	8.3	1.53	19.4
ARUNDINARIA GIGANTEA	0	0	0	0	2.64	11.1
ASTER LATERIFLORUS	0	0	0	0	0.14	5.6
ASTER SIMPLEX	0	0	0	0	0.28	11.1
BERCHEMIA SCANDENS	2.78	2.8	13.89	8.3	0.28	11.1
BIDENS FRONDOSA	0	0	0	0	0.14	5.6
BIGNONIA CAPREOLATA	0	0	0	0	0.21	8.3
BOEHMERIA CYLINDRICA	0	0	0	0	3.13	19.4
BRUNNICHIA CIRRHOSA	0	0	25.00	8.3	1.25	22.2
CAMPSIS RADICANS	25.00	11.1	30.56	16.7	2.22	22.2
CELTIS LAEVIGATA	0	0	0	0	0.56	22.2
CELTIS OCCIDENTALIS	0	0	0	0	0.07	2.8
CLEMATIS SP	0	0	0	0	0.07	2.8
COCCULUS CAROLINUS	0	0	30.56	11.1	0.14	5.6
COMMELINA VIRGINICA	0	0	0	0	1.67	13.9
CUSCUTA SP	0	0	0	0	0.07	2.8
CYPERUS ROTUNDUS	0	0	0	0	0.07	2.8
DIOSPYROS VIRGINIANA	0	0	0	0	0.07	2.8
ELEPHANTOPUS CAROLINIANUS	0	0	0	0	2.57	11.1
FRAXINUS PENNSYLVANICA	0	0	0	0	0.49	5.6
GELSEMIUM SEMPERVIRENS	0	0	0	0	0.07	2.8
GEUM CANADENSE	0	0	0	0	0.14	5.6
GLEDITSIA AQUATICA	0	0	0	0	0.21	8.3
IPOMOEA LACUNOSA	0	0	0	0	0.21	8.3
IRESINE RHIZOMATOSA	0	0	0	0	0.14	5.6
LAPORTEA CANADENSIS	0	0	0	0	7.15	44.4
LEERSIA VIRGINICA	0	0	0	0	1.46	19.4
LINDERA BENZOIN	0	0	0	0	0.42	2.8
MATELEA GONOCARPA	0	0	8.33	5.6	0	0
MORUS RUBRA	0	0	0	0	0.14	5.6
PANICUM SP	0	0	0	0	0.07	2.8
PARTHENOCISSUS QUINQUEFOLIA	130.56	41.7	697.22	44.4	2.01	38.9
PILEA PUMILA	0	0	0	0	0.21	3.3
PLANERA AQUATICA	0	0	0	0	0.07	2.8

POLYGONUM VIRGINIANUM	0	0	0	0	20.90	47.2
TOXICODENDRON RADICANS	180.56	38.9	225.00	33.3	5.63	38.9
RUBUS TRIVIALIS	0	0	0	0	3.61	50.0
SANICULA CANADENSIS	0	0	0	0	0.14	5.6
SAURURUS CERNUUS	0	0	0	0	0.21	8.3
SMILAX BONA-NOX	8.33	2.8	150.00	11.1	0.56	22.2
SMILAX HISPIDA	0	0	25.00	5.6	0.42	16.7
SMILAX ROTUNDIFOLIA	0	0	19.44	8.3	0.56	8.3
STELLARIA MEDIA	0	0	0	0	0.07	2.8
TAXODIUM DISTICHUM	0	0	0	0	0.21	8.3
TRADESCANTIA OHIENSIS	0	0	0	0	0.42	2.8
TRACHELOSPERMUM DIFFORME	0	0	16.67	2.8	0.21	8.3
URTICA CHAMAEDRYOIDES	0	0	0	0	0.14	5.6
VIOLA PAPILIONACEA	0	0	0	0	4.79	33.3
VITIS RIPARIA	22.22	16.7	0	0	0.21	8.3
VITIS ROTUNDIFOLIA	19.44	5.6	0	0	0	0
TOTAL	394.44	72.2	1255.56	77.8	68.26	100.0
STD DEV	476.26		1173.14			

SUBTYPE: 28
NUMBER OF PLOTS: 61

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.12	4.9
ACER NEGUNDO	0	0	0	0	0.25	9.8
AMPELOPSIS ARBOREA	45.90	6.6	36.07	9.8	0.41	8.2
AMBROSIA TRIFIDA	0	0	0	0	1.93	6.6
AMPELOPSIS CORDATA	13.11	9.8	0	0	0	0
ASIMINA TRILOBA	0	0	0	0	0.49	3.3
ASTER SIMPLEX	0	0	0	0	1.52	14.8
BERCHEMIA SCANDENS	3.28	1.6	6.56	4.9	0	0
BIDENS ARISTOSA	0	0	0	0	0.04	1.6
BOEHMERIA CYLINDRICA	0	0	0	0	1.52	27.9
BRUNNICHIA CIRRHOSA	0	0	70.49	19.7	1.48	26.2
CARYA ILLINOENSIS	0	0	0	0	0.86	11.5
CAMPSIS RADICANS	18.03	9.8	45.90	19.7	6.64	41.0
CAREX SP	0	0	0	0	0.12	4.9
CELTIS LAEVIGATA	0	0	0	0	0.57	23.0
CERASTIUM SEMIDECANDRUM	0	0	0	0	0.04	1.6
COCCULUS CAROLINUS	9.84	3.3	24.59	11.5	0.49	19.7
CORNUS DRUMMONDII	0	0	0	0	0.08	3.3
COMMELINA COMMUNIS	0	0	0	0	0.04	1.6
COMMELINA DIFFUSA	0	0	0	0	0.08	3.3
COMMELINA VIRGINICA	0	0	0	0	2.09	13.1
DIODIA VIRGINIANA	0	0	0	0	0.16	6.6
DIOSPYROS VIRGINIANA	0	0	0	0	0.16	6.6
ECHINOCHLOA CRUS-GALLI	0	0	0	0	0.04	1.6
ECLIPTA PROSTRATA	0	0	0	0	0.04	1.6
ERICHTITES HIERACIFOLIA	0	0	0	0	0.04	1.6
FORESTIERA ACUMINATA	0	0	0	0	0.41	8.2
FRAXINUS PENNSYLVANICA	0	0	0	0	0.12	4.9
GEUM CANADENSE	0	0	0	0	0.74	6.6
GLEDITSIA TRIACANTHOS	0	0	0	0	0.08	3.3
UNKNOWN GRAMINOID	0	0	0	0	0.29	3.3
HACKLIA VIRGINIANA	0	0	0	0	0.78	6.6
IPOMOEA LACUNOSA	0	0	0	0	0.08	3.3
IPOMOEA PURPUREA	0	0	0	0	0.04	1.6
IVA ANNUA	0	0	0	0	0.04	1.6
JUSTICIA OVATA	0	0	0	0	0.12	4.9

LACTUCA CANADENSIS	0	0	0	0	1.15	6.6
LAPORTEA CANADENSIS	0	0	0	0	10.12	23.0
LEERSIA LENTICULARIS	0	0	0	0	0.08	3.3
LEERSIA VIRGINICA	0	0	0	0	0.61	16.4
LINDERA BENZOIN	0	0	0	0	0.04	1.6
MALUS CORONARIA	0	0	0	0	0.04	1.6
MATELEA GONOCARPA	0	0	3.28	3.3	0.04	1.6
MORUS RUBRA	0	0	0	0	0.04	1.6
OXALIS STRICTA	0	0	0	0	0.04	1.6
PANICUM SP	0	0	0	0	1.56	14.8
PARTHENOCISSUS QUINQUEFOLIA	104.92	23.0	588.52	44.3	1.52	27.9
PHYTOLACCA AMERICANA	0	0	0	0	0.04	1.6
POLYGONUM HYDROPIPEROIDES	0	0	0	0	0.04	1.6
POLYGONUM VIRGINIANUM	0	0	0	0	11.80	27.9
QUERCUS NUTTALLII	0	0	0	0	0.04	1.6
TOXICODENDRON RADICANS	100.00	21.3	177.05	24.6	3.61	34.4
RUBUS SP	0	0	0	0	1.23	18.0
RUBUS TRIVIALIS	0	0	0	0	3.48	37.7
SANICULA CANADENSIS	0	0	0	0	0.08	3.3
SAURURUS CERNUUS	0	0	0	0	0.70	11.5
SENECIO GLABELLUS	0	0	0	0	0.12	4.9
SICYOS ANGULATUS	0	0	0	0	0.12	4.9
SMILAX BONA-NOX	0	0	26.23	3.3	0.04	1.6
SMILAX HISPIDA	3.28	1.6	24.59	6.6	0.45	18.0
SMILAX ROTUNDIFOLIA	0	0	14.75	3.3	0.08	3.3
SOLANUM AMERICANUM	0	0	0	0	0.08	3.3
SOLIDAGO CANADENSIS	0	0	0	0	0.29	3.3
STACHYS TENUIFOLIA	0	0	0	0	0.04	1.6
TRADESCANTIA OHIENSIS	0	0	0	0	0.04	1.6
TRACHELOSPERMUM DIFFORME	0	0	0	0	0.04	1.6
TRADESCANTIA VIRGINIANA	0	0	0	0	0.04	1.6
UNKNOWN FORB	0	0	0	0	0.25	1.6
ULMUS AMERICANA	0	0	0	0	0.08	3.3
URTICA DIOICA	0	0	0	0	0.61	16.4
URTICA CHAMAEDRYOIDES	0	0	0	0	0.08	3.3
VERNONIA GIGANTEA	0	0	0	0	0.04	1.6
VIOLA SP	0	0	0	0	0.04	1.6
VIOLA PAPILIONACEA	0	0	0	0	0.29	11.5
VITIS RIPARIA	57.38	23.0	32.79	6.6	0.08	3.3
VITIS ROTUNDIFOLIA	3.28	3.3	0	0	0.04	1.6
TOTAL	359.02	60.7	1050.82	83.6	61.02	98.4
STD DEV	452.17		1252.68			

SUBTYPE: 29
NUMBER OF PLOTS: 25

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	0.80	12.0
ACER SACCHARINUM	0	0	0	0	1.20	28.0
AMPELOPSIS CORDATA	8.00	4.0	0	0	0	0
APIOS AMERICANA	0	0	4.00	4.0	0	0
BRUNNICHIA CIRRHOSA	0	0	0	0	0.10	4.0
CARYA ILLINOENSIS	0	0	0	0	0.20	8.0
CAMPSIS RADICANS	80.00	8.0	40.00	24.0	8.80	28.0
CYNANCHUM LAEVE	0	0	0	0	0.10	4.0
FRAXINUS PENNSYLVANICA	0	0	0	0	0.10	4.0
IPOMOEA SP	0	0	0	0	0.50	20.0
IPOMOEA LACUNOSA	0	0	0	0	1.70	12.0
IPOMOEA PURPUREA	0	0	0	0	0.10	4.0
LACTUCA CANADENSIS	0	0	0	0	0.80	12.0
LEERSIA LENTICULARIS	0	0	0	0	0.10	4.0
MATELEA GONOCARPA	0	0	4.00	4.0	0	0
MORUS RUBRA	0	0	0	0	0.20	8.0
PANICUM LANUGINOSUM	0	0	0	0	0.10	4.0
PANICUM SP	0	0	0	0	0.20	8.0
PARTHENOCISSUS QUINQUEFOLIA	0	0	8.00	8.0	0.60	4.0
TOXICODENDRON RADICANS	40.00	20.0	384.00	32.0	13.90	60.0
RUBUS SP	0	0	0	0	0.20	8.0
RUBUS TRIVIALIS	0	0	0	0	0.10	4.0
SICYOS ANGULATUS	0	0	0	0	0.10	4.0
SMILAX ROTUNDIFOLIA	0	0	0	0	0.60	4.0
URTICA DIOICA	0	0	0	0	0.10	4.0
VITIS CINEREA	8.00	4.0	0	0	0	0
VITIS RIPARIA	44.00	28.0	36.00	20.0	0.30	12.0
TOTAL	180.00	44.0	476.00	56.0	30.90	92.0
STD DEV	292.97		1289.15			

SUBTYPE: 30
NUMBER OF PLOTS: 25

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.20	8.0
ACER NEGUNDO	0	0	0	0	0.20	8.0
AMPELOPSIS CORDATA	0	0	0	0	0.10	4.0
ASIMINA TRILOBA	0	0	0	0	0.30	12.0
ASTER SIMPLEX	0	0	0	0	0.70	8.0
BIDENS FRONDOSA	0	0	0	0	0.20	8.0
BOEHMERIA CYLINDRICA	0	0	0	0	0.70	8.0
BRUNNICHIA CIRRHOSA	0	0	12.00	8.0	0.30	12.0
CAMPSIS RADICANS	32.00	12.0	92.00	36.0	2.00	40.0
CELTIS LAEVIGATA	0	0	0	0	0.20	8.0
COCCULUS CAROLINUS	0	0	4.00	4.0	0.10	4.0
COMMELINA VIRGINICA	0	0	0	0	0.10	4.0
CUSCUTA SP	0	0	0	0	0.10	4.0
FORESTIERA ACUMINATA	0	0	0	0	0.20	8.0
GYMNOCLADUS DIOICA	0	0	0	0	0.10	4.0
IPOMOEA SP	0	0	0	0	0.10	4.0
IPOMOEA LACUNOSA	0	0	0	0	0.10	4.0
LEERSIA LENTICULARIS	0	0	0	0	0.10	4.0
LEERSIA VIRGINICA	0	0	0	0	0.10	4.0
LINDERA BENZOIN	0	0	0	0	0.10	4.0
PANICUM SP	0	0	0	0	0.80	12.0
PARTHENOCISSUS QUINQUEFOLIA	120.00	32.0	268.00	40.0	2.90	40.0
TOXICODENDRON RADICANS	236.00	32.0	436.00	40.0	12.90	60.0
RUBUS TRIVIALIS	0	0	0	0	0.20	8.0
SAMBUCUS CANADENSIS	0	0	0	0	0.90	16.0
SASSAFRAS ALBIDUM	0	0	0	0	0.10	4.0
SICYOS ANGULATUS	0	0	0	0	0.10	4.0
SMILAX HISPIDA	0	0	16.00	4.0	0.30	12.0
SOLANUM AMERICANUM	0	0	0	0	0.10	4.0
TRADESCANTIA VIRGINIANA	0	0	0	0	0.10	4.0
UNKNOWN FORB	0	0	0	0	0.10	4.0
VIOLA PAPILIONACEA	0	0	0	0	0.10	4.0
VITIS RIPARIA	60.00	24.0	48.00	20.0	0.30	12.0
TOTAL	448.00	76.0	876.00	84.0	25.40	84.0
STD DEV	437.91		1146.11			

SUBTYPE: 31
NUMBER OF PLOTS: 35

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER SACCHARINUM	0	0	0	0	0.29	11.4
AMPELOPSIS ARBOREA	0	0	0	0	0.07	2.9
AMPELOPSIS CORDATA	8.57	2.9	5.71	2.9	0	0
ARISAEMA DRACONTIUM	0	0	0	0	0.21	8.6
ARISAEMA TRIPHYLLUM	0	0	0	0	0.43	2.9
ARUNDINARIA GIGANTEA	0	0	0	0	0.21	8.6
ASIMINA TRILOBA	0	0	0	0	6.93	17.1
ASTER SIMPLEX	0	0	0	0	1.64	22.9
ASTER SP	0	0	0	0	0.07	2.9
BOEHMERIA CYLINDRICA	0	0	0	0	0.07	2.9
BRUNNICHIA CIRRHOSA	22.86	8.6	22.86	11.4	0.86	5.7
CARYA ILLINOENSIS	0	0	0	0	0.07	2.9
CAMPSIS RADICANS	17.14	11.4	31.43	11.4	5.21	42.9
CELTIS LAEVIGATA	0	0	0	0	0.14	5.7
COCCULUS CAROLINUS	0	0	14.29	5.7	0.07	2.9
CUSCUTA SP	0	0	0	0	0.14	5.7
CYNANCHUM LAEVE	0	0	0	0	0.43	2.[illegible]
DECUMARIA BARBARA	0	0	2.86	2.9	0.64	11.4
FORESTIERA ACUMINATA	0	0	0	0	0.07	2.9
IPOMOEA SP	0	0	25.71	5.7	0.50	5.7
IPOMOEA LACUNOSA	0	0	0	0	0.14	5.7
IRESINE RHIZOMATOSA	0	0	0	0	0.07	2.9
LACTUCA CANADENSIS	0	0	0	0	5.36	34.3
LAPORTEA CANADENSIS	0	0	0	0	2.00	11.4
LEERSIA VIRGINICA	0	0	0	0	0.07	2.9
MATELEA GONOCARPA	0	0	2.86	2.9	0.07	2.9
MENISPERMUM CANADENSE	0	0	0	0	0.07	2.9
PANICUM SP	0	0	0	0	2.86	31.4
PARTHENOCISSUS QUINQUEFOLIA	151.43	37.1	454.29	60.0	1.93	62.9
PILEA PUMILA	0	0	0	0	0.07	2.9
POLYGONUM VIRGINIANUM	0	0	0	0	1.00	11.4
TOXICODENDRON RADICANS	182.86	40.0	357.14	51.4	16.93	62.9
RUBUS SP	0	0	0	0	0.43	17.1
RUELLIA STREPENS	0	0	0	0	0.43	2.9
RUBUS TRIVIALIS	0	0	0	0	0.43	17.1
SAMBUCUS CANADENSIS	0	0	0	0	0.07	2.9

SAURURUS CERNUUS	0	0	0	0	1.50	17.1
SICYOS ANGULATUS	0	0	2.86	2.9	0.21	8.6
SMILAX BONA-NOX	40.00	2.9	20.00	5.7	0.21	8.6
SMILAX HISPIDA	8.57	5.7	57.14	20.0	2.07	28.6
SMILAX ROTUNDIFOLIA	5.71	2.9	40.00	11.4	0.71	14.3
SOLIDAGO CANADENSIS	0	0	0	0	0.07	2.9
UNKNOWN FORB	0	0	0	0	0.07	2.9
URTICA DIOICA	0	0	0	0	1.57	8.6
VITIS AESTIVALIS	0	0	2.86	2.9	0	0
VITIS CINEREA	2.86	2.9	2.86	2.9	1.07	2.9
VIOLA PAPILIONACEA	0	0	0	0	1.36	54.3
VITIS PALMATA	2.86	2.9	2.86	2.9	0	0
VITIS RIPARIA	91.43	40.0	14.29	8.6	1.79	17.1
XANTHIUM STRUMARIUM	0	0	0	0	0.07	2.9
TOTAL	534.29	97.1	1060.00	88.6	60.71	100.0
STD DEV	589.09		999.18			

SUBTYPE: 32
NUMBER OF PLOTS: 44

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	1.08	11.4
ACER NEGUNDO	0	0	0	0	0.85	11.4
ACER SACCHARINUM	0	0	0	0	0.11	4.5
AMPELOPSIS ARBOREA	9.09	2.3	29.55	9.1	0.68	15.9
AMBROSIA ARTEMISIIFOLIA	0	0	0	0	0.11	4.5
AMPELOPSIS CORDATA	11.36	9.1	0	0	0	0
ARISAEMA DRACONTIUM	0	0	0	0	0.06	2.3
ASTER LATERIFLORUS	0	0	0	0	0.85	2.3
ASIMINA TRILOBA	0	0	0	0	0.06	2.3
ASTER SIMPLEX	0	0	0	0	4.26	29.5
BERCHEMIA SCANDENS	20.45	11.4	36.36	11.4	0.63	13.6
BIDENS SP	0	0	0	0	0.06	2.3
BIGNONIA CAPREOLATA	0	0	2.27	2.3	0.11	4.5
BOEHMERIA CYLINDRICA	0	0	0	0	4.77	29.5
BRUNNICHIA CIRRHOSA	0	0	9.09	4.5	0.06	2.3
CARYA ILLINOENSIS	0	0	0	0	2.16	31.8
CAMPSIS RADICANS	9.09	4.5	22.73	11.4	3.41	27.3
CARYA SP	0	0	0	0	0.06	2.3
CELTIS LAEVIGATA	0	0	0	0	1.25	38.6
COCCULUS CAROLINUS	2.27	2.3	25.00	11.4	0.51	20.5
CORNUS DRUMMONDII	0	0	0	0	0.63	13.6
CRATAEGUS MARSHALLII	0	0	0	0	0.06	2.3
CROTON GLANDULOSA	0	0	0	0	0.06	2.3
CUSCUTA SP	0	0	0	0	0.06	2.3
CYNODON DACTYLON	0	0	0	0	1.19	4.5
CYNANCHUM LAEVE	0	0	0	0	0.06	2.3
CYPERUS ROTUNDUS	0	0	0	0	3.13	6.8
DESMODIUM SP	0	0	0	0	0.06	2.3
DICLIPTERA BRACHIATA	0	0	0	0	0.06	2.3
DIODIA VIRGINIANA	0	0	0	0	0.06	2.3
ELEPHANTOPUS CAROLINIANUS	0	0	0	0	0.06	2.3
ELYMUS CANADENSIS	0	0	0	0	0.34	2.3
ELYMUS VIRGINICUS	0	0	0	0	0.06	2.3
EUPATORIUM COELESTINUM	0	0	0	0	0.06	2.3
EUPATORIUM SEROTINUM	0	0	0	0	0.06	2.3
GEUM CANADENSE	0	0	0	0	0.11	4.5

GLEDITSIA TRIACANTHOS	0	0	0	0	0.06	2.3
ILEX DECIDUA	0	0	0	0	0.51	9.1
IPOMOEA SP	0	0	0	0	0.06	2.3
IPOMOEA LACUNOSA	0	0	0	0	0.06	2.3
JUSTICIA OVATA	0	0	0	0	0.06	2.3
LAPORTEA CANADENSIS	0	0	0	0	6.48	31.8
LEERSIA LENTICULARIS	0	0	0	0	1.48	15.9
LEERSIA VIRGINICA	0	0	0	0	0.57	11.4
LIQUIDAMBAR STYRACIFLUA	0	0	0	0	0.11	4.5
LONICERA JAPONICA	0	0	170.45	4.5	2.27	4.5
MATELEA GONOCARPA	0	0	4.55	4.5	0	0
MENISPERMUM CANADENSE	0	0	4.55	2.3	0	0
OPLISMENUS SETARIUS	0	0	0	0	0.06	2.3
PANICUM LANUGINOSUM	0	0	0	0	0.85	2.3
PANICUM RIGIDULUM	0	0	0	0	0.06	2.3
PANICUM SP	0	0	0	0	0.11	4.5
PARTHENOCISSUS QUINQUEFOLIA	204.55	29.5	656.82	47.7	1.76	36.4
PHYTOLACCA AMERICANA	0	0	0	0	0.06	2.3
PILEA PUMILA	0	0	0	0	0.06	2.3
POLYGONUM SCANDENS	0	0	0	0	0.06	2.3
POLYGONUM VIRGINIANUM	0	0	0	0	0.51	9.1
TOXICODENDRON RADICANS	109.09	34.1	231.82	31.8	14.20	50.0
RUBUS TRIVIALIS	0	0	0	0	1.59	40.9
SAMBUCUS CANADENSIS	0	0	0	0	0.40	4.5
SAURURUS CERNUUS	0	0	0	0	0.23	9.1
SENECIO GLABELLUS	0	0	0	0	0.91	4.5
SETARIA GENICULATA	0	0	0	0	0.06	2.3
SICYOS ANGULATUS	0	0	2.27	2.3	0.06	2.3
SMILAX BONA-NOX	0	0	4.55	4.5	0.06	2.3
SMILAX HISPIDA	18.18	6.8	4.55	4.5	0.68	15.9
SMILAX ROTUNDIFOLIA	0	0	0	0	0.17	6.8
SOLANUM AMERICANUM	0	0	0	0	0.06	2.3
TEUCRIUM CANADENSE	0	0	0	0	0.11	4.5
TRACHELOSPERMUM DIFFORME	4.55	2.3	0	0	0	0
ULMUS AMERICANA	0	0	0	0	0.06	2.3
URTICA DIOICA	0	0	0	0	0.06	2.3
URTICA CHAMAEDRYOIDES	0	0	0	0	0.06	2.3
VITIS CINEREA	4.55	4.5	0	0	0	0
VICIA SP	0	0	0	0	0.06	2.3
VIOLA SP	0	0	0	0	0.17	6.8
VIOLA PAPILIONACEA	0	0	0	0	5.91	27.3
VITIS RIPARIA	33.64	22.7	34.09	4.5	0.51	9.1
TOTAL	431.82	68.2	1238.64	77.3	67.61	95.5
STD DEV	470.91		1739.85			

SUBTYPE: 33
NUMBER OF PLOTS: 9

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
AMPELOPSIS ARBOREA	0	0	0	0	0.28	11.1
ARISAEMA DRACONTIUM	0	0	0	0	0.28	11.1
ARUNDINARIA GIGANTEA	0	0	0	0	0.28	11.1
ASTER SIMPLEX	0	0	0	0	8.61	33.3
CARYA ILLINOENSIS	0	0	0	0	0.28	11.1
CARYA LACINIOSA	0	0	0	0	0.28	11.1
CAMPSIS RADICANS	0	0	0	0	1.67	11.1
CELTIS LAEVIGATA	0	0	0	0	0.28	11.1
COCCULUS CAROLINUS	0	0	11.11	11.1	0	0
DECUMARIA BARBARA	0	0	0	0	0.28	11.1
LACTUCA CANADENSIS	0	0	0	0	14.72	55.6
LAPORTEA CANADENSIS	0	0	0	0	16.94	44.4
MATELEA GONOCARPA	0	0	11.11	11.1	1.11	44.4
MENISPERMUM CANADENSE	0	0	0	0	0.56	22.2
PANICUM SP	0	0	0	0	2.50	44.4
PARTHENOCISSUS QUINQUEFOLIA	88.89	22.2	1055.56	77.8	3.33	77.8
POLYGONUM VIRGINIANUM	0	0	0	0	0.28	11.1
TOXICODENDRON RADICANS	333.33	55.6	344.44	66.7	24.72	77.8
RUELLIA STREPENS	0	0	0	0	0.28	11.1
SAURURUS CERNUUS	0	0	0	0	0.28	11.1
SMILAX HISPIDA	0	0	11.11	11.1	1.67	11.1
SMILAX ROTUNDIFOLIA	11.11	11.1	33.33	11.1	0.56	22.2
TRIPHORA TRIANTHOPHORA	0	0	0	0	0.28	11.1
URTICA DIOICA	0	0	0	0	4.17	11.1
VIOLA PAPILIONACEA	0	0	0	0	2.50	44.4
VITIS RIPARIA	11.11	11.1	44.44	33.3	0.56	22.2
TOTAL	444.44	55.6	1511.11	100.0	86.67	100.0
STD DEV	458.56		1175.21			

SUBTYPE: 34
NUMBER OF PLOTS: 7

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER RUBRUM	0	0	0	0	0.36	14.3
ARISAEMA DRACONTIUM	0	0	0	0	0.71	28.6
ASIMINA TRILOBA	0	0	0	0	0.36	14.3
BIDENS FRONDOSA	0	0	0	0	0.71	28.6
BRUNNICHIA CIRRHOSA	0	0	0	0	0.36	14.3
CELTIS LAEVIGATA	0	0	0	0	0.36	14.3
COCCULUS CAROLINUS	0	0	0	0	0.36	14.3
FORESTIERA ACUMINATA	0	0	0	0	1.07	42.9
GEUM CANADENSE	0	0	0	0	0.36	14.3
GEUM CANADENSE	0	0	0	0	2.50	28.6
LAPORTEA CANADENSIS	0	0	0	0	0.71	28.6
PARTHENOCISSUS QUINQUEFOLIA	14.29	14.3	128.57	42.9	1.07	42.9
PILEA PUMILA	0	0	0	0	0.36	14.3
TOXICODENDRON RADICANS	300.00	57.1	85.71	42.9	5.00	57.1
SAMBUCUS CANADENSIS	0	0	0	0	5.36	14.3
SANICULA CANADENSIS	0	0	0	0	5.71	28.6
SMILAX ROTUNDIFOLIA	0	0	0	0	0.36	14.3
ULMUS AMERICANA	0	0	0	0	0.36	14.3
VITIS RIPARIA	28.57	14.3	0	0	0	0
TOTAL	342.86	57.1	214.29	71.4	26.07	100.0
STD DEV	515.94		211.57			

SUBTYPE: 35
NUMBER OF PLOTS: 45

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.06	2.2
ACER NEGUNDO	0	0	0	0	0.44	17.8
ACER RUBRUM	0	0	0	0	0.06	2.2
ACER SACCHARINUM	0	0	0	0	0.22	8.9
AMPELOPSIS ARBOREA	13.33	6.7	8.89	4.4	1.33	11.1
AMPELOPSIS CORDATA	24.44	15.6	0	0	0.06	2.2
AMARANTHUS PALMERI	0	0	0	0	0.06	2.2
APIOS AMERICANA	0	0	0	0	0.06	2.2
ARUNDINARIA GIGANTEA	0	0	0	0	1.17	4.4
ASTER LATERIFLORUS	0	0	0	0	1.44	4.4
ASTER SIMPLEX	0	0	0	0	7.61	37.8
BERCHEMIA SCANDENS	2.22	2.2	2.22	2.2	0.28	11.1
BIGNONIA CAPREOLATA	0	0	4.44	2.2	0.89	4.4
BOEHMERIA CYLINDRICA	0	0	0	0	0.44	17.8
BRUNNICHIA CIRRHOSA	0	0	64.44	11.1	0.94	15.6
CARYA AQUATICA	0	0	0	0	0.11	4.4
CARYA ILLINOENSIS	0	0	0	0	0.11	4.4
CAMPSIS RADICANS	8.89	8.9	17.78	11.1	3.50	24.4
CELTIS LAEVIGATA	0	0	0	0	2.17	22.2
CELTIS OCCIDENTALIS	0	0	0	0	0.06	2.2
CLEMATIS CRISPA	0	0	0	0	0.11	4.4
CLEMATIS SP	0	0	0	0	0.05	2.2
CLEMATIS VIRGINIANA	0	0	0	0	0.22	8.9
COCCULUS CAROLINUS	8.89	4.4	6.67	4.4	0.33	13.3
CORNUS DRUMMONDII	0	0	0	0	0.06	2.2
COMMELINA VIRGINICA	0	0	0	0	0.06	2.2
CRATAEGUS SP	0	0	0	0	0.11	4.4
CYPERUS SP	0	0	0	0	0.06	2.2
ECLIPTA PROSTRATA	0	0	0	0	0.06	2.2
EUPATORIUM RUGOSUM	0	0	0	0	0.06	2.2
EUPATORIUM SEROTINUM	0	0	0	0	0.06	2.2
FORESTIERA ACUMINATA	0	0	0	0	0.17	6.7
FRAXINUS PENNSYLVANICA	0	0	0	0	0.06	2.2
ILEX DECIDUA	0	0	0	0	0.11	4.4
IMPATIENS CAPENSIS	0	0	0	0	0.39	4.4
IPOMOEA LACUNOSA	0	0	0	0	0.06	2.2

JUSTICIA OVATA	0	0	0	0	0.33	13.3
LACTUCA CANADENSIS	0	0	0	0	0.06	2.2
LAPORTEA CANADENSIS	0	0	0	0	2.17	13.3
LEERSIA LENTICULARIS	0	0	0	0	0.06	2.2
LEERSIA VIRGINICA	0	0	0	0	0.50	8.9
LINDERNIA DUBIA	0	0	0	0	0.06	2.2
LONICERA JAPONICA	0	0	0	0	0.06	2.2
LUDWIGIA PEPLOIDES	0	0	0	0	0.06	2.2
MATELEA GONOCARPA	0	0	4.44	4.4	0.06	2.2
MOLLUGO VERTICILLATA	0	0	0	0	0.06	2.2
PASSIFLORA LUTEA	0	0	0	0	0.06	2.2
PANICUM SP	0	0	0	0	0.06	2.2
PARTHENOCISSUS QUINQUEFOLIA	171.11	26.7	175.56	40.0	2.28	35.6
PHYSALIS ANGULATA	0	0	0	0	0.06	2.2
POA SP	0	0	0	0	0.06	2.2
POLYGONUM VIRGINIANUM	0	0	0	0	0.22	8.9
QUERCUS LYRATA	0	0	0	0	0.06	2.2
TOXICODENDRON RADICANS	103.89	24.4	177.78	22.2	2.94	42.2
RUBUS TRIVIALIS	0	0	0	0	4.00	51.1
SAMBUCUS CANADENSIS	0	0	0	0	1.61	11.1
SAURURUS CERNUUS	0	0	0	0	0.78	8.9
SENECIO GLABELLUS	0	0	0	0	0.11	4.4
SMILAX BONA-NOX	0	0	2.22	2.2	0.11	4.4
SMILAX HISPIDA	26.67	2.2	5.67	4.4	0.39	15.6
SMILAX ROTUNDIFOLIA	0	0	17.78	6.7	0.06	2.2
SOLIDAGO CANADENSIS	0	0	0	0	0.06	2.2
SPERMACOCE GLABRA	0	0	0	0	0.06	2.2
STYRAX GRANDIFOLIA	0	0	0	0	0.06	2.2
ULMUS AMERICANA	0	0	0	0	0.22	8.9
VICIA SP	0	0	0	0	0.11	4.4
VIOLA SP	0	0	0	0	0.33	2.2
VIOLA PAPILIONACEA	0	0	0	0	0.11	4.4
VITIS PALMATA	0	0	0	0	0.11	4.4
VITIS RIPARIA	64.44	26.7	4.44	4.4	0.22	8.9
VITIS ROTUNDIFOLIA	2.22	2.2	0	0	0.06	2.2
TOTAL	431.11	62.2	493.33	66.7	40.44	97.8
STD DEV	667.70		759.31			

SUBTYPE: 36
NUMBER OF PLOTS: 21

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
AGRIMONIA PARVIFLORA	0	0	0	0	0.12	4.8
AMPELOPSIS ARBOREA	4.76	4.8	0	0	1.19	23.8
AMPELOPSIS CORDATA	14.29	4.8	4.76	4.8	0	0
ASIMINA TRILOBA	0	0	0	0	1.43	9.5
BRUNNICHIA CIRRHOSA	0	0	19.05	9.5	0.60	23.8
CARYA ILLINOENSIS	0	0	0	0	0.43	19.0
CAMPANULA AMERICANA	0	0	0	0	0.71	4.8
CAMPSIS RADICANS	0	0	71.43	9.5	1.55	14.3
CAREX SP	0	0	0	0	0.24	9.5
CELTIS LAEVIGATA	0	0	0	0	0.60	23.8
CHENOPODIUM ALBUM	0	0	0	0	0.12	4.8
CLEMATIS CRISPA	0	0	0	0	0.33	9.5
COCCULUS CAROLINUS	0	0	0	0	0.24	9.5
CORNUS DRUMMONDII	0	0	0	0	0.48	19.0
EUPATORIUM RUGOSUM	0	0	0	0	5.43	14.3
FORESTIERA ACUMINATA	0	0	0	0	0.12	4.8
FRAXINUS PENNSYLVANICA	0	0	0	0	1.79	4.8
GEUM CANADENSE	0	0	0	0	0.95	14.3
IPOMOEA LACUNOSA	0	0	0	0	0.12	4.8
LACTUCA CANADENSIS	0	0	0	0	2.98	4.8
LEERSIA LENTICULARIS	0	0	0	0	1.07	42.9
LEERSIA VIRGINICA	0	0	0	0	3.21	14.3
LINDERNIA DUBIA	0	0	0	0	0.12	4.8
MORUS RUBRA	0	0	0	0	0.36	14.3
PARTHENOCISSUS QUINQUEFOLIA	42.86	14.3	461.90	38.1	1.31	28.6
POLYGONUM VIRGINIANUM	0	0	0	0	3.81	19.0
TOXICODENDRON RADICANS	119.05	19.0	214.29	33.3	7.86	42.9
RUBUS SP	0	0	0	0	14.76	47.6
RUELLIA STREPENS	0	0	0	0	0.24	9.5
RUBUS TRIVIALIS	0	0	0	0	0.36	14.3
SAURURUS CERNUUS	0	0	0	0	0.12	4.8
SMILAX BONA-NOX	0	0	0	0	0.12	4.8
SMILAX HISPIDA	14.29	9.5	4.76	4.8	0.60	23.8
URTICA DIOICA	0	0	0	0	3.45	47.6
VIOLA SP	0	0	0	0	0.12	4.8
VIOLA PAPILIONACEA	0	0	0	0	0.24	9.5
VITIS RIPARIA	23.81	14.3	9.52	9.5	0	0
TOTAL	219.05	38.1	785.71	81.0	57.74	100.0
STD DEV	431.99		913.39			

SUBTYPE: 37
NUMBER OF PLOTS: 15

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	0.50	20.0
ACER SACCHARINUM	0	0	0	0	0.17	6.7
AMPELOPSIS ARBOREA	0	0	46.67	13.3	0.33	13.3
AMPELOPSIS CORDATA	0	0	20.00	13.3	0.50	20.0
ASTER SIMPLEX	0	0	0	0	1.33	20.0
BIGNONIA CAPREOLATA	13.33	6.7	0	0	0.17	6.7
BOEHMERIA CYLINDRICA	0	0	0	0	0.17	6.7
BRUNNICHIA CIRRHOSA	0	0	6.67	6.7	1.00	6.7
CARDIOSPERMUM HALICACABUM	0	0	0	0	0.17	6.7
CARYA ILLINOENSIS	0	0	0	0	1.00	6.7
CAMPSIS RADICANS	0	0	80.00	40.0	16.50	60.0
CARYA SP	0	0	0	0	0.17	6.7
CELTIS LAEVIGATA	0	0	0	0	0.67	26.7
CLEMATIS CRISPA	0	0	0	0	0.17	6.7
COCCULUS CAROLINUS	0	0	40.00	20.0	1.50	26.7
CORNUS DRUMMONDII	0	0	0	0	0.17	6.7
CYNANCHUM LAEVE	0	0	0	0	0.17	6.7
ILEX DECIDUA	0	0	0	0	0.17	6.7
LACTUCA CANADENSIS	0	0	0	0	4.17	6.7
LAPORTEA CANADENSIS	0	0	0	0	6.17	26.7
LEERSIA VIRGINICA	0	0	0	0	0.33	13.3
LINDERA BENZOIN	0	0	0	0	2.67	13.3
PARTHENOCISSUS QUINQUEFOLIA	20.00	13.3	33.33	6.7	2.50	33.3
PRUNELLA VULGARIS	0	0	0	0	0.17	6.7
TOXICODENDRON RADICANS	60.00	13.3	120.00	26.7	23.00	60.0
RUBUS TRIVIALIS	0	0	0	0	1.33	20.0
SAMBUCUS CANADENSIS	0	0	0	0	0.17	6.7
SENECIO GLABELLUS	0	0	0	0	0.17	6.7
SICYOS ANGULATUS	0	0	33.33	6.7	2.67	13.3
SMILAX HISPIDA	0	0	60.00	20.0	1.17	13.3
SMILAX ROTUNDIFOLIA	0	0	0	0	1.00	6.7
TEUCRIUM CANADENSE	0	0	0	0	0.17	6.7
VITIS RIPARIA	53.33	20.0	6.67	6.7	0	0
TOTAL	146.67	33.3	446.67	73.3	70.50	100.0
STD DEV	264.21		415.53			

SUBTYPE: 38
NUMBER OF PLOTS: 3

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.83	33.3
AMPELOPSIS ARBOREA	0	0	200.00	66.7	5.00	33.3
AMPELOPSIS CORDATA	100.00	33.3	166.67	33.3	0	0
ASTER SIMPLEX	0	0	0	0	0.83	33.3
BOEHMERIA CYLINDRICA	0	0	0	0	1.67	66.7
BRUNNICHIA CIRRHOSA	0	0	0	0	5.00	33.3
CARDIOSPERMUM HALICACABUM	0	0	0	0	1.67	66.7
CAMPSIS RADICANS	66.67	33.3	400.00	66.7	0.83	33.3
CELTIS LAEVIGATA	0	0	0	0	0.83	33.3
COCCULUS CAROLINUS	166.67	33.3	666.67	66.7	0.83	33.3
COMMELINA DIFFUSA	0	0	0	0	0.83	33.3
DESMANTHUS ILLINOENSIS	0	0	0	0	60.83	66.7
DIODIA VIRGINIANA	0	0	0	0	5.00	33.3
IPOMOEA LACUNOSA	0	0	266.67	66.7	10.83	100.0
MATELEA GONOCARPA	0	0	66.67	33.3	0.83	33.3
PHYSALIS ANGULATA	0	0	0	0	0.83	33.3
SALIX NIGRA	0	0	0	0	0.83	33.3
SICYOS ANGULATUS	0	0	333.33	33.3	0.83	33.3
VITIS PALMATA	0	0	400.00	33.3	32.50	33.3
VITIS RIPARIA	0	0	266.67	33.3	0	0
XANTHIUM STRUMARIUM	0	0	0	0	29.17	66.7
TOTAL	333.33	33.3	2833.33	133.3	160.83	133.3
STD DEV	577.35		1836.66			

SUBTYPE: 39
NUMBER OF PLOTS: 3

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
CAREX SP	0	0	0	0	5.00	33.3
COMMELINA VIRGINICA	0	0	0	0	0.83	33.3
ELEPHANTOPUS CAROLINIANUS	0	0	0	0	0.83	33.3
GALIUM APARINE	0	0	0	0	0.83	33.3
GEUM CANADENSE	0	0	0	0	0.83	33.3
LEERSIA VIRGINICA	0	0	0	0	6.67	100.0
PARTHENOCISSUS QUINQUEFOLIA	166.67	66.7	1200.00	100.0	0	0
POLYGONUM VIRGINIANUM	0	0	0	0	37.50	100.0
TOXICODENDRON RADICANS	100.00	33.3	133.33	33.3	0	0
RUBUS TRIVIALIS	0	0	0	0	5.00	33.3
SANICULA CANADENSIS	0	0	0	0	18.33	100.0
SMILAX HISPIDA	0	0	0	0	0.33	33.3
TREPOCARPUS AETHUSAE	0	0	0	0	5.00	33.3
URTICA CHAMAEDRYOIDES	0	0	0	0	1.67	66.7
VIOLA SP	0	0	0	0	0.83	33.3
VITIS RIPARIA	33.33	33.3	0	0	0.83	33.3
TOTAL	300.00	66.7	1333.33	100.0	85.00	100.0
STD DEV	300.00		1429.45			

SUBTYPE: 40
NUMBER OF PLOTS: 12

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	0.42	16.7
ASTER SIMPLEX	0	0	0	0	0.63	25.0
BOEHMERIA CYLINDRICA	0	0	0	0	0.63	25.0
BRUNNICHIA CIRRHOSA	25.00	8.3	25.00	8.3	2.50	16.7
CARYA ILLINOENSIS	0	0	0	0	0.42	16.7
CAMPSIS RADICANS	16.67	8.3	16.67	8.3	1.67	25.0
CAREX SP	0	0	0	0	2.92	33.3
CELTIS LAEVIGATA	0	0	0	0	1.25	50.0
CELTIS OCCIDENTALIS	0	0	0	0	0.21	8.3
COCCULUS CAROLINUS	0	0	50.00	16.7	0.42	16.7
CORNUS DRUMMONDII	0	0	0	0	0.21	8.3
COMMELINA VIRGINICA	0	0	0	0	1.25	8.3
CYNANCHUM LAEVE	0	0	16.67	8.3	0.21	8.3
ELEPHANTOPUS CAROLINIANUS	0	0	0	0	0.42	16.7
FRAXINUS PENNSYLVANICA	0	0	0	0	1.46	16.7
GEUM CANADENSE	0	0	0	0	0.21	8.3
ILEX DECIDUA	0	0	0	0	1.46	16.7
IPOMOEA SP	0	0	0	0	1.25	8.3
LAPORTEA CANADENSIS	0	0	0	0	0.63	25.0
LEERSIA VIRGINICA	0	0	0	0	1.88	33.3
MATELEA GONOCARPA	25.00	8.3	8.33	8.3	0.21	8.3
MENISPERMUM CANADENSE	0	0	0	0	0.21	8.3
PANICUM SP	0	0	0	0	0.83	33.3
PARTHENOCISSUS QUINQUEFOLIA	125.00	41.7	1483.33	75.0	2.50	58.3
POLYGONUM HYDROPIPEROIDES	0	0	0	0	0.42	16.7
POLYGONUM VIRGINIANUM	0	0	0	0	22.92	83.3
TOXICODENDRON RADICANS	275.00	58.3	500.00	58.3	2.08	41.7
RUBUS SP	0	0	0	0	2.08	41.7
RUBUS TRIVIALIS	0	0	0	0	2.92	33.3
SANICULA CANADENSIS	0	0	0	0	0.21	8.3
SICYOS ANGULATUS	0	0	58.33	16.7	0.21	8.3
SMILAX HISPIDA	0	0	8.33	8.3	1.25	50.0
TREPOCARPUS AETHUSAE	0	0	0	0	0.21	8.3
TRADESCANTIA VIRGINIANA	0	0	0	0	0.21	8.3
URTICA DIOICA	0	0	0	0	0.21	8.3
URTICA CHAMAEDRYOIDES	0	0	0	0	0.83	33.3
VITIS CINEREA	58.33	8.3	0	0	0	0
VIOLA PAPILIONACEA	0	0	0	0	0.83	33.3
VITIS RIPARIA	33.33	25.0	0	0	0	0
TOTAL	558.33	83.3	2166.67	91.7	58.13	100.0
STD DEV	593.08		1984.64			

SUBTYPE: 41
NUMBER OF PLOTS: 12

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	1.46	16.7
ACER SACCHARINUM	0	0	0	0	0.21	8.3
AMPELOPSIS ARBOREA	0	0	0	0	0.21	8.3
AMPELOPSIS CORDATA	8.33	8.3	0	0	0	0
ARISTOLOCHIA SERPENTARIA	0	0	0	0	0.21	8.3
ASIMINA TRILOBA	0	0	0	0	13.54	25.0
ASTER SIMPLEX	0	0	0	0	4.58	25.0
BIGNONIA CAPREOLATA	0	0	0	0	0.21	8.3
BOEHMERIA CYLINDRICA	0	0	0	0	1.46	16.7
BRUNNICHIA CIRRHOSA	0	0	8.33	8.3	0.42	16.7
CAMPSIS RADICANS	8.33	8.3	16.67	8.3	11.04	41.7
CAREX SP	0	0	0	0	0.21	8.3
CELTIS LAEVIGATA	0	0	0	0	0.63	25.0
COCCULUS CAROLINUS	0	0	8.33	8.3	0	0
CRYPTOTAENIA CANADENSIS	0	0	0	0	3.54	25.0
ELEPHANTOPUS CAROLINIANUS	0	0	0	0	0.21	8.3
FORESTIERA ACUMINATA	0	0	0	0	0.63	25.0
GALIUM APARINE	0	0	0	0	3.13	8.3
GEUM CANADENSE	0	0	0	0	1.25	8.3
LACTUCA CANADENSIS	0	0	0	0	7.50	25.0
LAPORTEA CANADENSIS	0	0	0	0	23.96	50.0
LEERSIA LENTICULARIS	0	0	0	0	0.21	8.3
LEERSIA VIRGINICA	0	0	0	0	2.92	33.3
MATELEA GONOCARPA	0	0	0	0	0.21	8.3
MENISPERMUM CANADENSE	0	0	16.67	8.3	0	0
MORUS RUBRA	0	0	0	0	0.21	8.3
OXALIS STRICTA	0	0	0	0	0.21	8.3
PANICUM SP	0	0	0	0	0.21	8.3
PARTHENOCISSUS QUINQUEFOLIA	58.33	33.3	375.00	50.0	5.63	66.7
POLYGONUM VIRGINIANUM	0	0	0	0	1.67	25.0
TOXICODENDRON RADICANS	125.00	41.7	308.33	41.7	4.79	66.7
RUBUS SP	0	0	0	0	0.63	25.0
RUELLIA STREPENS	0	0	0	0	0.21	8.3
RUBUS TRIVIALIS	0	0	0	0	0.63	25.0
SAURURUS CERNUUS	0	0	0	0	0.21	8.3
SMILAX BONA-NOX	0	0	108.33	33.3	0.21	8.3

SMILAX ROTUNDIFOLIA	0	0	0	0	0.21	8.3
TRACHELOSPERMUM DIFFORME	0	0	0	0	0.21	8.3
TREPOCARPUS AETHUSAE	0	0	0	0	0.42	16.7
TRADESCANTIA VIRGINIANA	0	0	0	0	0.63	25.0
URTICA DIOICA	0	0	0	0	1.25	8.3
VIOLA SP	0	0	0	0	0.83	33.3
VIOLA PAPILIONACEA	0	0	0	0	0.83	33.3
VITIS RIPARIA	58.33	16.7	41.67	16.7	0	0
VITIS ROTUNDIFOLIA	0	0	8.33	8.3	0	0
TOTAL	258.33	66.7	891.67	91.7	96.67	100.0
STD DEV	320.39		892.86			

SUBTYPE: 42
NUMBER OF PLOTS: 8

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
AMPELOPSIS ARBOREA	12.50	12.5	0	0	0	0
AMPELOPSIS CORDATA	125.00	75.0	25.00	12.5	0	0
ASTER SIMPLEX	0	0	0	0	0.63	25.0
BOEHMERIA CYLINDRICA	0	0	0	0	0.31	12.5
BRUNNICHIA CIRRHOSA	0	0	0	0	1.38	12.5
CARDIOSPERMUM HALICACABUM	0	0	0	0	0.31	12.5
CAMPSIS RADICANS	75.00	37.5	0	0	6.88	37.5
CELTIS LAEVIGATA	0	0	0	0	0.31	12.5
COCCULUS CAROLINUS	0	0	12.50	12.5	0.63	25.0
LEERSIA LENTICULARIS	0	0	0	0	0.31	12.5
LEERSIA VIRGINICA	0	0	0	0	0.31	12.5
MATELEA GONOCARPA	0	0	25.00	12.5	0.31	12.5
MELOTHRIA PENDULA	0	0	12.50	12.5	0	0
MORUS RUBRA	0	0	0	0	0.31	12.5
PASSIFLORA LUTEA	0	0	0	0	0.31	12.5
PARTHENOCISSUS QUINQUEFOLIA	37.50	12.5	200.00	37.5	0.94	37.5
PHYSALIS ANGULATA	0	0	0	0	0.31	12.5
TOXICODENDRON RADICANS	287.50	50.0	450.00	50.0	6.88	37.5
RUBUS TRIVIALIS	0	0	0	0	6.25	75.0
SMILAX BONA-NOX	0	0	0	0	0.63	25.0
SMILAX HISPIDA	0	0	0	0	0.63	25.0
TEUCRIUM CANADENSE	0	0	0	0	0.31	12.5
URTICA CHAMAEDRYOIDES	0	0	0	0	0.31	12.5
VIOLA PAPILIONACEA	0	0	0	0	1.25	50.0
VITIS RIPARIA	125.00	50.0	0	0	0	0
TOTAL	662.50	100.0	725.00	100.0	30.31	112.5
STD DEV	492.62		446.41			

SUBTYPE: 43
NUMBER OF PLOTS: 34

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.22	8.8
ACALYPHA OSTRYAEFOLIA	0	0	0	0	0.07	2.9
ACER SACCHARINUM	0	0	0	0	0.29	11.8
AMBROSIA TRIFIDA	0	0	0	0	0.07	2.9
AMPELOPSIS CORDATA	2.94	2.9	0	0	0	0
AMARANTHUS PALMERI	0	0	0	0	0.07	2.9
ASTER SIMPLEX	0	0	0	0	0.15	5.9
BIDENS SP	0	0	0	0	0.66	11.8
BIDENS FRONDOSA	0	0	0	0	3.75	11.8
BOEHMERIA CYLINDRICA	0	0	0	0	5.81	35.3
BRUNNICHIA CIRRHOSA	0	0	252.94	41.2	4.34	44.1
CARDIOSPERMUM HALICACABUM	0	0	8.82	2.9	3.75	35.3
CAMPSIS RADICANS	8.82	8.8	161.76	17.6	10.22	29.4
CAREX SP	0	0	0	0	0.07	2.9
CELTIS LAEVIGATA	0	0	0	0	1.32	11.8
CEPHALANTHUS OCCIDENTALIS	0	0	0	0	1.10	2.9
COCCULUS CAROLINUS	23.53	5.9	32.35	8.8	0.15	5.9
COMMELINA DIFFUSA	0	0	0	0	0.29	11.8
COMMELINA VIRGINICA	0	0	0	0	0.07	2.9
CUSCUTA SP	0	0	0	0	0.15	5.9
CYNANCHUM LAEVE	0	0	0	0	0.15	5.9
CYPERUS STRIGOSUS	0	0	0	0	0.07	2.9
CYPERUS ROTUNDUS	0	0	0	0	4.04	8.8
ECLIPTA PROSTRATA	0	0	0	0	0.07	2.9
FORESTIERA ACUMINATA	0	0	0	0	0.22	8.8
HIBISCUS MILITARIS	0	0	0	0	6.03	17.6
IPOMOEA SP	0	0	0	0	1.69	11.8
IPOMOEA LACUNOSA	0	0	0	0	3.60	20.6
LEERSIA LENTICULARIS	0	0	0	0	5.15	11.8
LEERSIA VIRGINICA	0	0	0	0	0.22	8.8
LINDERNIA DUBIA	0	0	0	0	0.15	5.9
LIPPIA LANCEOLATA	0	0	0	0	1.10	14.7
MOLLUGO VERTICILLATA	0	0	0	0	0.07	2.9
PANICUM RIGIDULUM	0	0	0	0	0.07	2.9
PANICUM SP	0	0	0	0	0.07	2.9
PILEA PUMILA	0	0	0	0	5.22	14.7

PLANERA AQUATICA	0	0	0	0	0.15	5.9
PLUCHEA CAMPHORATA	0	0	0	0	0.07	2.9
TOXICODENDRON RADICANS	5.88	2.9	23.53	11.8	7.87	20.6
SAURURUS CERNUUS	0	0	0	0	1.10	2.9
SENECIO GLABELLUS	0	0	0	0	0.07	2.9
SICYOS ANGULATUS	0	0	0	0	1.76	11.8
SIDA SPINOSA	0	0	0	0	0.07	2.9
SMILAX BONA-NOX	0	0	0	0	0.07	2.9
SOLIDAGO CANADENSIS	0	0	0	0	0.07	2.9
SPERMACOCE GLABRA	0	0	0	0	0.29	11.8
TAXODIUM DISTICHUM	0	0	0	0	0.44	2.9
TRACHELOSPERMUM DIFFORME	0	0	82.35	14.7	1.40	14.7
URTICA DIOICA	0	0	0	0	0.07	2.9
URTICA CHAMAEDRYOIDES	0	0	0	0	0.07	2.9
VITIS PALMATA	0	0	0	0	0.07	2.9
VITIS RIPARIA	17.65	8.8	5.88	2.9	0.66	11.8
XANTHIUM STRUMARIUM	0	0	0	0	0.66	11.8
TOTAL	53.82	20.6	567.65	47.1	75.44	97.1
STD DEV	184.42		960.66			

SUBTYPE: 44
NUMBER OF PLOTS: 24

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.10	4.2
ACER SACCHARINUM	0	0	0	0	0.42	16.7
AMPELOPSIS ARBOREA	0	0	4.17	4.2	0.73	8.3
ASIMINA TRILOBA	0	0	0	0	0.21	8.3
ASTER SIMPLEX	0	0	0	0	3.33	16.7
BERCHEMIA SCANDENS	0	0	37.50	16.7	0.10	4.2
BIDENS FRONDOSA	0	0	0	0	0.63	4.2
BOEHMERIA CYLINDRICA	0	0	0	0	2.92	16.7
BRUNNICHIA CIRRHOSA	4.17	4.2	25.00	20.8	1.35	33.3
CARYA ILLINOENSIS	0	0	0	0	0.10	4.2
CARYA LACINIOSA	0	0	0	0	0.10	4.2
CAMPSIS RADICANS	8.33	8.3	62.50	20.8	4.69	66.7
CELTIS LAEVIGATA	0	0	0	0	2.19	45.8
COCCULUS CAROLINUS	0	0	41.67	8.3	0.31	12.5
CRYPTOTAENIA CANADENSIS	0	0	0	0	0.63	4.2
CYNANCHUM LAEVE	0	0	0	0	0.10	4.2
EUONYMUS AMERICANUS	0	0	0	0	0.10	4.2
FORESTIERA ACUMINATA	0	0	0	0	0.21	8.3
FRAXINUS PENNSYLVANICA	0	0	0	0	0.10	4.2
GEUM CANADENSE	0	0	0	0	0.21	8.3
IMPATIENS CAPENSIS	0	0	0	0	0.73	8.3
IPOMOEA SP	0	0	0	0	0.10	4.2
IPOMOEA LACUNOSA	0	0	0	0	0.63	25.0
LACTUCA CANADENSIS	0	0	0	0	0.73	29.2
LAPORTEA CANADENSIS	0	0	0	0	10.31	20.8
LEERSIA LENTICULARIS	0	0	0	0	0.10	4.2
LINDERA BENZOIN	0	0	0	0	0.83	12.5
LONICERA JAPONICA	0	0	41.67	12.5	3.23	12.5
MENISPERMUM CANADENSE	0	0	0	0	0.10	4.2
MIKANIA SCANDENS	0	0	8.33	4.2	0	0
MORUS RUBRA	0	0	0	0	0.21	8.3
PASSIFLORA LUTEA	0	0	8.33	4.2	0	0
PANICUM SP	0	0	0	0	0.63	25.0
PARTHENOCISSUS QUINQUEFOLIA	75.00	29.2	425.00	58.3	2.71	45.8
PHYTOLACCA AMERICANA	0	0	0	0	0.21	8.3
PILEA PUMILA	0	0	0	0	1.88	16.7

POLYGONUM COCCINEUM	0	0	0	0	0.10	4.2
POLYGONUM VIRGINIANUM	0	0	0	0	0.73	8.3
POLYGONUM SP	0	0	0	0	0.63	4.2
QUERCUS NIGRA	0	0	0	0	0.10	4.2
TOXICODENDRON RADICANS	187.50	45.8	470.83	33.3	13.13	45.8
RUBUS SP	0	0	0	0	0.42	16.7
RUELLIA STREPENS	0	0	0	0	1.15	25.0
RUBUS TRIVIALIS	0	0	0	0	5.52	20.8
SAMBUCUS CANADENSIS	0	0	0	0	0.63	4.2
SAURURUS CERNUUS	0	0	0	0	0.94	16.7
SICYOS ANGULATUS	0	0	8.33	8.3	0.10	4.2
SMILAX BONA-NOX	0	0	8.33	4.2	0.10	4.2
SMILAX HISPIDA	0	0	0	0	0.21	8.3
SMILAX ROTUNDIFOLIA	0	0	4.17	4.2	0	0
TAXODIUM DISTICHUM	0	0	0	0	0.10	4.2
TRACHELOSPERMUM DIFFORME	0	0	0	0	0.21	8.3
ULMUS AMERICANA	0	0	0	0	0.10	4.2
URTICA DIOICA	0	0	0	0	0.52	20.8
VIOLA SP	0	0	0	0	0.10	4.2
VIOLA PAPILIONACEA	0	0	0	0	0.10	4.2
VITIS RIPARIA	20.83	12.5	4.17	4.2	3.13	25.0
VITIS ROTUNDIFOLIA	16.67	4.2	0	0	0	0
TOTAL	312.50	75.0	1150.00	95.8	68.96	100.0
STD DEV	399.25		1020.23			

SUBTYPE: 45
NUMBER OF PLOTS: 15

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	0.33	13.3
ACER RUBRUM	0	0	0	0	0.33	13.3
AMPELOPSIS ARBOREA	0	0	0	0	1.33	20.0
AMPELOPSIS CORDATA	13.33	6.7	0	0	0	0
ARISAEMA DRACONTIUM	0	0	0	0	0.17	6.7
ARISTOLOCHIA SERPENTARIA	0	0	0	0	0.33	13.3
ASCLEPIAS PERENNIS	0	0	0	0	0.17	6.7
ASIMINA TRILOBA	0	0	0	0	0.17	6.7
BERCHEMIA SCANDENS	506.67	73.3	46.67	13.3	0.67	26.7
BIGNONIA CAPREOLATA	0	0	0	0	0.50	20.0
BRUNNICHIA CIRRHOSA	0	0	0	0	0.17	6.7
CAMPSIS RADICANS	0	0	6.67	6.7	0	0
CAREX SP	0	0	0	0	0.50	20.0
CELTIS LAEVIGATA	0	0	0	0	1.00	40.0
CLEMATIS SP	0	0	0	0	0.17	6.7
COCCULUS CAROLINUS	0	0	0	0	0.17	6.7
CORNUS DRUMMONDII	0	0	0	0	0.17	6.7
DIOSPYROS VIRGINIANA	0	0	0	0	0.17	6.7
FORESTIERA ACUMINATA	0	0	0	0	0.33	13.3
GLEDITSIA TRIACANTHOS	0	0	0	0	0.17	6.7
ILEX DECIDUA	0	0	0	0	0.83	33.3
IMPATIENS CAPENSIS	0	0	0	0	1.33	20.0
LONICERA JAPONICA	0	0	340.00	26.7	3.67	20.0
MATELEA GONOCARPA	0	0	0	0	0.17	6.7
MORUS RUBRA	0	0	0	0	0.17	6.7
PARTHENOCISSUS QUINQUEFOLIA	126.67	40.0	420.00	73.3	5.17	73.3
QUERCUS NIGRA	0	0	0	0	0.17	6.7
TOXICODENDRON RADICANS	80.00	33.3	80.00	20.0	3.00	53.3
RUBUS ARGUTUS	0	0	0	0	0.17	6.7
RUBUS TRIVIALIS	0	0	0	0	0.50	20.0
SAURURUS CERNUUS	0	0	0	0	0.17	6.7
SENECIO GLABELLUS	0	0	0	0	0.33	13.3
SMILAX BONA-NOX	33.33	6.7	6.67	6.7	1.00	40.0
SMILAX HISPIDA	0	0	0	0	0.17	6.7
SMILAX ROTUNDIFOLIA	0	0	33.33	20.0	0.83	33.3
TRACHELOSPERMUM DIFFORME	0	0	0	0	0.33	13.3

TREPOCARPUS AETHUSAE	0	0	0	0	0.33	13.3
VIOLA SP	0	0	0	0	0.17	6.7
VIOLA PAFILIONACEA	0	0	0	0	0.83	33.3
VITIS RIPARIA	13.33	6.7	0	0	0.17	6.7
VITIS ROTUNDIFOLIA	0	0	0	0	0.17	6.7
TOTAL	773.33	80.0	933.33	100.0	26.50	100.0
STD DEV	785.10		987.54			

SUBTYPE: 46
NUMBER OF PLOTS: 34

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.07	2.9
ACER NEGUNDO	0	0	0	0	0.07	2.9
ACER SACCHARINUM	0	0	0	0	0.44	17.6
AMPELOPSIS ARBOREA	44.12	17.6	23.53	11.8	1.54	17.6
AMPELOPSIS CORDATA	11.76	8.8	0	0	0	0
ARISTOLOCHIA SERPENTARIA	0	0	0	0	0.07	2.9
ARUNDINARIA GIGANTEA	0	0	0	0	0.07	2.9
ASCLEPIAS PERENNIS	0	0	0	0	0.07	2.9
ASTER SIMPLEX	0	0	0	0	7.94	26.5
BERCHEMIA SCANDENS	17.65	2.9	20.59	5.9	0.29	11.8
BIDENS FRONDOSA	0	0	0	0	0.22	8.8
BIGNONIA CAPREOLATA	0	0	2.94	2.9	0.15	5.9
BOEHMERIA CYLINDRICA	0	0	0	0	0.38	20.6
BRUNNICHIA CIRRHOSA	2.94	2.9	26.47	11.8	1.47	29.4
CARYA ILLINOENSIS	0	0	0	0	0.07	2.9
CAMPSIS RADICANS	17.65	8.8	14.71	8.8	7.87	44.1
CELTIS LAEVIGATA	0	0	0	0	1.69	52.9
CLEMATIS SP	0	0	0	0	0.66	11.8
COCCULUS CAROLINUS	14.71	5.9	35.29	5.9	0.37	14.7
CORNUS DRUMMONDII	0	0	0	0	0.07	2.9
COMMELINA VIRGINICA	0	0	0	0	0.07	2.9
CYNANCHUM LAEVE	0	0	2.94	2.9	0	0
FORESTIERA ACUMINATA	0	0	0	0	2.43	26.5
FRAXINUS PENNSYLVANICA	0	0	0	0	0.22	8.8
UNKNOWN GRAMINOID	0	0	0	0	0.22	8.8
ILEX DECIDUA	0	0	0	0	0.07	2.9
IPOMOEA LACUNOSA	0	0	5.88	2.9	0.66	26.5
JUSTICIA OVATA	0	0	0	0	2.57	5.9
LAPORTEA CANADENSIS	0	0	0	0	3.82	11.8
LEERSIA LENTICULARIS	0	0	0	0	0.15	5.9
LEERSIA VIRGINICA	0	0	0	0	0.07	2.9
LIPPIA LANCEOLATA	0	0	0	0	0.07	2.9
MATELEA GONOCARPA	0	0	8.82	5.9	0.07	2.9
MORUS RUBRA	0	0	0	0	0.15	5.9
PASSIFLORA LUTEA	0	0	0	0	0.07	2.9
PANICUM SP	0	0	0	0	0.22	8.8

PARTHENOCISSUS QUINQUEFOLIA	55.88	23.5	500.00	29.4	1.10	14.7
PILEA PUMILA	0	0	0	0	0.15	5.9
POLYGONUM VIRGINIANUM	0	0	0	0	0.66	11.8
QUERCUS NUTTALLII	0	0	0	0	0.22	8.8
TOXICODENDRON RADICANS	105.88	38.2	341.18	38.2	5.59	52.9
RUBUS SP	0	0	0	0	0.29	11.8
RUELLIA STREPENS	0	0	0	0	0.07	2.9
RUBUS TRIVIALIS	0	0	0	0	2.65	35.3
SAURURUS CERNUUS	0	0	0	0	0.74	14.7
SENECIO GLABELLUS	0	0	0	0	0.51	5.9
SICYOS ANGULATUS	0	0	2.94	2.9	0	0
SMILAX BONA-NOX	0	0	38.24	5.9	0.15	5.9
SMILAX HISPIDA	0	0	8.82	2.9	0.22	8.8
SMILAX ROTUNDIFOLIA	41.18	8.8	55.88	14.7	0.81	17.6
SOLANUM AMERICANUM	0	0	0	0	0.07	2.9
TAXODIUM DISTICHUM	0	0	0	0	0.07	2.9
TEUCRIUM CANADENSE	0	0	0	0	0.07	2.9
TRACHELOSPERMUM DIFFORME	0	0	0	0	0.07	2.9
TRADESCANTIA VIRGINIANA	0	0	0	0	0.15	5.9
UNKNOWN FORB	0	0	0	0	0.07	2.9
ULMUS AMERICANA	0	0	0	0	0.07	2.9
URTICA DIOICA	0	0	0	0	0.88	20.6
VICIA SP	0	0	0	0	0.07	2.9
VIOLA SP	0	0	0	0	0.51	5.9
VIOLA PAPILIONACEA	0	0	0	0	0.15	5.9
VITIS PALMATA	0	0	0	0	0.15	5.9
VITIS RIPARIA	35.29	17.6	5.88	2.9	0.15	5.9
TOTAL	347.06	76.5	1094.12	76.5	50.59	100.0
STD DEV	426.57		1484.66			

SUBTYPE: 47
NUMBER OF PLOTS: 17

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER SACCHARINUM	0	0	0	0	0.29	11.8
AMPELOPSIS ARBOREA	0	0	0	0	0.15	5.9
AMPELOPSIS CORDATA	5.88	5.9	0	0	0	0
ASTER SIMPLEX	0	0	0	0	26.18	41.2
BERCHEMIA SCANDENS	11.76	5.9	17.65	11.8	1.03	11.8
BIGNONIA CAPREOLATA	0	0	0	0	0.29	11.8
BOEHMERIA CYLINDRICA	0	0	0	0	17.79	41.2
BRUNNICHIA CIRRHOSA	0	0	35.29	11.8	5.59	29.4
CARYA ILLINOENSIS	0	0	0	0	1.62	35.3
CAMPSIS RADICANS	0	0	52.94	11.8	11.18	52.9
CELTIS LAEVIGATA	0	0	0	0	0.88	35.3
COCCULUS CAROLINUS	5.88	5.9	11.76	11.8	0	0
COMMELINA VIRGINICA	0	0	0	0	2.21	5.9
CUSCUTA SP	0	0	0	0	0.44	17.6
CYNANCHUM LAEVE	0	0	0	0	0.15	5.9
FRAXINUS PENNSYLVANICA	0	0	0	0	0.29	11.8
LAPORTEA CANADENSIS	0	0	0	0	19.71	35.3
LEERSIA VIRGINICA	0	0	0	0	0.29	11.8
MATELEA GONOCARPA	0	0	11.76	5.9	0	0
MIKANIA SCANDENS	17.65	5.9	11.76	11.8	0.15	5.9
OPLISMENUS SETARIUS	0	0	0	0	4.41	11.8
PANICUM SP	0	0	0	0	0.44	17.6
PARTHENOCISSUS QUINQUEFOLIA	111.76	29.4	305.88	47.1	0.44	17.6
POLYGONUM VIRGINIANUM	0	0	0	0	4.26	29.4
TOXICODENDRON RADICANS	129.41	23.5	300.00	29.4	17.94	70.6
RUELLIA STREPENS	0	0	0	0	0.88	5.9
RUBUS TRIVIALIS	0	0	0	0	1.03	41.2
SAURURUS CERNUUS	0	0	0	0	1.03	11.8
SMILAX BONA-NOX	0	0	0	0	0.15	5.9
SMILAX HISPIDA	0	0	0	0	0.44	17.6
SMILAX ROTUNDIFOLIA	0	0	58.82	11.8	0.44	17.6
TRIPHORA TRIANTHOPHORA	0	0	0	0	0.15	5.9
VITIS RIPARIA	41.18	29.4	17.65	5.9	0	0
VITIS ROTUNDIFOLIA	5.88	5.9	0	0	0	0
TOTAL	329.41	64.7	823.53	82.4	119.85	100.0
STD DEV	361.88		584.73			

SUBTYPE: 48
NUMBER OF PLOTS: 7

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	0.36	14.3
AMPELOPSIS ARBOREA	285.71	28.6	71.43	14.3	2.86	42.9
AMPELOPSIS CORDATA	0	0	0	0	0.71	28.6
ASCLEPIAS PERENNIS	0	0	0	0	0.36	14.3
BERCHEMIA SCANDENS	14.29	14.3	0	0	0	0
BRUNNICHIA CIRRHOSA	0	0	300.00	28.6	2.50	100.0
CARYA AQUATICA	0	0	0	0	0.36	14.3
CAMPSIS RADICANS	0	0	0	0	0.36	14.3
CELTIS LAEVIGATA	0	0	0	0	2.50	100.0
CLEMATIS SP	0	0	0	0	1.07	42.9
COCCULUS CAROLINUS	28.57	14.3	57.14	28.6	0.71	28.6
FORESTIERA ACUMINATA	0	0	0	0	0.71	28.6
FRAXINUS PENNSYLVANICA	0	0	0	0	0.36	14.3
JUSTICIA OVATA	0	0	0	0	3.21	57.1
LIPPIA LANCEOLATA	0	0	0	0	1.07	42.9
QUERCUS NUTTALLII	0	0	0	0	0.36	14.3
SMILAX BONA-NOX	0	0	0	0	0.71	28.6
TRACHELOSPERMUM DIFFORME	0	0	0	0	1.79	71.4
VITIS PALMATA	0	0	0	0	0.71	28.6
VITIS RIPARIA	71.43	28.6	0	0	0	0
TOTAL	400.00	42.9	428.57	42.9	20.71	100.0
STD DEV	591.61		699.32			

SUBTYPE: 49
NUMBER OF PLOTS: 13

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACALYPHA RHOMBOIDEA	0	0	0	0	0.38	15.4
ACER NEGUNDO	0	0	0	0	0.19	7.7
AMPELOPSIS ARBOREA	15.38	7.7	30.77	7.7	1.73	30.8
AMPELOPSIS CORDATA	0	0	7.69	7.7	0	0
ASTER SIMPLEX	0	0	0	0	7.12	30.8
BOEHMERIA CYLINDRICA	0	0	0	0	0.19	7.7
BRUNNICHIA CIRRHOSA	0	0	76.92	23.1	0.77	30.8
CARDIOSPERMUM HALICACABUM	0	0	0	0	0.38	15.4
CAMPSIS RADICANS	0	0	61.54	15.4	1.54	23.1
CELTIS LAEVIGATA	0	0	0	0	0.19	7.7
ECLIPTA PROSTRATA	0	0	0	0	0.19	7.7
FORESTIERA ACUMINATA	0	0	0	0	1.35	15.4
IPOMOEA LACUNOSA	0	0	0	0	0.58	23.1
LACTUCA CANADENSIS	0	0	0	0	0.19	7.7
LAPORTEA CANADENSIS	0	0	0	0	0.19	7.7
LEERSIA LENTICULARIS	0	0	0	0	1.54	61.5
LEERSIA VIRGINICA	0	0	0	0	0.19	7.7
LIPPIA LANCEOLATA	0	0	0	0	0.19	7.7
MORUS RUBRA	0	0	0	0	0.19	7.7
TOXICODENDRON RADICANS	0	0	192.31	7.7	0.58	23.1
RUBUS SP	0	0	0	0	25.38	61.5
RUBUS TRIVIALIS	0	0	0	0	1.35	15.4
SALIX INTERIOR	0	0	0	0	0.19	7.7
SAURURUS CERNUUS	0	0	0	0	5.00	15.4
STACHYS TENUIFOLIA	0	0	0	0	0.19	7.7
TEUCRIUM CANADENSE	0	0	0	0	2.88	7.7
TRADESCANTIA VIRGINIANA	0	0	0	0	0.58	23.1
UNKNOWN FORB	0	0	0	0	0.19	7.7
URTICA DIOICA	0	0	0	0	3.27	53.8
VIOLA RAFFINESQUE	0	0	0	0	0.19	7.7
VITIS RIPARIA	0	0	0	0	0.38	15.4
TOTAL	15.38	7.7	369.23	46.2	57.31	100.0
STD DEV	55.47		759.81			

SUBTYPE: 50
NUMBER OF PLOTS: 16

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	0.16	6.3
ACER SACCHARINUM	0	0	0	0	0.47	18.8
ARISAEMA DRACONTIUM	0	0	0	0	0.47	18.8
ARUNDINARIA GIGANTEA	0	0	0	0	1.41	25.0
ASIMINA TRILOBA	0	0	0	0	0.16	6.3
ASTER SIMPLEX	0	0	0	0	3.75	31.3
BIDENS ARISTOSA	0	0	0	0	0.16	6.3
BIGNONIA CAPREOLATA	0	0	6.25	6.3	0.31	12.5
BOEHMERIA CYLINDRICA	0	0	0	0	0.31	12.5
BRUNNICHIA CIRRHOSA	0	0	0	0	0.16	6.3
CARPINUS CAROLINIANA	0	0	0	0	0.16	6.3
CARYA LACINIOSA	0	0	0	0	0.31	12.5
CAMPSIS RADICANS	6.25	6.3	18.75	12.5	9.22	37.5
CELTIS LAEVIGATA	0	0	0	0	0.78	31.3
COCCULUS CAROLINUS	0	0	25.00	12.5	0.47	18.8
FORESTIERA ACUMINATA	0	0	0	0	0.47	18.8
ILEX DECIDUA	0	0	0	0	0.47	18.8
LACTUCA CANADENSIS	0	0	0	0	4.84	12.5
LAPORTEA CANADENSIS	0	0	0	0	13.28	31.3
LEERSIA LENTICULARIS	0	0	0	0	0.47	18.8
LEERSIA VIRGINICA	0	0	0	0	0.63	25.0
LINDERA BENZOIN	0	0	0	0	0.16	6.3
MENISPERMUM CANADENSE	0	0	37.50	6.3	0	0
PARTHENOCISSUS QUINQUEFOLIA	0	0	162.50	50.0	3.75	56.3
PILEA PUMILA	0	0	0	0	0.94	37.5
POLYGONUM VIRGINIANUM	0	0	0	0	0.31	12.5
QUERCUS LYRATA	0	0	0	0	0.16	6.3
TOXICODENDRON RADICANS	306.25	37.5	237.50	37.5	14.06	81.3
SAURURUS CERNUUS	0	0	0	0	0.47	18.8
SICYOS ANGULATUS	0	0	0	0	0.16	6.3
SMILAX BONA-NOX	0	0	62.50	12.5	2.34	6.3
SMILAX HISPIDA	0	0	187.50	31.3	0	0
SMILAX ROTUNDIFOLIA	0	0	112.50	31.3	0.16	6.3
TAXODIUM DISTICHUM	0	0	0	0	0.47	18.8
URTICA DIOICA	0	0	0	0	0.94	6.3
VIOLA SP	0	0	0	0	2.81	25.0
VIOLA PAPILIONACEA	0	0	0	0	0.31	12.5
VITIS RIPARIA	50.00	25.0	0	0	0	0
TOTAL	362.50	56.3	850.00	93.8	65.47	100.0
STD DEV	592.03		731.21			

SUBTYPE: 51
NUMBER OF PLOTS: 18

SPECIES	CANOPY VINES DENSITY PER ACRE	CANOPY VINES CONSTANCY	SUBCANOPY VINES DENSITY PER ACRE	SUBCANOPY VINES CONSTANCY	GROUND COVER PERCENT COVER	GROUND COVER CONSTANCY
ACER NEGUNDO	0	0	0	0	0.83	5.6
AMPELOPSIS ARBOREA	72.22	33.3	16.67	5.6	2.08	27.8
AMPELOPSIS CORDATA	5.56	5.6	0	0	0	0
ASTER SIMPLEX	0	0	0	0	1.11	16.7
BERCHEMIA SCANDENS	100.00	22.2	66.67	22.2	0.69	27.8
BIGNONIA CAPREOLATA	0	0	0	0	0.14	5.6
BOEHMERIA CYLINDRICA	0	0	0	0	0.14	5.6
BRUNNICHIA CIRRHOSA	22.22	11.1	44.44	11.1	0.56	22.2
CARDIOSPERMUM HALICACABUM	0	0	0	0	0.83	5.6
CARYA ILLINOENSIS	0	0	0	0	0.56	22.2
CAMPSIS RADICANS	27.78	11.1	22.22	11.1	0.56	22.2
CELTIS LAEVIGATA	0	0	0	0	0.42	16.7
CLEMATIS CRISPA	0	0	0	0	0.14	5.6
CLEMATIS SP	0	0	0	0	0.42	16.7
COCCULUS CAROLINUS	72.22	22.2	38.89	11.1	1.25	50.0
DESMODIUM SP	0	0	0	0	0.14	5.6
FORESTIERA ACUMINATA	0	0	0	0	0.14	5.6
GELSEMIUM SEMPERVIRENS	0	0	0	0	0.14	5.6
GLEDITSIA TRIACANTHOS	0	0	0	0	0.28	11.1
ILEX DECIDUA	0	0	0	0	0.97	11.1
LEERSIA LENTICULARIS	0	0	0	0	0.14	5.6
LEERSIA VIRGINICA	0	0	0	0	0.14	5.6
MATELEA GONOCARPA	0	0	22.22	16.7	0	0
MIKANIA SCANDENS	0	0	11.11	5.6	0.14	5.6
PARTHENOCISSUS QUINQUEFOLIA	133.33	38.9	311.11	66.7	0.83	33.3
PILEA PUMILA	0	0	0	0	0.14	5.6
POLYGONUM VIRGINIANUM	0	0	0	0	2.64	22.2
TOXICODENDRON RADICANS	450.00	61.1	266.67	33.3	3.61	61.1
RUBUS TRIVIALIS	0	0	0	0	5.00	61.1
SAMBUCUS CANADENSIS	0	0	0	0	0.14	5.6
SAURURUS CERNUUS	0	0	0	0	0.83	5.6
SENECIO GLABELLUS	0	0	0	0	0.14	5.6
SICYOS ANGULATUS	0	0	5.56	5.6	0	0
SMILAX BONA-NOX	0	0	0	0	0.14	5.6
SMILAX HISPIDA	27.78	5.6	0	0	0.28	11.1
SMILAX ROTUNDIFOLIA	11.11	5.6	22.22	16.7	0.14	5.6

TEUCRIUM CANADENSE	0	0	0	0	0.14	5.6
TRACHELOSPERMUM DIFFORME	0	0	0	0	0.14	5.6
VACCINEUM SP	0	0	0	0	0.14	5.6
VITIS CINEREA	27.78	11.1	0	0	0	0
VIOLA PAPILIONACEA	0	0	0	0	0.69	27.8
VITIS RIPARIA	105.56	33.3	5.56	5.6	0.97	11.1
VITIS ROTUNDIFOLIA	5.56	5.6	0	0	0	0
TOTAL	1061.11	83.3	833.33	88.9	27.78	100.0
STD DEV	818.28		678.23			

SUBTYPE: 1
NUMBER OF PLOTS: 16

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	51.88	59.53	7.69	25.16	2.75	81.88
STD DEV	10.78	20.58	4.19	20.11	1.39	25.06
MAXIMUM	65.00	97.50	14.00	62.50	5.00	97.50
MINIMUM	35.00	37.50	0.00	0.00	1.00	15.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	1.25	8.13	0.00	6.25	4.38
STD DEV	3.42	10.47	0.00	7.19	7.27
MAXIMUM	10.00	30.00	0.00	20.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 2
NUMBER OF PLOTS: 7

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	32.86	93.93	3.86	11.43	1.86	62.14
STD DEV	13.18	6.10	5.05	23.18	0.90	23.34
MAXIMUM	50.00	97.50	12.00	62.50	3.00	85.00
MINIMUM	20.00	85.00	0.00	0.00	1.00	15.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	8.57	1.43	0.00	1.43	12.86
STD DEV	10.69	3.78	0.00	3.78	11.13
MAXIMUM	20.00	10.00	0.00	10.00	30.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 3
NUMBER OF PLOTS: 4

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	37.50	50.63	17.00	80.00	0.56	11.25
STD DEV	15.00	23.75	1.15	20.21	0.52	7.50
MAXIMUM	55.00	62.50	18.00	97.50	1.00	15.00
MINIMUM	25.00	15.00	16.00	62.50	0.00	0.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	0.00	17.50	0.00	10.00	17.50
STD DEV	0.00	20.62	0.00	14.14	20.62
MAXIMUM	0.00	40.00	0.00	30.00	40.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 4
NUMBER OF PLOTS: 10

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	40.56	58.89	7.44	30.83	0.97	50.00
STD DEV	17.93	34.30	6.39	39.59	0.68	36.93
MAXIMUM	75.00	97.50	18.00	97.50	2.00	85.00
MINIMUM	20.00	0.00	0.00	0.00	0.25	2.50

STATISTIC	NUMBER CF: DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	12.22	27.78	6.67	3.33	4.44
STD DEV	12.02	16.41	10.00	5.00	5.27
MAXIMUM	30.00	60.00	20.00	10.00	10.00
MINIMUM	0.00	10.00	0.00	0.00	0.00

SUBTYPE: 5
NUMBER OF PLOTS: 25

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	57.80	85.50	7.40	8.00	1.56	44.80
STD DEV	21.61	13.05	6.36	14.29	1.07	33.86
MAXIMUM	100.00	97.50	20.00	62.50	4.00	97.50
MINIMUM	35.00	62.50	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	6.80	15.60	2.00	12.40	9.60
STD DEV	9.45	22.93	5.00	19.43	10.20
MAXIMUM	30.00	100.00	20.00	90.00	30.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 6
NUMBER OF PLOTS: 25

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	80.20	84.90	11.64	26.20	1.26	40.40
STD DEV	28.96	14.69	13.96	29.58	0.88	34.15
MAXIMUM	120.00	97.50	50.00	85.00	3.00	97.50
MINIMUM	35.00	37.50	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	5.60	16.80	1.20	10.80	14.40
STD DEV	8.21	19.52	4.40	11.52	12.61
MAXIMUM	30.00	70.00	20.00	30.00	40.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 7
NUMBER OF PLOTS: 6

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	61.67	93.33	13.50	6.67	0.50	5.00
STD DEV	16.63	6.45	4.85	6.45	0.84	7.75
MAXIMUM	85.00	97.50	20.00	15.00	2.00	15.00
MINIMUM	40.00	85.00	6.00	2.50	0.00	0.00

STATISTIC	NUMBER OF DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	0.00	38.33	0.00	8.33	3.33
STD DEV	0.00	49.97	0.00	13.29	5.16
MAXIMUM	0.00	120.00	0.00	30.00	10.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 8
NUMBER OF PLOTS: 20

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	76.11	83.47	7.28	20.83	0.89	17.22
STD DEV	18.11	16.85	5.24	28.98	0.42	27.68
MAXIMUM	110.00	97.50	20.00	85.00	2.00	97.50
MINIMUM	55.00	37.50	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	7.78	32.78	11.67	8.33	15.00
STD DEV	11.14	30.83	13.83	9.24	10.43
MAXIMUM	30.00	100.00	50.00	30.00	40.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 9
NUMBER OF PLOTS: 12

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	53.33	75.83	4.75	9.58	1.46	67.71
STD DEV	6.51	14.59	3.89	14.10	1.11	29.72
MAXIMUM	65.00	97.50	10.00	37.50	4.00	97.50
MINIMUM	40.00	62.50	0.00	0.00	0.25	15.00

STATISTIC	NUMBER OF				
	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	3.33	10.00	6.67	20.00	5.00
STD DEV	6.51	14.77	10.73	15.95	7.98
MAXIMUM	20.00	50.00	30.00	50.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 10
NUMBER OF PLOTS: 11

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	33.64	80.23	10.18	22.73	1.23	28.18
STD DEV	9.77	14.98	7.29	27.87	1.03	35.80
MAXIMUM	55.00	97.50	20.00	97.50	3.00	97.50
MINIMUM	20.00	62.50	0.00	0.00	0.00	0.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	1.82	10.91	0.00	0.91	9.09
STD DEV	6.03	12.21	0.00	3.02	7.01
MAXIMUM	20.00	30.00	0.00	10.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 11
NUMBER OF PLOTS: 7

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	57.14	95.71	8.71	14.64	1.04	46.79
STD DEV	9.06	4.72	2.56	11.68	0.51	29.61
MAXIMUM	70.00	97.50	12.00	37.50	2.00	85.00
MINIMUM	45.00	85.00	5.00	2.50	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	0.00	8.57	0.00	10.00	8.57
STD DEV	0.00	12.15	0.00	8.16	6.90
MAXIMUM	0.00	30.00	0.00	20.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 12
NUMBER OF PLOTS: 19

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	52.89	93.03	8.58	16.97	1.18	51.84
STD DEV	9.02	9.04	4.69	22.25	0.64	28.54
MAXIMUM	70.00	97.50	18.00	85.00	3.00	85.00
MINIMUM	40.00	62.50	0.00	0.00	0.25	15.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	3.16	13.16	2.11	7.37	8.42
STD DEV	5.82	12.04	5.35	8.72	7.65
MAXIMUM	20.00	40.00	20.00	30.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 13
NUMBER OF PLOTS: 51

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	48.43	80.69	8.43	14.71	1.54	65.00
STD DEV	12.10	10.72	5.62	18.37	0.88	36.43
MAXIMUM	70.00	97.50	20.00	85.00	3.00	97.50
MINIMUM	20.00	62.50	0.00	0.00	0.00	0.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	8.63	23.14	3.53	12.35	10.00
STD DEV	10.59	43.47	7.16	14.78	7.75
MAXIMUM	50.00	260.00	30.00	50.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 14
NUMBER OF PLOTS: 9

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	36.67	80.00	8.89	27.22	2.44	75.00
STD DEV	13.23	9.92	5.30	20.37	0.73	30.39
MAXIMUM	50.00	85.00	15.00	62.50	3.00	97.50
MINIMUM	20.00	62.50	0.00	0.00	1.00	15.00

STATISTIC	NUMBER OF DEBRIS PILES / ACRE	NUMBER OF LOGS / ACRE	NUMBER OF STUMPS / ACRE	NUMBER OF SNAGS / ACRE	NUMBER OF POOLSITES / ACRE
AVERAGE	5.56	17.78	4.44	2.22	7.78
STD DEV	13.33	24.38	8.82	6.67	6.67
MAXIMUM	40.00	70.00	20.00	20.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 15
NUMBER OF PLOTS: 15

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	57.67	85.33	8.13	13.67	1.13	51.50
STD DEV	6.78	16.25	6.98	18.59	0.71	34.93
MAXIMUM	65.00	97.50	20.00	62.50	2.00	97.50
MINIMUM	40.00	37.50	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	3.33	20.67	0.67	8.00	6.67
STD DEV	4.83	45.59	2.58	8.62	7.24
MAXIMUM	10.00	180.00	10.00	20.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 16
NUMBER OF PLOTS: 32

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	51.25	85.08	7.50	13.91	1.10	48.36
STD DEV	11.98	14.83	5.39	15.54	0.61	29.67
MAXIMUM	70.00	97.50	20.00	62.50	3.00	85.00
MINIMUM	30.00	37.50	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	5.00	18.13	4.69	5.31	10.94
STD DEV	6.72	16.35	8.03	7.18	6.89
MAXIMUM	20.00	70.00	30.00	30.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 17
NUMBER OF PLOTS: 15

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	56.00	73.33	6.27	5.33	1.28	37.17
STD DEV	19.01	20.52	8.22	7.13	1.12	39.84
MAXIMUM	85.00	97.50	25.00	15.00	4.00	97.50
MINIMUM	30.00	37.50	0.00	0.00	0.25	0.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	12.00	12.67	2.67	6.67	43.33
STD DEV	13.73	20.52	7.99	13.45	57.65
MAXIMUM	40.00	60.00	30.00	50.00	180.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 18
NUMBER OF PLOTS: 6

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	52.50	61.25	1.17	2.50	1.58	50.00
STD DEV	4.18	26.02	2.86	6.12	1.27	52.03
MAXIMUM	55.00	85.00	7.00	15.00	3.00	97.50
MINIMUM	45.00	37.50	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	50.00	25.00	0.00	6.67	0.00
STD DEV	30.33	18.71	0.00	8.16	0.00
MAXIMUM	90.00	60.00	0.00	20.00	0.00
MINIMUM	0.00	10.00	0.00	0.00	0.00

SUBTYPE: 19
NUMBER OF PLOTS: 9

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	56.67	40.56	5.78	6.94	2.44	93.33
STD DEV	14.79	21.82	5.93	7.68	1.24	6.25
MAXIMUM	90.00	85.00	15.00	15.00	4.00	97.50
MINIMUM	40.00	15.00	0.00	0.00	1.00	85.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	13.33	10.00	1.11	15.56	11.11
STD DEV	14.14	8.66	3.33	11.30	9.28
MAXIMUM	30.00	20.00	10.00	40.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 20
NUMBER OF PLOTS: 27

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	57.59	67.04	14.93	25.19	1.38	48.33
STD DEV	17.40	29.61	13.15	25.35	0.73	37.69
MAXIMUM	95.00	97.50	40.00	85.00	3.00	97.50
MINIMUM	30.00	2.50	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	8.52	26.30	2.22	3.70	5.19
STD DEV	9.89	23.88	5.06	5.65	10.14
MAXIMUM	30.00	70.00	20.00	20.00	40.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 21
NUMBER OF PLOTS: 37

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	73.30	72.97	8.70	18.45	1.36	47.97
STD DEV	27.29	18.85	6.55	24.87	0.86	35.77
MAXIMUM	110.00	97.50	25.00	85.00	3.00	97.50
MINIMUM	22.00	37.50	0.00	0.00	0.00	0.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	8.92	29.73	4.59	7.30	12.16
STD DEV	12.86	25.76	8.36	10.97	11.34
MAXIMUM	50.00	100.00	30.00	50.00	40.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 22
NUMBER OF PLOTS: 64

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	69.22	82.85	10.28	21.05	1.26	43.55
STD DEV	22.49	14.87	7.57	27.26	0.75	27.78
MAXIMUM	110.00	97.50	30.00	97.50	4.00	97.50
MINIMUM	30.00	37.50	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	6.41	19.69	3.44	6.56	9.06
STD DEV	8.04	19.19	6.48	7.81	9.71
MAXIMUM	40.00	90.00	30.00	30.00	40.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 23
NUMBER OF PLOTS: 16

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	58.75	88.28	9.00	27.81	0.97	25.47
STD DEV	21.25	9.21	6.61	31.17	0.79	29.[illegible]
MAXIMUM	95.00	97.50	20.00	85.00	3.00	97.[illegible]
MINIMUM	30.00	62.50	0.00	0.00	0.25	2.[illegible]

STATISTIC	NUMBER OF DEBRIS PILES / ACRE	NUMBER OF LOGS / ACRE	NUMBER OF STUMPS / ACRE	NUMBER OF SNAGS / ACRE	NUMBER OF POOLSITES / ACRE
AVERAGE	7.50	31.88	13.13	10.00	17.50
STD DEV	9.31	32.29	14.93	14.61	8.56
MAXIMUM	20.00	100.00	40.00	50.00	40.00
MINIMUM	0.00	0.00	0.00	0.00	10.00

SUBTYPE: 24
NUMBER OF PLOTS: 14

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	77.14	84.46	15.50	39.82	1.25	33.04
STD DEV	18.78	20.76	4.83	30.91	0.84	39.45
MAXIMUM	100.00	97.50	25.00	85.00	3.00	97.50
MINIMUM	40.00	37.50	8.00	2.50	0.25	2.50

STATISTIC	NUMBER OF DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	9.29	24.29	9.29	7.14	15.71
STD DEV	14.92	30.05	14.39	9.94	13.42
MAXIMUM	50.00	100.00	50.00	30.00	50.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 25
NUMBER OF PLOTS: 10

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	77.92	89.17	10.67	33.33	1.33	31.67
STD DEV	18.52	6.15	9.94	33.29	0.89	31.63
MAXIMUM	100.00	97.50	25.00	85.00	3.00	85.00
MINIMUM	50.00	85.00	0.00	0.00	0.00	0.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	0.83	16.67	3.33	13.33	12.50
STD DEV	2.89	13.03	6.51	13.71	8.66
MAXIMUM	10.00	40.00	20.00	40.00	30.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 26
NUMBER OF PLOTS: 12

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	62.50	96.46	12.17	41.04	0.96	38.13
STD DEV	13.90	3.61	5.34	33.79	0.44	35.58
MAXIMUM	75.00	97.50	20.00	85.00	2.00	85.00
MINIMUM	40.00	85.00	5.00	2.50	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	2.50	19.17	7.50	10.83	7.50
STD DEV	6.22	15.05	8.66	11.65	6.22
MAXIMUM	20.00	50.00	20.00	30.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 27
NUMBER OF PLOTS: 36

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	58.59	89.55	7.82	10.77	1.03	43.27
STD DEV	17.36	7.61	6.52	14.31	0.67	32.55
MAXIMUM	110.00	97.50	20.00	62.50	3.00	97.50
MINIMUM	35.00	62.50	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	6.67	27.44	1.54	8.97	15.90
STD DEV	8.98	20.99	4.32	10.71	11.63
MAXIMUM	30.00	80.00	20.00	50.00	40.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 28
NUMBER OF PLOTS: 61

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	59.83	82.33	7.58	16.88	1.50	44.71
STD DEV	18.20	17.71	7.62	23.50	0.85	30.63
MAXIMUM	100.00	97.50	30.00	85.00	3.00	97.50
MINIMUM	25.00	2.50	0.00	0.00	0.25	2.50

STATISTIC	NUMBER OF DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	5.17	19.00	4.17	6.67	9.00
STD DEV	7.25	17.53	8.50	8.77	9.15
MAXIMUM	30.00	80.00	40.00	30.00	30.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 29
NUMBER OF PLOTS: 25

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	83.64	75.20	17.04	42.50	1.08	28.50
STD DEV	32.13	15.88	11.00	35.96	0.68	30.59
MAXIMUM	136.00	97.50	35.00	97.50	3.00	85.00
MINIMUM	30.00	37.50	0.00	0.00	0.00	0.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	13.60	16.00	2.00	10.00	2.00
STD DEV	9.95	18.03	5.00	12.58	6.45
MAXIMUM	40.00	60.00	20.00	40.00	30.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 30
NUMBER OF PLOTS: 25

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	82.80	82.00	8.44	26.60	1.21	21.30
STD DEV	17.56	14.20	6.12	27.38	0.90	28.06
MAXIMUM	110.00	97.50	20.00	85.00	4.00	85.00
MINIMUM	55.00	37.50	0.00	0.00	0.00	0.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	25.20	35.60	1.20	13.20	12.80
STD DEV	19.82	31.37	3.32	11.45	15.42
MAXIMUM	70.00	150.00	10.00	40.00	50.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 31
NUMBER OF PLOTS: 35

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	52.43	75.14	9.06	16.21	1.44	38.64
STD DEV	18.80	22.73	4.81	19.49	0.90	34.79
MAXIMUM	80.00	97.50	18.00	85.00	4.00	97.50
MINIMUM	20.00	0.00	0.00	0.00	0.25	2.50

STATISTIC	NUMBER OF DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	11.71	39.43	10.57	8.86	10.29
STD DEV	10.14	21.82	12.82	8.67	13.82
MAXIMUM	30.00	100.00	40.00	30.00	60.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 32
NUMBER OF PLOTS: 44

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	CROUND VEGETATION COVER (%)
AVERAGE	63.13	77.61	8.75	29.55	1.27	47.39
STD DEV	25.79	25.53	5.22	29.42	0.63	36.27
MAXIMUM	110.00	97.50	20.00	97.50	3.00	97.50
MINIMUM	0.00	0.00	0.00	0.00	0.25	0.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	7.95	24.55	2.50	6.59	10.00
STD DEV	9.78	23.77	5.34	9.14	11.81
MAXIMUM	30.00	120.00	20.00	40.00	40.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 33
NUMBER OF PLOTS: 9

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	68.33	62.78	8.78	18.61	1.56	66.94
STD DEV	13.46	28.63	1.30	11.46	0.73	30.20
MAXIMUM	90.00	85.00	10.00	37.50	3.00	97.50
MINIMUM	50.00	0.00	6.00	2.50	1.00	15.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	8.89	22.22	8.89	11.11	15.56
STD DEV	7.82	19.22	9.28	10.54	15.09
MAXIMUM	20.00	60.00	20.00	30.00	40.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 34
NUMBER OF PLOTS: 7

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	81.43	83.57	13.71	53.21	0.86	31.07
STD DEV	26.88	10.39	6.73	29.61	1.01	38.99
MAXIMUM	120.00	97.50	25.00	97.50	3.00	85.00
MINIMUM	50.00	62.50	7.00	15.00	0.25	2.50

STATISTIC	NUMBER OF				
	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	1.43	35.71	5.71	12.86	15.71
STD DEV	3.78	31.01	11.34	11.13	7.87
MAXIMUM	10.00	100.00	30.00	30.00	30.00
MINIMUM	0.00	10.00	0.00	0.00	10.00

SUBTYPE: 35
NUMBER OF PLOTS: 45

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	57.22	86.17	7.31	12.56	1.14	31.00
STD DEV	15.69	12.95	6.28	18.48	0.68	29.70
MAXIMUM	100.00	97.50	25.00	85.00	3.00	97.50
MINIMUM	30.00	37.50	0.00	0.00	0.00	0.00

STATISTIC	NUMBER OF DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	10.89	19.78	2.67	6.89	16.44
STD DEV	12.03	17.25	7.20	9.73	11.71
MAXIMUM	40.00	80.00	40.00	40.00	40.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 36
NUMBER OF PLOTS: 21

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	67.38	75.95	16.71	24.17	1.18	46.07
STD DEV	17.93	15.90	9.34	17.68	0.74	33.14
MAXIMUM	110.00	97.50	30.00	62.50	3.00	97.50
MINIMUM	35.00	37.50	5.00	2.50	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	9.05	15.71	0.95	8.57	4.76
STD DEV	9.44	21.58	3.01	7.27	6.80
MAXIMUM	30.00	80.00	10.00	20.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 37
NUMBER OF PLOTS: 15

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERACE	69.33	79.17	8.87	12.50	1.93	56.33
STD DEV	21.62	21.60	6.17	17.17	0.70	28.35
MAXIMUM	110.00	97.50	20.00	62.50	3.00	97.50
MINIMUM	40.00	15.00	0.00	0.00	1.00	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	12.67	54.67	2.67	9.33	18.67
STD DEV	15.34	123.80	5.94	10.33	12.46
MAXIMUM	50.00	500.00	20.00	30.00	40.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 38
NUMBER OF PLOTS: 3

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	67.75	55.63	7.25	31.88	2.06	94.38
STD DEV	57.48	35.14	5.85	35.38	1.74	6.25
MAXIMUM	120.00	85.00	12.00	62.50	4.00	97.50
MINIMUM	18.00	15.00	0.00	0.00	0.25	85.00

STATISTIC	NUMBER OF DEBRIS PILES / ACRE	NUMBER OF LOGS / ACRE	NUMBER OF STUMPS / ACRE	NUMBER OF SNAGS / ACRE	NUMBER OF POOLSITES / ACRE
AVERAGE	0.00	0.00	0.00	2.50	7.50
STD DEV	0.00	0.00	0.00	5.00	5.00
MAXIMUM	0.00	0.00	0.00	10.00	10.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 39
NUMBER OF PLOTS: 3

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	81.67	89.17	0.00	0.00	1.33	89.17
STD DEV	2.89	7.22	0.00	0.00	0.58	7.22
MAXIMUM	85.00	97.50	0.00	0.00	2.00	97.50
MINIMUM	80.00	85.00	0.00	0.00	1.00	85.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	0.00	20.00	3.33	10.00	13.33
STD DEV	0.00	10.00	5.77	0.00	5.77
MAXIMUM	0.00	30.00	10.00	10.00	20.00
MINIMUM	0.00	10.00	0.00	10.00	10.00

SUBTYPE: 40
NUMBER OF PLOTS: 12

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	76.25	73.54	11.25	21.46	1.17	50.00
STD DEV	11.89	20.82	11.31	30.44	0.39	36.37
MAXIMUM	95.00	97.50	25.00	85.00	2.00	97.50
MINIMUM	55.00	37.50	0.00	0.00	1.00	2.50

STATISTIC	NUMBER OF DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	6.67	20.83	5.00	7.50	7.50
STD DEV	8.88	16.76	6.74	10.55	9.65
MAXIMUM	30.00	60.00	20.00	30.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 41
NUMBER OF PLOTS: 12

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	66.67	71.46	7.42	12.29	1.75	68.54
STD DEV	19.69	29.03	4.98	10.36	0.37	25.68
MAXIMUM	95.00	97.50	18.00	37.50	3.00	97.50
MINIMUM	35.00	0.00	0.00	0.00	1.00	37.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	0.83	20.83	9.17	11.67	8.33
STD DEV	2.89	18.32	9.96	11.15	8.35
MAXIMUM	10.00	50.00	30.00	30.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 42
NUMBER OF PLOTS: 8

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	57.78	93.61	5.44	5.83	0.78	19.72
STD DEV	17.34	11.67	5.29	6.96	0.59	31.41
MAXIMUM	90.00	97.50	15.00	15.00	2.00	97.50
MINIMUM	40.00	62.50	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	7.78	18.89	0.00	7.78	4.44
STD DEV	6.67	15.37	0.00	6.67	5.27
MAXIMUM	20.00	40.00	0.00	20.00	10.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 43
NUMBER OF PLOTS: 34

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	65.00	73.24	8.53	20.88	1.35	57.50
STD DEV	15.37	17.72	9.40	26.13	0.77	36.85
MAXIMUM	85.00	97.50	30.00	85.00	3.00	97.50
MINIMUM	25.00	37.50	0.00	0.00	0.00	0.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	6.18	42.35	3.53	13.24	10.29
STD DEV	7.79	51.29	5.44	10.93	10.29
MAXIMUM	20.00	230.00	20.00	40.00	40.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 44
NUMBER OF PLOTS: 24

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	63.54	77.92	10.04	30.10	1.16	49.38
STD DEV	13.79	16.56	6.71	23.55	1.07	31.48
MAXIMUM	110.00	97.50	25.00	85.00	4.00	97.50
MINIMUM	40.00	37.50	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	1.25	16.67	5.00	6.67	6.25
STD DEV	3.33	13.41	8.34	9.63	8.24
MAXIMUM	10.00	60.00	30.00	30.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 45
NUMBER OF PLOTS: 15

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	71.33	91.67	9.53	19.67	0.60	15.17
STD DEV	10.93	6.45	6.93	21.02	0.39	22.86
MAXIMUM	90.00	97.50	20.00	62.50	1.00	85.00
MINIMUM	55.00	85.00	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	21.33	13.33	0.00	7.33	9.33
STD DEV	21.00	11.13	0.00	7.99	10.33
MAXIMUM	70.00	40.00	0.00	20.00	30.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 46
NUMBER OF PLOTS: 34

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	75.48	81.85	12.74	28.39	1.10	33.47
STD DEV	22.04	17.76	6.31	25.46	0.67	29.54
MAXIMUM	110.00	97.50	25.00	85.00	3.00	97.50
MINIMUM	40.00	15.00	0.00	0.00	0.25	2.50

STATISTIC	NUMBER OF				
	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	5.48	29.03	3.23	7.10	8.06
STD DEV	8.50	20.39	7.48	7.83	10.14
MAXIMUM	30.00	80.00	30.00	30.00	30.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 47
NUMBER OF PLOTS: 17

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	75.88	83.82	6.35	9.41	1.94	85.44
STD DEV	19.06	9.02	5.52	12.39	1.03	16.80
MAXIMUM	110.00	97.50	15.00	37.50	4.00	97.50
MINIMUM	45.00	62.50	0.00	0.00	1.00	37.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	4.12	13.53	2.35	5.29	16.47
STD DEV	7.12	12.72	4.37	8.00	7.86
MAXIMUM	20.00	30.00	10.00	30.00	30.00
MINIMUM	0.00	0.00	0.00	0.00	10.00

SUBTYPE: 48
NUMBER OF PLOTS: 7

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	49.29	93.93	7.00	13.57	0.79	6.07
STD DEV	12.72	6.10	5.48	17.13	0.37	6.10
MAXIMUM	65.00	97.50	15.00	37.50	1.00	15.00
MINIMUM	30.00	85.00	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	4.29	4.29	10.00	4.29	15.71
STD DEV	7.87	5.35	14.14	7.87	9.76
MAXIMUM	20.00	10.00	40.00	20.00	30.00
MINIMUM	0.00	0.00	0.00	0.00	10.00

SUBTYPE: 49
NUMBER OF PLOTS: 13

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	88.08	60.19	29.62	43.65	1.19	58.08
STD DEV	21.27	15.33	12.45	25.69	0.62	32.74
MAXIMUM	110.00	85.00	45.00	85.00	2.00	85.00
MINIMUM	25.00	37.50	7.00	15.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	19.23	34.62	3.08	10.77	1.54
STD DEV	10.38	29.04	4.80	14.98	3.76
MAXIMUM	40.00	100.00	10.00	50.00	10.00
MINIMUM	10.00	0.00	0.00	0.00	0.00

SUBTYPE: 50
NUMBER OF PLOTS: 16

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	68.44	81.56	9.63	21.56	1.75	62.34
STD DEV	13.63	15.38	4.86	21.48	0.58	25.36
MAXIMUM	90.00	97.50	18.00	62.50	3.00	97.50
MINIMUM	50.00	37.50	0.00	0.00	1.00	15.00

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	3.13	24.38	0.63	4.38	11.88
STD DEV	6.02	20.97	2.50	6.29	10.47
MAXIMUM	20.00	70.00	10.00	20.00	30.00
MINIMUM	0.00	0.00	0.00	0.00	0.00

SUBTYPE: 51
NUMBER OF PLOTS: 18

STATISTIC	CANOPY HT (FT)	CANOPY COVER (%)	UNDERSTORY HEIGHT (FT)	UNDERSTORY COVER (%)	GROUND VEGETATION HT (FT)	GROUND VEGETATION COVER (%)
AVERAGE	68.06	88.06	9.00	20.00	0.72	13.33
STD DEV	19.18	11.10	5.72	23.67	0.49	10.57
MAXIMUM	110.00	97.50	20.00	85.00	2.00	37.50
MINIMUM	30.00	62.50	0.00	0.00	0.25	2.50

	NUMBER OF				
STATISTIC	DEBRIS PILES / ACRE	LOGS / ACRE	STUMPS / ACRE	SNAGS / ACRE	POOLSITES / ACRE
AVERAGE	13.33	36.67	1.11	8.33	7.78
STD DEV	18.47	38.19	4.71	10.43	3.78
MAXIMUM	70.00	150.00	20.00	30.00	20.00
MINIMUM	0.00	0.00	0.00	0.00	0.00