

**Natural vegetation of the Carolinas:  
Classification and Description of  
Plant Communities of the Far Western Mountains of North Carolina**

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## INTRODUCTION

In mid June 2010, the Carolina Vegetation Survey conducted an initial inventory of natural communities along the far western montane counties of North Carolina. There had never been a project designed to classify the diversity of natural upland (and some wetland) communities throughout this portion of North Carolina. Furthermore, the data captured from these plots will enable us to refine the community classification within the broader region. The goal of this report is to determine a classification structure based on the synthesis of vegetation data obtained from the June 2010 sampling event, and to use the resulting information to develop restoration targets for disturbed ecosystems location in this general region of North Carolina.

## STUDY AREA AND FIELD METHODS

From June 13-20 2010, a total of 48 vegetation plots were established throughout the far western mountains of North Carolina (Figure 1). Focus locations within the study area included the Pisgah National Forest (NF) (French Broad and Pisgah Ranger Districts), the Nantahala NF (Tusquitee Ranger District), and Sandymush Game Land. Target natural communities throughout the week included basic oak-hickory forest, rich cove forest, northern hardwood and boulderfield forest, chestnut oak forest, montane red cedar woodland, shale slope woodland, montane alluvial slough forest, and low elevation xeric pine forest.

Vegetation was sampled following the North Carolina Vegetation Survey protocol described in Peet et al. (1998), and data collected conformed to established and proposed federal standards (see: Jennings et al. 2007, and Federal Geographic Data Committee 2007)

[http://www.fgdc.gov/standards/projects/FGDC-standards-projects/vegetation/index\\_html](http://www.fgdc.gov/standards/projects/FGDC-standards-projects/vegetation/index_html)). Plots were subjectively located to best capture the composition of the target plant community. Each plot contained from 1 to 10 100 m<sup>2</sup> modules, the number reflecting the area of visually homogeneous vegetation available to sample. Species presence was recorded across a logarithmic sequence of subplot sizes including 0.01, 0.1, 1, 10, 100, and where sufficient modules were sampled 400 and 1000 m<sup>2</sup>. Species cover was recorded individually for up to 4 intensively sampled modules (those containing the nested subplots), and overall cover for the plot was also recorded for species not found in intensively sampled modules. Soil samples were collected and sent to Brookside Laboratories for analysis. Soil nutrients were extracted by the Mehlich III technique. Mean soil nutrient and texture values are summarized by community in Appendix 1. Tree stems were recorded for each plot by diameter.



**FIGURE 1.** Pulse 2010B sample region and established plots. Map courtesy of GoogleMaps:  
<http://maps.google.com/maps?q=http://cvs.bio.unc.edu/maps/121-points.kml.xml>

## VEGETATION CLASSIFICATION

Plots were classified to association following the US National Vegetation Classification (NVC) standard (Grossman et al. 1998, Jennings et al. 2006) and the Carolina Vegetation Survey's "Vegetation of the Carolinas" project (<http://cvs.bio.unc.edu/vegetation.htm>). The 'association' is defined as a group of plots having similar species composition, structure, and habitat. Plot assignment was accomplished through a qualitative assessment of vegetation composition, landscape position, hydrologic regime, and soil characteristics. The associations were grouped into higher categories following the classification hierarchy developed by the "Vegetation of the Carolinas" project and include the Formation (e.g., Coastal Plain lowland evergreen forests and shrublands) and Ecological Group (e.g., White cedar forests) levels. The lowest, finest level of the classification scheme used was the NVC association.

Where possible, plots were assigned to an NVC association, identified by association name and unique CEGL identifier. Also, a degree of fit was applied to the classification scheme based on the plot's

correspondence with its assigned association. The 5-level scale of fit we employ conforms to that the standards employed by the VegBank archive and the proposed US Federal standards (see Jennings et al. 2007): Excellent, Good, Fair, Poor (similar but wrong), and Incorrect (unambiguously wrong). In some cases it was necessary to assign a plot to more than one community because of its intermediate character. In 18 of the 48 cases (see Appendix 2), the fit was either fair or poor, suggesting a need for numerous revisions of the NVC to better represent the vegetation of this part of North Carolina.

For each community type to which we assigned plots, we provide a brief summary. We also provide hotlinks (with the CEGL codes) to the formal descriptions of these types in the National Vegetation Classification. Where the fit is weak or poor, we briefly explain the problem. Composition is shown in detail in Appendix 3 where the prevalent species (most frequent species with the number equal to the average number of species per 100 m<sup>2</sup> plot) are listed by constancy among plots, and mean percent cover where present. Average cover class was calculated using the geometric mean of the true cover range for each cover class. Vegetation that was novel or failed to fit well in established associations of the National Vegetation Classification are summarized in Appendix 2. Botanical nomenclature follows Weakley 2006.

Our classification yielded assignments to 25 high-order community associations, from 17 Ecological Groups and 10 Formations. A community characterization is presented for each association below. Names are based on the naming system used in the U.S. National Vegetation Classification (NatureServe 2007). Names reflect species with high constancy and high cover; a “-” separates species within the same vertical strata, while a “/” separates species of different strata.

## ASSOCIATIONS

### I. Spruce and Fir Forests

#### A. Spruce Forests

- 1) *Picea rubens* - (*Betula alleghaniensis*, *Aesculus flava*) / *Viburnum lantanoides* / *Oxalis montana* - *Solidago glomerata* Forest (CEGL006256)

NVC Fit = Good to Excellent      Plots = 121-01-1452, 121-07-1451

This spruce forest is found in high elevations (1400-1555 m) of the Southern Blue Ridge, typically on steep slopes, protected ridges, and over rocky substrate. These two plots sampled during this survey are located on Unaka Mountain, on the North Carolina (Mitchell County) and Tennessee (Unicoi County) border. The canopy of these stands are dominated by *Picea rubens*, with lesser amounts of *Betula alleghaniensis* and *Fagus grandifolia*. The shrub and subcanopy strata are comprised of canopy species, as well as *Sorbus americana*, *Acer pensylvanicum*, and *Vaccinium erythrocarpum*. The herbaceous layer is

diverse, and includes *Dryopteris campyloptera*, *Carex pensylvanica*, *Carex intumescens*, *Oxalis montana*, and *Maianthemum canadense*.

## II. Northern Hardwood Forests

### A. Birch-Beech-Maple Forests

- 1) *Aesculus flava* - *Betula alleghaniensis* - *Acer saccharum* / *Acer spicatum* / *Caulophyllum thalictroides* - *Laporteaa canadensis* Forest (CEGL004973)

NVC Fit = Good

Plots = 121-07-1450, 121-10-1451

This Southern Blue Ridge association represents a vegetation type dominated by canopy species typical of northern hardwood forests (*Aesculus flava*, *Betula allegheniensis*, *Acer saccharum*, *Fagus grandifolia*) occurring with herbaceous species typical of lower elevation cove forests. The herbaceous stratum of this forest is typically lush and diverse. The aforementioned tree species dominate the canopy of these two plots sampled during this survey. Other canopy and subcanopy species include *Fraxinus americana*, *Tilia americana*, and *Betula lenta*. The shrub stratum is not well developed in either of these two plots. The herbaceous stratum is comprised of many species, including *Podophyllum peltatum*, *Caulophyllum thalictroides*, *Maianthemum canadensis*, *Trillium erectum*, *Osmorhiza claytonia*, and *Actaea racemosa*. In one example (07-1450), *Laporteaa canadensis* is found in high density. These two plots are located on High Knob/Sugarhouse Cove (Buncombe County, NC) and Price Creek/Coxcomb Mountain (Yancey County, NC); elevations of both plots exceed 1200 m.

### B. Boulderfields

- 1) *Betula alleghaniensis* / *Acer spicatum* / *Hydrangea arborescens* - *Ribes cynosbati* / *Dryopteris marginalis* Forest (CEGL004982)

NVC Fit = Fair

Plots = 121-01-1455, 121-05-1452

This association represents boulderfield forests of the Southern Blue Ridge with a canopy and herbaceous stratum more typical of lower elevation cove forests. It often is found growing on a rocky talus substrate, usually associated with small stream and seepage areas. The canopy is composed of stunted *Betula alleghaniensis*, co dominating with other cove hardwood species. These two plots occur at high elevation (> 900 m) sites in Cherokee County, NC, on the Nantahala NF (Allen Gap and Rocky Knob). They are characterized as having a fair fit to the NVS association because of the absence of *Betula alleghaniensis*. The canopy of these plots is dominated by *Quercus rubra*, *Carya cordiformis*, *Liriodendron tulipifera*, *Carya ovalis*, *Juglans cinerea*, *Halesia tetraptera*, and *Robinia pseudoacacia*. Herbaceous species include *Hydrangea arborescens*, *Maianthemum canadensis*, *Dryopteris marginalis*, *Prosartes lanuginosa*, *Ribes cynosbati*, and *Trillium vaseyi*.

### III. Montane Acid Mesic Forests

#### A. Hemlock Forests

1) *Tsuga canadensis / Rhododendron maximum - (Clethra acuminata, Leucothoe fontanesiana)*  
Forest (CEGL007136)

NVC Fit = Poor to Fair

Plots = 121-01-1450, 121-06-1451



This eastern hemlock dominated forest of the southern Appalachians is found on acidic soils of lower protected slopes, typically over 550 m in elevation. Besides *Tsuga canadensis*, other canopy associates include *Betula lenta*, *Liriodendron tulipifera*, *Tilia americana* var. *heterophylla*, and *Magnolia fraseri*. The shrub stratum of this association is characterized by dense to patchy colonies of *Rhododendron maximum*, and sometimes dense patches of *Leucothoe fontanesiana*. Depending on the coverage of these shrubs, herbaceous diversity can be quite variable. Typical species includes *Mitchella repens*, *Chimaphila maculata*, *Goodyera pubescens*, and *Hexastylis shuttleworthii*. Each of these hemlock forest type plots sampled during this survey contain components of this vegetation association, but do not fit well because of their unique species assemblages. Plot 01-1450 is located in Spring Creek Gorge (Madison County, NC), on a north-facing mid slope position. Although association nominal species occur on this plot in high abundance, there is also an abundance of species more typical of mafic, or nutrient rich sites. Some unique, mafic species include *Cladrastis kentukea*, *Laportea canadensis*, and *Panax quinquefolius*. Plot 06-1451 is located at the base of a steep north-facing cliff on the south side of Sandymush Creek in Buncombe County, NC. This plot is unique among others belonging to this association because of the high density of *Buckleya distichophylla* in the shrub stratum.

## IV. Montane Rich Mesic Forests

### A. Rich Cove Forests

- 1) *Aesculus flava - Acer saccharum - (Fraxinus americana, Tilia americana var. heterophylla) / Hydrophyllum canadense - Solidago flexicaulis* Forest (CEGL007695)

NVC Fit = Good

Plots = 121-10-1450, 121-12-1450

This association represents species rich, protected cove forests of the southern Appalachians dominated by some combination of the following canopy species--*Acer saccharum*, *Aesculus flava*, *Fraxinus americana*, *Tilia americana* var. *heterophylla*, *Carya cordiformis*, and/or *Quercus rubra*. Another characteristic component of this type is the lush and diverse herbaceous layer, often dominated by species indicative of circumneutral soils. These two plots are located on High Knob/Sugarhouse Cove (Buncombe County, NC) and Powder Burnt Branch (Cherokee County, NC). The canopy of these forests is co dominated by *Acer saccharum*, *Quercus rubra*, *Betula lenta*, *Aesculus flava*, *Magnolia acuminata*, *Tilia americana* var. *heterophylla*, and *Liriodendron tulipifera*. The shrub stratum is not well-developed in these forests, although there is a minor component of *Rhododendron maximum* in plot 12-1450 (Power Burnt Branch). Herbaceous species richness is high in both plots; shared species include *Actaea racemosa*, *Caulophyllum thalictroides*, *Polystichum acrostichoides*, *Arisaema triphyllum*, and *Sanguinaria canadensis*.

- 2) *Liriodendron tulipifera - Aesculus flava - (Fraxinus americana, Tilia americana var. heterophylla) / Actaea racemosa - Laporteia canadensis* Forest (CEGL007710)

NVC Fit = Fair to Good

Plots = 121-03-1450, 121-04-1459, 121-07-1452

This association represents typical intermediate (neither acidic nor circumneutral) cove forests of the southern Appalachians. The canopy of this type is dominated by a mixture of mesophytic species--including *Fraxinus americana*, *Tilia americana* var. *heterophylla*, *Aesculus flava*, and *Magnolia acuminata*--occurring with species of greater ecological amplitudes--*Liriodendron tulipifera*, *Acer rubrum*, and *Tsuga canadensis*. Although the herbaceous layer is often lush and diverse in this forest type, it does not include species indicative of calciphilic conditions (~CEGL007695). The canopy of these three plots is composed of *Liriodendron tulipifera*, *Halesia tetrapeta*, *Betula lenta*, *Tilia americana* var. *heterophylla*, *Carya cordiformis*, and *Aesculus flava*. The shrub stratum is not well developed in any of these forests. Diagnostic herbaceous species include *Tiarella cordifolia*, *Polystichum acrostichoides*, *Actaea racemosa*, *Arisaema triphyllum*, and *Adiantum pedatum*. Plot 03-1450, which occurs in Sandymush Game Land (Buncombe County, NC), is characterized as a fair fit to this NVC association because of its unique canopy species assemblage. Species include the aforementioned community indicators, as well as *Quercus montana*, *Juglans nigra*, and *Pinus strobus*.



3) *Tilia americana* var. *heterophylla* - *Fraxinus americana* - (*Ulmus rubra*) / *Sanguinaria canadensis* - (*Aquilegia canadensis*, *Asplenium rhizophyllum*) Forest (CEGL007711)

NVC Fit = Good

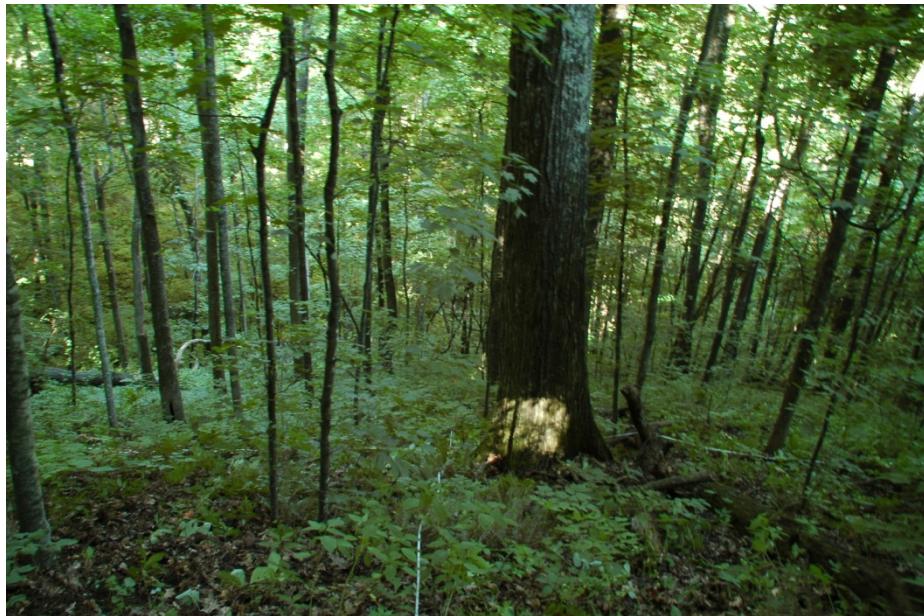
Plots = 121-04-1450

This association represents species rich, protected cove forests of lower elevations (usually below 700 m) of the southern Appalachians, with a significant component of species associated with circumneutral substrates. This plot is found at a relatively high elevation (1009 m) for this association, in Sugar Creek Cove of Buncombe County, NC. The canopy is co dominated by the following mesophytic species-- *Fraxinus americana*, *Juglans nigra*, *Carya cordiformis*, *Ulmus rubra*, *Betula lenta*, and *Tilia americana* var. *heterophylla*. The subcanopy and shrub layer is dominated by *Lindera benzoin*. The herbaceous stratum includes a mixture of calciphilic and more broadly distributed mesophytic species. Frequent species include *Cystopteris protrusa*, *Cryptotaenia canadensis*, *Impatiens pallida*, *Hydrophyllum canadense*, *Osmorhiza claytonii*, and *Arisaema triphyllum*.

4) *Quercus rubra* - *Tilia americana* var. *heterophylla* - *Halesia tetraptera* var. *monticola* / *Collinsonia canadensis* - *Tradescantia subaspera* Forest (CEGL007878)

NVC Fit = Good

Plots = 121-04-1451



This community has been described only from the Great Smoky Mountains National Park and needs further review. It represents *Quercus rubra* dominated cove forests on rocky slopes of intermediate (915-1220 m) elevations. This plot sampled during the survey occurs on Panther Branch Slopes, of Madison County, NC. The canopy is composed of *Quercus rubra*, occurring with other mesic, rich cove trees such as *Acer saccharum*, *Fraxinus americana*, *Tilia americana* var. *heterophylla* and *Carya cordiformis*. The herbaceous stratum is rich and lush in this plot. Frequent species include *Arisaema triphyllum*, *Astilbe biternata*, *Impatiens pallida*, *Geranium maculatum*, and *Polystichum acrostichoides*.

#### B. Mesic Oak-Hickory Forests

- 1) *Quercus alba* - *Quercus rubra* - *Quercus prinus* / *Collinsonia canadensis* - *Podophyllum peltatum* - *Sanguinaria canadensis* Forest (CEGL007692)

NVC Fit = Poor to Good

Plots = 121-03-1454, 121-05-1450, 121-06-1450,

121-07-1453, 121-12-1451

This association represents oak-hickory forests of circumneutral soils in the Southern Blue Ridge and inner Piedmont of the Carolinas and Georgia. The canopy of this forest type can be dominated by any number of oak and hickory species, including *Quercus alba*, *Quercus velutina*, *Quercus rubra*, *Carya glabra*, and/or *Carya alba*; these usually co-occur with mesophytic, or cove hardwood species, including *Fraxinus americana* and *Magnolia acuminata*. The five plots related to this association occur throughout the sampling area, and are highly variable with respect to their species composition. Constant canopy species include *Liriodendron tulipifera*, *Quercus alba*, *Carya glabra*, *Acer rubrum*, and *Nyssa sylvatica*. Most of the plots in this survey do not occur on true mafic soil conditions; instead, they represent an

intermediate form of oak-hickory forest, in terms of both soil productivity and fertility. There is a need for the NVC to fine-tune the classification of intermediate to mesic/mafic oak-hickory forests of the southern Appalachians.

## V. Montane Dry - Mesic Oak Forests

### A. Dry - Mesic Oak Forests

- 1) *Quercus rubra* - *Acer rubrum* / *Pyrularia pubera* / *Thelypteris noveboracensis* Forest  
(CEGL006192)

NVC Fit = Good

Plots = 121-05-1453

This red oak dominated forest of the southern Appalachians is found at intermediate elevations, on variable topography, and typically on an acidic substrate. The canopy is often dominated by *Quercus rubra*, occurring with other oak species and *Liriodendron tulipifera* and *Acer rubrum*. This forest type can be classified as having an intermediate productivity; i.e., these forests do not occur on mesic or xeric slopes/soils. The single plot identified to this association during this survey is found in the Fires Creek Watershed of Clay County, NC. The canopy is dominated by *Quercus rubra*, *Acer rubrum*, *Quercus montana*, and *Carya glabra*. The subcanopy is dominated by canopy species, as well as *Halesia tetrapeta*, *Magnolia fraseri*, *Hamamelis virginiana*, and *Nyssa sylvatica*. The low shrub stratum is characterized by a dense cover of *Gaylussacia ursina*. Herbs found in this plot include *Medeola virginiana*, *Viola hastata*, *Thelypteris noveboracensis*, *Goodyera pubescens*, and *Desmodium nudiflorum*.

- 2) *Quercus alba* - *Quercus coccinea* - *Quercus falcata* / *Kalmia latifolia* - *Vaccinium pallidum* Forest (CEGL007691)

NVC Fit = Good

Plots = 121-06-1458

This montane oak-hickory forest occurs on dry, acidic sites of low elevations (below 915 m) within the Southern Blue Ridge. The canopies of this type are dominated by a mixture of oak species (including *Quercus alba*, *Quercus coccinea*, *Quercus falcata*, and *Quercus velutina*) and dry site pine species (including *Pinus virginiana*, *Pinus echinata*, and/or *Pinus rigida*). This association is characterized by having a species composition more typical of lower elevation, Piedmont forests (e.g., *Quercus falcata*, *Piptochaetium avenaceum*, and *Schizachyrium scoparium*) and lacking species of more mesic forests. This plot is located on the Needmore Tract, in Swain County, NC. The canopy is dominated by *Quercus falcata*, *Quercus velutina*, and *Quercus alba*. Subcanopy species include *Nyssa sylvatica*, *Pinus rigida*, *Acer rubrum*, *Liriodendron tulipifera*, and *Oxydendrum arboreum*. The shrub stratum is well developed in this forest. Species include *Kalmia latifolia*, *Vaccinium pallidum*, *Vaccinium stamineum*, *Symplocos tinctoria*, and *Arundinaria appalachiana*. Herbaceous species diversity is high in this forest; typical species include *Phegopteris hexagonoptera*, *Lysimachia quadrifolia*, *Pityopsis graminifolia*, *Polystichum acrostichoides*, *Viola hastata*, and *Schizachyrium scoparium*.

## B. Chestnut Oak Forests

- 1) *Quercus (prinus, coccinea) / Kalmia latifolia / (Galax urceolata, Gaultheria procumbens)* Forest (CEGL006271)

NVC Fit = Fair to Excellent      Plots = 121-01-1456, 121-06-1452



This association represents oak forests of subxeric ridges and southwesterly exposed slopes of the Southern Blue Ridge, dominated by *Quercus montana*, with or without co dominance of *Quercus coccinea*. Both the low and high shrub strata can be well-developed in this forest type; species can include *Kalmia latifolia*, *Rhododendron maximum*, *Vaccinium pallidum*, *Gaylussacia ursina*, and *Gaylussacia baccata*. Herbaceous diversity is typically low, and species abundances are sparse. These two plots occur in Fires Creek Watershed (Clay County, NC) and Cold Springs Creek (Haywood County, NC). These plots are dominated by a canopy of *Quercus montana*; subcanopy trees include *Acer rubrum*, *Oxydendrum arboreum*, *Tsuga canadensis*, and *Nyssa sylvatica*. Shrub species include *Kalmia latifolia*, *Rhododendron maximum*, and *Vaccinium pallidum*. Plot 06-1452 (Cold Springs Creek) is identified as having a fair fit with the NVC association because of its atypical high herbaceous species richness. Herbaceous species encountered on this plot include *Carex pensylvanica*, *Houstonia purpurea*, *Solidago curtisii*, and *Solidago flexicaulis*.

## VI. Montane Xeric Forests

### A. Shortleaf Pine - Oak Forests

- 1) *Pinus echinata - Quercus (prinus, falcata) / Oxydendrum arboreum / Vaccinium pallidum* Forest (CEGL007493)

NVC Fit = Good to Excellent      Plots = 121-01-1457, 121-06-1455

This association represents low elevation ridges and exposed slopes of the Southern Blue Ridge (known for the Blue Ridge Escarpment and Blue Ridge/Piedmont transition) where *Pinus echinata* and dry site oaks dominate the canopy. Common subcanopy species can include *Oxydendrum arboreum*, *Ilex opaca* var. *opaca*, *Cornus florida*, and *Carya pallida*. The shrub stratum is variable in species composition and density, but some combination of Ericaceous plants is usually present. The canopy of these plots sampled during this survey is dominated by *Pinus echinata*, *Quercus coccinea*, *Quercus velutina*, *Quercus alba*, *Quercus falcata*, *Carya pallida*, and *Pinus rigida*. Subcanopy species include canopy species, as well as *Oxydendrum arboreum*, *Cornus florida*, *Nyssa sylvatica*, and *Amelanchier spp.* The shrub stratum is well developed in this example, and includes *Vaccinium pallidum*, *Pyrularia pubera*, *Gaylussacia baccata*, *Gaylussacia ursina*, and in one example, *Corylus cornuta* var. *cornuta*.



## **B. Table Mountain Pine / Pitch Pine Forests and Woodlands**

- 1) *Pinus pungens* - *Pinus rigida* - (*Quercus prinus*) / *Kalmia latifolia* - *Vaccinium pallidum*  
Woodland (CEGL007097)

NVC Fit = Fair to Excellent      Plots = 121-01-1454, 121-03-1453

This association represents the typical pine-oak-heath woodland of the Southern Blue Ridge dominated by *Pinus pungens* and/or *Pinus rigida*. Deciduous canopy species may become increasingly more important on sites where fire has been excluded for long durations, or on sites of greater soil productivity. The shrub stratum can also vary in density based on fire history. Typical shrub species found in this woodland includes *Kalmia latifolia*, *Vaccinium pallidum*, *Vaccinium stamineum*, *Vaccinium corymbosum*, *Rhododendron maximum*, *Rhododendron minus*, *Gaylussacia ursina*, *Pyrularia pubera*, and *Fothergilla major*. The herb stratum is typically sparse on these sites and herb species that are found here are tolerant of the xerophytic soil conditions. These may include *Pteridium aquilinum*, *Gaultheria procumbens*, *Iris verna*, and *Epigaea repens*. The sampled plots mapped to this NVC association both are located on Collett Ridge in Cherokee County, NC. The canopy of these plots are dominated by *Pinus pungens* and *Quercus coccinea*, while subcanopy species include *Oxydendrum arboreum*, *Nyssa sylvatica*, *Quercus velutina*, and *Sassafras albidum*. The shrub stratum contains *Kalmia latifolia*, *Gaylussacia baccata*, *Vaccinium pallidum*, *Vaccinium stamineum*, and *Gaylussacia ursina*. Constant herbaceous species include *Gaultheria procumbens* and *Epigaea repens*. Herbaceous diversity is relatively high in plot 03-1453, which explains why it was assigned a fair fit category to this NVC association.

- 2) *Pinus virginiana* - (*Pinus rigida*, *Pinus pungens*) / *Schizachyrium scoparium* Forest  
(CEGL008500)

NVC Fit = Fair to Good      Plots = 121-05-1451, 121-06-1454

Both plots 05-1451 and 06-1454 are located on the John Green Bend tract of the Nantahala NF in Cherokee County, NF. Canopy and subcanopy species include *Pinus rigida*, *Carya alba*, *Acer rubrum*, *Quercus alba*, *Oxydendrum arboreum*, *Carya pallida*, and *Quercus coccinea*. This association (dominated by either *Pinus virginiana* or *Pinus rigida*) is known from low elevation ridges of the Chattahoochee and Cherokee National Forests. It has a characteristic open canopy and herbaceous layer dominated by graminoid vegetation. Plot 06-1454 does not fit this description well, and may represent a fire suppressed version of this community type.

## **VII. Montane Woodlands and Glades**

### **A. Mafic Igneous / Metamorphic Glades and Barrens**

1) *Carya (glabra, alba)* - *Fraxinus americana* - *Juniperus virginiana* var. *virginiana* Woodland  
(CEGL003752)

NVC Fit = Fair

Plots = 121-04-1457

This association describes Southern Blue Ridge woodlands on sites with a biotite gneiss underlying substrate, southerly or easterly exposure, and having a stunted canopy of *Juniperus virginiana*, *Carya glabra*, *Fraxinus americana*, *Quercus montana*, *Ostrya virginiana*, and/or *Chionanthus virginicus*. A dense grassy herbaceous stratum is also characteristic of this woodland. This plot is located on the Cheoah Mountains Shale Slope site in Graham County, NC. The stunted canopy is dominated by *Carya glabra*, with lesser amounts of *Quercus montana*, *Fraxinus americana*, and *Quercus rubra*. The subcanopy includes canopy species, as well as *Amelanchier laevis*, *Carya alba*, *Robinia pseudoacacia*, and *Ulmus alata*. The herbaceous stratum is rich and lush in this plot. Dominant species include *Carex pensylvanica*, *Penstemon smallii*, *Coreopsis major*, *Pycnanthemum pycnanthemooides*, and *Antennaria plantaginifolia*. The high herbaceous species diversity found on this plot is the reason it is assigned a fair fit to the NVC association.



- 2) *Selaginella rupestris* - *Schizachyrium scoparium* - *Hylotelephium telephoides* - *Allium cernuum*  
Herbaceous Vegetation (CEGL004991)

NVC Fit = Excellent

Plots = 121-01-1451

This association describes montane and Piedmont herbaceous glade vegetation of North Carolina and Virginia occurring on elevated pH soil conditions. The flora of this association is diverse, and due its patchy distribution, composition from one site to another may be very distinct. *Selaginella rupestris* is often a characteristic species, occurring on shallow mats on low elevation outcrops. This plot is located on Cedar Cliff Knob, in Buncombe County, NC. The herbaceous stratum is dominated by a lush coverage of grass species--*Sorghastrum nutans*, *Danthonia spicata*, and *Schizachyrium scoparium*. Other characteristic herbs include *Selaginella rupestris*, *Hypoxis hirsuta*, *Scleria pauciflora* var. *pauciflora*, and *Silene virginica*. A minor tree and shrub component are found on this plot. Species include *Quercus rubra*, *Quercus montana*, and *Philadelphus inodorus*.

## B. Shale Glades and Barrens

- 1) *Quercus prinus* - *Juniperus virginiana* - (*Pinus virginiana*) / *Philadelphus hirsutus* - *Celtis occidentalis* Woodland (CEGL007720)

NVC Fit = Excellent

Plots = 121-08-1450

This association represents Southern Blue Ridge woodlands dominated by a stunted canopy of *Quercus montana*, *Juniperus virginiana*, and/or *Pinus virginiana*, and occurring on calcareous shale substrates. This plot occurs in Spring Creek Gorge, in Madison County, NC. The canopy includes *Pinus strobus*, *Pinus virginiana*, *Quercus rubra*, *Quercus montana*, and *Carya glabra*. The shrub stratum includes the association nominal, *Philadelphus hirsutus*, and in the low shrub stratum, *Vaccinium pallidum*. Dominant herbaceous species include *Carex pensylvanica*, *Danthonia spicata*, *Penstemon smallii*, and *Solidago arguta*.

# VIII. Montane Shrub and Herbaceous Vegetation

## A. Grassy Balds and Meadows

- 1) *Carex pensylvanica* Herbaceous Vegetation (CEGL004094)

NVC Fit = Fair to Good

Plots = 121-08-1452, 121-08-1453

This association describes southern Appalachian grasslands over 1220 m in elevation dominated by *Carex pensylvanica*. These two plots are located on Ogle Meadows, in Yancey County, NC. Besides the community nominal, other species include *Vaccinium corymbosum*, *Schizachyrium scoparium*, *Poa*

*pratensis*, *Danthonia compressa*, and *Packera schweinitziana*. Plot 08-1452 is assigned a fair fit to the NVC association due its relatively low coverage of *Carex pensylvanica*.

2) *Danthonia compressa* - (*Sibbaldiopsis tridentata*) Herbaceous Vegetation (CEGL004242)

NVC Fit = Fair to Good

Plots = 121-04-1452, 121-04-1453, 121-04-1454,  
121-04-1455

This association describes southern Appalachian grasslands on high elevation (usually above 1350 m) summits dominated by *Danthonia compressa*, or the subshrub, *Sibbaldiopsis tridentata*. The four plots belonging to this association sampled during this survey occur on Big Bald Mountain, on the North Carolina (Yancey County) - Tennessee (Unicoi County) state line. Except for plot 04-1453, these plots are dominated by *Danthonia compressa*. Other species include *Packera schweinitziana*, *Carex cristatella*, *Potentilla simplex*, *Hieracium caespitosum*, and *Sibbaldiopsis tridentata*.



## IX. Montane Alluvial Forests and Woodlands

### A. Floodplain Forests

- 1) *Acer rubrum* var. *trilobum* - *Fraxinus pennsylvanica* / *Carex crinita* - *Peltandra virginica* Forest (CEGL004420)

NVC Fit = Good

Plots = 121-06-1453

This community is found on floodplain depressions, or sloughs, in the Blue Ridge Mountains of North Carolina. Characteristic canopy species include *Acer rubrum* var. *trilobum* and *Fraxinus pennsylvanica*. It has been described for slough forests of the Little Tennessee River, and although it historically had a more widespread distribution, its current distribution has been severely reduced due to floodplain alteration and timber harvesting. This plot is located on a slough of the French Broad River in Buncombe County, NC. The canopy is comprised of the community nominal species, as well as *Betula nigra* and *Platanus occidentalis*. The subcanopy/shrub layer is dominated by *Cornus amomum*. Frequent herbaceous species include *Boehmeria cylindrica*, *Carex lupulina*, *Onoclea sensibilis* var. *sensibilis*, and *Carex crinita*.

- 2) *Tsuga canadensis* - (*Pinus strobus*) Temporarily Flooded Forest (CEGL007143)

NVC Fit = Fair

Plots = 121-04-1458

This association represents temporarily flooded wetland forests of alluvial flats and terraces of the Southern Blue Ridge region, dominated by a combination of mesophytic upland and alluvial wetland species. This plot occurs on a stream terrace in the Fires Creek Watershed of Clay County, NC. Its canopy is dominated by *Tilia americana* var. *heterophylla*, *Betula lenta*, and *Liriodendron tulipifera*. A well-developed shrub stratum of *Rhododendron maximum* characterizes this stand. The herbaceous, shrub, and canopy strata are composed of mesophytic upland species, and do not contain any alluvial wetland species. This is why this plot is characterized as having a fair fit to the NVC association. Herbaceous species located on this plot include *Monarda fistulosa*, *Polystichum acrostichoides*, *Polygonatum biflorum*, *Mitchella repens*, and *Houstonia serpyllifolia*.

## X. Montane Bogs, Fens, and Seeps

### A. Forested Bogs

- 1) *Picea rubens* - (*Tsuga canadensis*) / *Rhododendron maximum* Saturated Forest (CEGL006277)

NVC Fit = Good to Excellent

Plots = 121-01-1453, 121-04-1456

This association represents spruce-dominated wetland forests of the central and southern Appalachian Mountains. It occurs on flat terrain adjacent to poorly drained small streams, typically at high elevations (above 1050 m in the Blue Ridge). Diagnostic characteristics of this forest include a canopy that is dominated by *Picea rubens*, sometimes with *Tsuga canadensis*, and a dense shrub layer dominated by *Rhododendron maximum*. Both of these plots linked to this association occur on Alarka Laurel, in Swain County, NC. The canopy of these stands is dominated by a pure mixture of *Picea rubens*, while the shrub stratum is well-developed, dense, and composed of *Rhododendron maximum*, *Kalmia latifolia*, and *Viburnum cassinoides*. The herbaceous layer in these swamps is sparse, and is composed of mostly bryophytic vegetation.



## B. Forested Seeps

- 1) *Diphylleia cymosa* - *Saxifraga micranthidifolia* - *Laportea canadensis* Herbaceous Vegetation  
(CEGL004296)

NVC Fit = Good

Plots = 121-03-1451, 121-03-1452, 121-08-1451

This community represents the vegetation of shaded seepage areas within the southern Appalachian Mountains, typically with overhanging forest canopy trees and characteristic herbs such as *Diphylleia cymosa*, *Saxifraga micranthidifolia*, and/or *Laportea canadensis*. Compared to other nonalluvial wetland types of the southern Appalachians, CEGL004296 is more often associated with elevated pH soil

conditions. The three plots of this example are located in Yancey County, NC, and are found on the Price Creek/Coxcomb Mountain and Toodies Creek Headwater sites. Diagnostic herbs include *Laportea canadensis*, *Hydrophyllum canadense*, *Diphylleia cymosa*, *Monarda didyma*, and *Dryopteris intermedia*. Overhanging tree species include *Acer saccharum*, *Aesculus flava*, *Fagus grandifolia*, and *Fraxinus americana*.

### C. Sphagnum and Shrub Bogs and Seeps

- 1) *Alnus serrulata* - *Rhododendron arborescens* / *Sarracenia oreophila* - *Rhynchospora rariflora*  
Shrubland (CEGL003914)

NVC Fit = Fair

Plots = 121-06-1456, 121-06-1457

This association represents non-alluvial montane wetlands dominated by shrubs and open herbaceous areas whose hydrology is influenced by acidic seepages. Many of these areas have been anthropogenically altered by grazing, fire removal, and drainage. The shrub layer can be variable depending on the frequency and severity of fire in these sites. The typical shrub stratum is 1-2 m in height, and can include *Alnus serrulata*, *Rhododendron arborescens*, *Lyonia ligustrina*, and *Rosa palustris*. Conspicuous herbs include *Sarracenia oreophila* and *Osmunda cinnamomea*. These two plots occur along a seepage gradient (06-1456=lower elevation, wetter variant; 06-1457=higher elevation, drier variant) in Clay County, NC. Shared species include upland encroaching hardwoods (*Acer rubrum* and *Liriodendron tulipifera*), *Saccharum giganteum*, *Helianthus angustifolius*, and *Viola primulifolia*. The drier variant includes patches of the community nominal, *Sarracenia oreophila*, as well as *Baptisia tinctoria*, and *Schizachyrium scoparium*. The wetter variant includes *Andropogon glomeratus*, *Eleocharis tuberculosa*, and *Sanguisorba canadensis*. Neither of these plots matches well with this NVC association because they lack the necessary shrub composition and structure.



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**Appendix 1: Soil Nutrient and Texture Values Summarized by Association. Specific soil variables include pH, Organic Matter (%), exchangeable cations (Ca, Mg, K, Na, Mn; ppm), texture class (clay, silt, sand; %).**

Community Type	PH	Organic	Calcium	Magnesium	Potassium	Sodium	Manganese	Sand %	Silt %	Clay %
I.A.1: <i>Picea rubens</i> - ( <i>Betula alleghaniensis</i> , <i>Aesculus flava</i> ) / <i>Viburnum lantanoides</i> / <i>Oxalis montana</i> - <i>Solidago glomerata</i> Forest (CEGL006256)	3.6	12	117	28	60	45	2	68	24	8
II.A.1: <i>Aesculus flava</i> - <i>Betula alleghaniensis</i> - <i>Acer saccharum</i> / <i>Acer spicatum</i> / <i>Caulophyllum thalictroides</i> - <i>Laporteaa canadensis</i> Forest (CEGL004973)	4.2	15	512	66	84	44	72	57	30	13
II.B.1: <i>Betula alleghaniensis</i> / <i>Acer spicatum</i> / <i>Hydrangea arborescens</i> - <i>Ribes cynosbati</i> / <i>Dryopteris marginalis</i> Forest (CEGL004982)	4.3	23	621	45	95	33	65	62	31	7
III.A.1: <i>Tsuga canadensis</i> / <i>Rhododendron maximum</i> - ( <i>Clethra acuminata</i> , <i>Leucothoe fontanesiana</i> ) Forest (CEGL007136)	4.4	25	1286	163	77	44	99	67	21	12
IV.A.1: <i>Aesculus flava</i> - <i>Acer saccharum</i> - ( <i>Fraxinus americana</i> , <i>Tilia americana</i> var. <i>heterophylla</i> ) / <i>Hydrophyllum canadense</i> - <i>Solidago flexicaulis</i> Forest (CEGL007695)	4.7	15	1094	149	136	44	86	50	42	8
IV.A.2: <i>Liriodendron tulipifera</i> - <i>Aesculus flava</i> - ( <i>Fraxinus americana</i> , <i>Tilia americana</i> var. <i>heterophylla</i> ) / <i>Actaea racemosa</i> - <i>Laporteaa canadensis</i> Forest (CEGL007710)	5.0	11	1023	166	117	43	88	60	31	9
IV.A.3: <i>Tilia americana</i> var. <i>heterophylla</i> - <i>Fraxinus americana</i> - ( <i>Ulmus rubra</i> ) / <i>Sanguinaria canadensis</i> - ( <i>Aquilegia canadensis</i> , <i>Asplenium rhizophyllum</i> ) Forest (CEGL007711)	6.1	9	2686	245	306	41	62	53	33	15
IV.A.4: <i>Quercus rubra</i> - <i>Tilia americana</i> var. <i>heterophylla</i> - <i>Halesia tetrapeta</i> var. <i>monticola</i> / <i>Collinsonia canadensis</i> - <i>Tradescantia subaspera</i> Forest (CEGL007878)	5.2	12	1541	147	185	38	65	51	33	15
IV.B.1: <i>Quercus alba</i> - <i>Quercus rubra</i> - <i>Quercus prinus</i> / <i>Collinsonia canadensis</i> - <i>Podophyllum peltatum</i> - <i>Sanguinaria canadensis</i> Forest (CEGL007692)	4.8	10	513	105	111	40	84	51	39	10
V.A.1: <i>Quercus rubra</i> - <i>Acer rubrum</i> / <i>Pyrularia pubera</i> / <i>Thelypteris noveboracensis</i> Forest (CEGL006192)	4.2	30	465	59	116	47	22	41	45	14
V.A.2: <i>Quercus alba</i> - <i>Quercus coccinea</i> - <i>Quercus falcata</i> / <i>Kalmia latifolia</i> - <i>Vaccinium pallidum</i> Forest (CEGL007691)	4.6	6	155	46	78	33	29	59	28	13
V.B.1: <i>Quercus (prinus, coccinea)</i> / <i>Kalmia latifolia</i> / ( <i>Galax urceolata</i> , <i>Gaultheria procumbens</i> ) Forest (CEGL006271)	4.0	37	239	56	123	50	17	63	31	6

<b>Community Type</b>	<b>PH</b>	<b>Organic</b>	<b>Calcium</b>	<b>Magnesium</b>	<b>Potassium</b>	<b>Sodium</b>	<b>Manganese</b>	<b>Sand %</b>	<b>Silt %</b>	<b>Clay %</b>
VI.A.1: <i>Pinus echinata</i> - <i>Quercus (prinus, falcata)</i> / <i>Oxydendrum arboreum</i> / <i>Vaccinium pallidum</i> Forest (CEGL007493)	4.3	8	158	24	46	42	60	59	26	15
VI.B.1: <i>Pinus pungens</i> - <i>Pinus rigida</i> - ( <i>Quercus prinus</i> ) / <i>Kalmia latifolia</i> - <i>Vaccinium pallidum</i> Woodland (CEGL007097)	4.0	26	186	24	54	43	6	52	36	12
VI.B.2: <i>Pinus virginiana</i> - ( <i>Pinus rigida</i> , <i>Pinus pungens</i> ) / <i>Schizachyrium scoparium</i> Forest (CEGL008500)	4.6	12	415	62	98	39	49	61	26	14
VII.A.1: <i>Carya (glabra, alba)</i> - <i>Fraxinus americana</i> - <i>Juniperus virginiana</i> var. <i>virginiana</i> Woodland (CEGL003752)	5.1	24	1482	218	128	50	110	66	27	7
VII.A.2: <i>Selaginella rupestris</i> - <i>Schizachyrium scoparium</i> - <i>Hylotelephium telephiooides</i> - <i>Allium cernuum</i> Herbaceous Vegetation (CEGL004991)	4.1	12	184	103	73	51	21	59	31	10
VII.B.1: <i>Quercus prinus</i> - <i>Juniperus virginiana</i> - ( <i>Pinus virginiana</i> ) / <i>Philadelphus hirsutus</i> - <i>Celtis occidentalis</i> Woodland (CEGL007720)	4.1	17	324	51	90	44	25	51	36	13
VIII.A.1: <i>Carex pensylvanica</i> Herbaceous Vegetation (CEGL004094)	4.7	19	461	60	148	44	41	54	35	11
VIII.A.2: <i>Danthonia compressa</i> - ( <i>Sibbaldiopsis tridentata</i> ) Herbaceous Vegetation (CEGL004242)	4.5	20	403	76	101	42	18	48	45	6
IX.A.1: <i>Acer rubrum</i> var. <i>trilobum</i> - <i>Fraxinus pennsylvanica</i> / <i>Carex crinita</i> - <i>Peltandra virginica</i> Forest (CEGL004420)	4.6	11	355	62	59	47	26	52	28	20
IX.A.2: <i>Tsuga canadensis</i> - ( <i>Pinus strobus</i> ) Temporarily Flooded Forest (CEGL007143)	4.5	6	526	76	61	46	104	73	24	3
X.A.1: <i>Picea rubens</i> - ( <i>Tsuga canadensis</i> ) / <i>Rhododendron maximum</i> Saturated Forest (CEGL006277)	3.8	45	310	54	70	49	9	52	25	23
X.B.1: <i>Diphylleia cymosa</i> - <i>Saxifraga micranthidifolia</i> - <i>Laportea canadensis</i> Herbaceous Vegetation (CEGL004296)	4.8	12	1301	169	82	44	81	83	13	4
X.C.1: <i>Alnus serrulata</i> - <i>Rhododendron arborescens</i> / <i>Sarracenia oreophila</i> - <i>Rhynchospora rariflora</i> Shrubland (CEGL003914)	4.7	12	323	52	38	46	3	64	33	4

**Appendix 2: Association Groups with Poor or Fair Fit**

CEGL	# of Plots	NVC Fit	Reason
<i>Betula alleghaniensis / Acer spicatum / Hydrangea arborescens - Ribes cynosbati / Dryopteris marginalis</i> Forest (CEGL004982)	2	Fair	Both plots do not contain <i>Betula alleghaniensis</i>
<i>Tsuga canadensis / Rhododendron maximum - (Clethra acuminata, Leucothoe fontanesiana)</i> Forest (CEGL007136)	2	Poor to Fair	Both plots contain unique assemblage of acidic hemlock forest species with rare and/or mafic species
<i>Liriodendron tulipifera - Aesculus flava - (Fraxinus americana, Tilia americana var. heterophylla) / Actaea racemosa - Laportea canadensis</i> Forest (CEGL007710)	3	Fair to Good	Plot 03-1450 has a unique assemblage of canopy species
<i>Quercus alba - Quercus rubra - Quercus prinus / Collinsonia canadensis - Podophyllum peltatum - Sanguinaria canadensis</i> Forest (CEGL007692)	5	Poor to Good	NVC concept of mesic/rich oak-hickory forests is too broad; needs refinement
<i>Quercus (prinus, coccinea) / Kalmia latifolia / (Galax urceolata, Gaultheria procumbens)</i> Forest (CEGL006271)	2	Fair to Excellent	Plot 06-1452 contains relatively high herbaceous species diversity
<i>Pinus pungens - Pinus rigida - (Quercus prinus) / Kalmia latifolia - Vaccinium pallidum</i> Woodland (CEGL007097)	2	Fair to Excellent	Plot 03-1453 contains relatively high herbaceous species diversity
<i>Pinus virginiana - (Pinus rigida, Pinus pungens) / Schizachyrium scoparium</i> Forest (CEGL008500)	2	Fair to Good	Plot 06-1454 does not contain lush graminoid dominated herbaceous layer
<i>Carya (glabra, alba) - Fraxinus americana - Juniperus virginiana var. virginiana</i> Woodland (CEGL003752)	1	Fair	Plot 04-1457 contains relatively high and unique herbaceous species diversity and composition
<i>Carex pensylvanica</i> Herbaceous Vegetation (CEGL004094)	2	Fair to Good	Plot 08-1452 has a relatively low coverage of <i>Carex pensylvanica</i>
<i>Danthonia compressa - (Sibbaldiopsis tridentata)</i> Herbaceous Vegetation (CEGL004242)	4	Fair to Good	Plot 04-1453 does not contain the community nominal, <i>Danthonia compressa</i>
<i>Tsuga canadensis - (Pinus strobus)</i> Temporarily Flooded Forest (CEGL007143)	1	Fair	Absence of alluvial wetland species
<i>Alnus serrulata - Rhododendron arborescens / Sarracenia oreophila - Rhynchospora rariflora</i> Shrubland (CEGL003914)	2	Fair	Both plots lack the shrub composition and structure indicative of this vegetation type

### Appendix 3: Floristic tables for Association Groups

#### Floristic table for Group: I.A.1

CEGL006256

Number of Plots: 2  
 Average Species Richness: 25 Species listed: 25  
 Average Plot Size: 1000 May be > avg. spp. richness  
 Homoteneity: 79 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Picea rubens</i>	100%	8
<i>Betula alleghaniensis</i>	100%	7
<i>Moss</i>	100%	6
<i>Carex pensylvanica</i>	100%	6
<i>Dryopteris campyloptera</i>	100%	6
<i>Fagus grandifolia</i>	100%	4
<i>Sorbus americana</i>	100%	4
<i>Vaccinium</i>	100%	3
<i>Carex intumescens</i>	100%	3
<i>Dryopteris intermedia</i>	100%	2
<i>Ilex montana</i>	100%	2
<i>Vaccinium erythrocarpum</i>	100%	2
<i>Oxalis montana</i>	100%	2
<i>Maianthemum canadense</i>	100%	2
<i>Carex</i>	50%	4
<i>Acer pensylvanicum</i>	50%	4
<i>Vaccinium corymbosum</i>	50%	3
<i>Acer spicatum</i>	50%	3
<i>Rhododendron maximum</i>	50%	2
<i>Amelanchier laevis</i>	50%	2
<i>Prunus pensylvanica</i>	50%	2
<i>Hexastylis heterophylla</i>	50%	2
<i>Carex debilis</i>	50%	2
<i>Athyrium</i>	50%	2
<i>Prunus serotina</i>	50%	2

**Floristic table for Group: II.A.1**

**CEGL004973**

Number of Plots: 2

Average Species Richness: 55

Average Plot Size: 1000

Homoteneity: 77 due to ties

Species	Avg Cover		Constancy	Class	Avg Cover
	Constancy	Class			
<i>Acer saccharum</i>	100%	7	Arnoglossum reniforme	50%	2
<i>Fagus grandifolia</i>	100%	7	<i>Medeola virginiana</i>	50%	2
<i>Aesculus flava</i>	100%	6	<i>Viola sororia</i>	50%	2
<i>Betula alleghaniensis</i>	100%	6	<i>Viola pubescens</i>	50%	2
<i>Acer pensylvanicum</i>	100%	6	<i>Actaea pachypoda</i>	50%	2
<i>Fraxinus americana</i>	100%	5	<i>Adiantum pedatum</i>	50%	2
<i>Prosartes lanuginosa</i>	100%	5	<i>Viburnum acerifolium</i>	50%	2
<i>Podophyllum peltatum</i>	100%	4	<i>Viburnum acerifolium</i>	50%	2
<i>Dryopteris intermedia</i>	100%	4	<i>Uvularia grandiflora</i>	50%	2
<i>Polystichum acrostichoides</i>	100%	4	<i>Asarum canadense</i>	50%	2
<i>Caulophyllum thalictroides</i>	100%	4	<i>Carex</i>	50%	2
<i>Maianthemum canadense ssp. racemosum</i>	100%	4	<i>Tiarella cordifolia</i>	50%	2
<i>Trillium erectum</i>	100%	4	<i>Deparia acrostichoides</i>	50%	2
<i>Osmorrhiza claytonii</i>	100%	4	<i>Dryopteris marginalis</i>	50%	2
<i>Ostrya virginiana</i>	100%	4	<i>Solidago flexicaulis</i>	50%	2
<i>Actaea racemosa</i>	100%	4	<i>Galium lanceolatum</i>	50%	2
<i>Anemone acutiloba</i>	100%	4	<i>Hamamelis virginiana</i>	50%	2
<i>Hydrophyllum canadense</i>	100%	3	<i>Uvularia perfoliata</i>	50%	2
<i>Arisaema triphyllum</i>	100%	2			
<i>Anemone quinquefolia</i>	100%	2			
<i>Cardamine diphylla</i>	100%	2			
<i>Prenanthes</i>	100%	2			
<i>Polygonatum pubescens</i>	100%	2			
<i>Lilium superbum</i>	100%	2			
<i>Prosartes maculata</i>	100%	2			
<i>Allium tricoccum</i>	100%	2			
<i>Eurybia divaricata</i>	100%	2			
<i>Carya cordiformis</i>	100%	2			
<i>Botrypus virginianus</i>	100%	1			
<i>Panax quinquefolius</i>	100%	1			
<i>Laportea canadensis</i>	50%	6			
<i>Stellaria corei</i>	50%	6			
<i>Stellaria pubera</i>	50%	5			
<i>Viola canadensis</i>	50%	5			
<i>Tilia americana</i>	50%	4			
<i>Tilia americana var. heterophylla</i>	50%	4			
<i>Viburnum lantanoides</i>	50%	4			
<i>Betula lenta</i>	50%	4			
<i>Clintonia</i>	50%	3			
<i>Amelanchier laevis</i>	50%	3			
<i>Solidago curtissii</i>	50%	2			

<i>Isotrema macrophylla</i>	50%	2
<i>Euonymus obovatus</i>	50%	2

**Floristic table for Group: II.B.1**
**CEGL004982**

Number of Plots: 2

Average Species Richness: 78

Average Plot Size: 1000

Homoteneity: 72

Species listed: 82

May be &gt; avg. spp. richness

due to ties

**Species**
**Avg Cover**

	<b>Constancy</b>	<b>Class</b>	<b>Species</b>	<b>Avg Cover</b>	<b>Constancy</b>	<b>Class</b>
<i>Prunus serotina</i>	100%	6	<i>Impatiens capensis</i>	50%	3	
<i>Quercus rubra</i>	100%	6	<i>Betula lenta</i>	50%	2	
<i>Parthenocissus quinquefolia</i>	100%	6	<i>Trillium vaseyi</i>	50%	2	
<i>Fraxinus americana</i>	100%	6	<i>Tiarella cordifolia</i>	50%	2	
<i>Carya cordiformis</i>	100%	5	<i>Pilea pumila</i>	50%	2	
<i>Maianthemum canadense</i>	100%	5	<i>Lindera benzoin</i>	50%	2	
<i>Lichen</i>	100%	4	<i>Ribes</i>	50%	2	
<i>Moss</i>	100%	4	<i>Ribes</i>	50%	2	
<i>Juglans cinerea</i>	100%	4	<i>Laportea canadensis</i>	50%	2	
<i>Halesia tetraptera</i>	100%	3	<i>Trillium</i>	50%	2	
<i>Smilax rotundifolia</i>	100%	3	<i>Tradescantia</i>	50%	2	
<i>Robinia pseudoacacia</i>	100%	3	<i>Caulophyllum thalictroides</i>	50%	2	
<i>Acer rubrum</i>	100%	3	<i>Trillium grandiflorum</i>	50%	2	
<i>Polystichum acrostichoides</i>	100%	3	<i>Tradescantia subaspera</i>	50%	2	
<i>Thalictrum</i>	100%	3	<i>Arisaema triphyllum</i>	50%	2	
<i>Hydrangea arborescens</i>	100%	2	<i>Boechera laevigata</i>	50%	2	
<i>Dryopteris marginalis</i>	100%	2	<i>Viola hastata</i>	50%	2	
<i>Ageratina altissima</i>	100%	2	<i>Viola hirsutula</i>	50%	2	
<i>Polygonatum biflorum</i>	100%	2	<i>Lilium superbum</i>	50%	2	
<i>Prosartes lanuginosa</i>	100%	2	<i>Astilbe biternata</i>	50%	2	
<i>Rubus allegheniensis</i>	100%	2	<i>Trillium flexipes</i>	50%	2	
<i>Dichanthelium boscii</i>	100%	2	<i>Ilex montana</i>	50%	2	
<i>Collinsonia canadensis</i>	100%	2	<i>Poaceae</i>	50%	2	
<i>Sanguinaria canadensis</i>	100%	2	<i>Castanea dentata</i>	50%	2	
<i>Trillium cuneatum</i>	100%	2	<i>Impatiens</i>	50%	2	
<i>Solidago</i>	100%	2	<i>Symphytum</i>	50%	2	
<i>Verbesina occidentalis</i>	100%	2	<i>Actaea podocarpa</i>	50%	2	
<i>Botrypus virginianus</i>	100%	2	<i>Actaea</i>	50%	2	
<i>Smilax glauca</i>	100%	2	<i>Houstonia purpurea</i>	50%	2	
<i>Uvularia perfoliata</i>	100%	2	<i>Heuchera villosa</i>	50%	2	
<i>Viola</i>	100%	2	<i>Arisaema</i>	50%	2	
<i>Carex</i>	100%	2	<i>Celastrus</i>	50%	2	
<i>Prenanthes</i>	100%	2	<i>Eutrochium steelei</i>	50%	2	
<i>Asclepias exaltata</i>	100%	1	<i>Solidago curtisiae</i>	50%	2	
<i>Liriodendron tulipifera</i>	50%	6	<i>Dioscorea</i>	50%	2	
<i>Carya ovalis</i>	50%	6	<i>Dioscorea quaternata</i>	50%	2	
<i>Ribes cynosbati</i>	50%	5	<i>Smilax</i>	50%	2	
<i>Vitis aestivalis</i>	50%	4	<i>Poa</i>	50%	2	
<i>Sassafras albidum</i>	50%	4	<i>Eurybia divaricata</i>	50%	2	
<i>Tilia americana var. heterophylla</i>	50%	3	<i>Rubus odoratus</i>	50%	2	
<i>Vitis cinerea</i>	50%	3				
<i>Toxicodendron radicans</i>	50%	3				
<i>Tilia americana</i>	50%	3				

**Floristic table for Group: III.A.1**

**CEGL007136**

Number of Plots:

2

Average Species Richness:

60 Species listed:

**Species**

**Avg Cover**

**Constancy**    **Class**

Average Plot Size:

550 May be > avg. spp. richness

Homoteneity:

67 due to ties

**Avg Cover**

**Species**

**Constancy**

**Class**

<i>Tsuga canadensis</i>	100%	8
<i>Rhododendron maximum</i>	100%	6
<i>Vitis aestivalis</i>	100%	4
<i>Halesia tetrapetala</i>	100%	4
<i>Dryopteris marginalis</i>	100%	4
<i>Polystichum acrostichoides</i>	100%	4
<i>Quercus rubra</i>	100%	3
<i>Leucothoe fontanesiana</i>	100%	3
<i>Adiantum pedatum</i>	100%	3
<i>Arisaema triphyllum</i>	100%	3
<i>Hydrangea arborescens</i>	100%	3
<i>Prosartes lanuginosa</i>	100%	2
<i>Polygonatum biflorum</i>	100%	2
<i>Anemone acutiloba</i>	100%	2
<i>Mitchella repens</i>	100%	2
<i>Solidago curtisii</i>	100%	2
<i>Thalictrum thalictroides</i>	100%	2
<i>Actaea racemosa</i>	100%	2
<i>Smilax glauca</i>	100%	2
<i>Euonymus americanus</i>	100%	2
<i>Moss</i>	50%	7
<i>Acer saccharum</i>	50%	5
<i>Cladrastis kentukea</i>	50%	4
<i>Carya ovalis</i>	50%	3
<i>Quercus velutina</i>	50%	3
<i>Calycanthus floridus</i>	50%	3
<i>Buckleya distichophylla</i>	50%	3
<i>Acer pensylvanicum</i>	50%	2
<i>Viola blanda</i>	50%	2
<i>Aesculus</i>	50%	2
<i>Polypodium appalachianum</i>	50%	2
<i>Nyssa sylvatica</i>	50%	2
<i>Juglans nigra</i>	50%	2
<i>Carya glabra</i>	50%	2
<i>Sassafras albidum</i>	50%	2
<i>Mitella diphylla</i>	50%	2
<i>Prenanthes</i>	50%	2
<i>Aesculus flava</i>	50%	2
<i>Carex</i>	50%	2
<i>Dioscorea quaternata</i>	50%	2
<i>Adlumia fungosa</i>	50%	2
<i>Cardamine diphylla</i>	50%	2
<i>Rubus occidentalis</i>	50%	2

*Amphicarpaea bracteata*

50% 2

*Conopholis americana*

50% 2

*Acer rubrum*

50% 2

*Carex oligocarpa*

50% 2

*Smilax hispida*

50% 2

*Acer negundo*

50% 2

*Stellaria pubera*

50% 2

*Stellaria pubera*

50% 2

*Rubus allegheniensis*

50% 2

*Anemone quinquefolia*

50% 2

*Galium lanceolatum*

50% 2

*Hexastylis heterophylla*

50% 2

*Betula lenta*

50% 2

*Impatiens capensis*

50% 2

*Impatiens pallida*

50% 2

*Isotrema macrophylla*

50% 2

*Ageratina altissima*

50% 2

*Asplenium trichomanes*

50% 2

*Galium triflorum*

50% 2

*Carex albursina*

50% 2

*Eurybia divaricata*

50% 2

*Dryopteris intermedia*

50% 2

*Osmorrhiza claytonii*

50% 2

*Panax quinquefolius*

50% 2

*Parthenocissus quinquefolia*

50% 2

*Phytolacca americana*

50% 2

*Eutrochium purpureum*

50% 2

*Tilia americana var. heterophylla*

50% 2

*Tiarella cordifolia*

50% 2

*Toxicodendron radicans*

50% 2

*Viola sororia*

50% 2

*Sympyotrichum cordifolium*

50% 2

## Floristic table for Group: IV.A.1

CEGL007695

Number of Plots:

2

Average Species Richness:

68 Species listed:

Species	Avg Cover		Constancy	Class	Avg Cover
	Constancy	Class			
<i>Osmorhiza claytonii</i>	50%	2			
<i>Viola canadensis var. canadensis</i>	50%	2			
<i>Silene stellata</i>	50%	2			
<i>Sanicula</i>	50%	2			
<i>Smilax rotundifolia</i>	50%	2			
<i>Solidago</i>	50%	2			
<i>Solidago curtisii</i>	50%	2			
<i>Solidago curtisii</i>	50%	2			
<i>Thaspium barbinode</i>	50%	2			
<i>Thaspium trifoliatum</i>	50%	2			
<i>Trillium flexipes</i>	50%	2			
<i>Trillium grandiflorum</i>	50%	2			
<i>Trillium vaseyi</i>	50%	2			
<i>Uvularia grandiflora</i>	50%	2			
<i>Uvularia perfoliata</i>	50%	2			
<i>Viola</i>	50%	2			
<i>Thalictrum thalictroides</i>	50%	2			
<i>Clintonia umbellulata</i>	50%	2			
<i>Deparia acrostichoides</i>	50%	2			
<i>Prenanthes altissima</i>	50%	2			
<i>Adiantum pedatum</i>	50%	2			
<i>Ageratina altissima var. altissima</i>	50%	2			
<i>Asteraceae</i>	50%	2			
<i>Coreopsis latifolia</i>	50%	2			
<i>Cornus alternifolia</i>	50%	2			
<i>Crataegus</i>	50%	2			
<i>Cypripedium parviflorum var. pubescens</i>	50%	2			
<i>Parthenocissus quinquefolia</i>	50%	2			
<i>Dioscorea villosa</i>	50%	2			
<i>Galium latifolium</i>	50%	2			
<i>Galium triflorum</i>	50%	2			
<i>Geranium maculatum</i>	50%	2			
<i>Hydrophyllum canadense</i>	50%	2			
<i>Polygonatum pubescens</i>	50%	2			
<i>Maianthemum racemosum</i>	50%	2			
<i>Maianthemum racemosum ssp. racemosum</i>	50%	2			
<i>Dioscorea quaternata</i>	50%	2			
<i>Amphicarpaea bracteata</i>	50%	2			
<i>Lilium superbum</i>	3				
<i>Osmunda claytoniana var. claytoniana</i>	3				
<i>Dryopteris intermedia</i>	3				
<i>Tiarella cordifolia</i>	3				
<i>Cystopteris protrusa</i>	3				
<i>Carya ovalis</i>	3				
<i>Rhododendron maximum</i>	3				
<i>Robinia pseudoacacia</i>	3				
<i>Ostrya virginiana</i>	2				
<i>Istrorema macrophylla</i>	2				
<i>Astilbe biternata</i>	2				
<i>Viola pubescens</i>	2				
<i>Polygonatum biflorum</i>	2				

**Floristic table for Group: IV.A.2**

CEGL007710

Number of Plots: 3  
 Average Species Richness: 80 Species listed: 131  
 Average Plot Size: 733 May be > avg. spp. richness  
 Homoteneity: 58 due to ties

**Species**

- Liriodendron tulipifera*
- Halesia tetrapeta*
- Hamamelis virginiana*
- Tiarella cordifolia*
- Polystichum acrostichoides*
- Actaea racemosa*
- Parthenocissus quinquefolia*
- Quercus rubra*
- Acer saccharum*
- Arisaema triphyllum*
- Betula lenta*
- Asteraceae**
- Tilia americana var. heterophylla*
- Thelypteris noveboracensis*
- Carya cordiformis*
- Amphicarpaea bracteata*
- Fraxinus americana*
- Tsuga canadensis*
- Solidago*
- Acer rubrum*
- Ageratina altissima*
- Adiantum pedatum*
- Pyrularia pubera*
- Aesculus flava*
- Ranunculus*
- Osmorrhiza claytonii*
- Polygonatum biflorum*
- Astilbe biternata*
- Deparia acrostichoides*
- Rhododendron maximum*
- Cornus alternifolia*
- Stellaria pubera*
- Carex*
- Phryma leptostachya*
- Botrypus virginianus*
- Persicaria virginiana*
- Trillium*
- Viola*
- Sanguinaria canadensis*
- Sanicula*
- Galium triflorum*
- Smilax rotundifolia*
- Thalictrum thalictroides*

<b>Species</b>	<b>Constancy</b>	<b>Class</b>	<b>Avg Cover</b>	
			<b>Constancy</b>	<b>Class</b>
<i>Dioscorea quaternata</i>	67%	1		
<i>Luzula</i>	67%	1		
<i>Cystopteris protrusa</i>	67%	1		
<i>Dryopteris marginalis</i>	67%	1		
<i>Galium circaeans</i>	67%	1		
<i>Aesculus sylvatica</i>	33%	6		
<i>Betula alleghaniensis</i>	33%	5		
<i>Betula alleghaniensis</i>	33%	5		
<i>Laportea</i>	33%	5		
<i>Prosartes lanuginosa</i>	33%	5		
<i>Pinus strobus</i>	33%	5		
<i>Ostrya virginiana</i>	33%	4		
<i>Carya glabra</i>	33%	4		
<i>Quercus montana</i>	33%	4		
<i>Viola rotundifolia</i>	33%	4		
<i>Acer pensylvanicum</i>	33%	4		
<i>Lindera benzoin</i>	33%	3		
<i>Toxicodendron radicans</i>	33%	3		
<i>Halesia tetrapeta var. monticola</i>	33%	3		
<i>Veratrum parviflorum</i>	33%	2		
<i>Vitis cinerea var. baileyana</i>	33%	2		
<i>Cornus florida</i>	33%	2		
<i>Phegopteris hexagonoptera</i>	33%	2		
<i>Tilia americana var. americana</i>	33%	2		
<i>Magnolia acuminata</i>	33%	2		
<i>Botrychium</i>	33%	2		
<i>Caulophyllum thalictroides</i>	33%	2		
<i>Solidago flexicaulis</i>	33%	2		
<i>Solidago flaccidifolia</i>	33%	2		
<i>Solidago curtisii</i>	33%	2		
<i>Actaea pachypoda</i>	33%	2		
<i>Collinsonia canadensis</i>	33%	2		
<i>Sedum ternatum</i>	33%	2		
<i>Saxifraga michauxii</i>	33%	2		
<i>Cryptotaenia</i>	33%	2		
<i>Rudbeckia laciniata</i>	33%	2		
<i>Rubus canadensis</i>	33%	2		
<i>Chionanthus virginicus</i>	33%	2		
<i>Viburnum prunifolium</i>	33%	2		
<i>Trillium rugelii</i>	33%	2		
<i>Vitis aestivalis</i>	33%	2		
<i>Viola sororia</i>	33%	2		
<i>Cardamine diphylla</i>	33%	2		
<i>Viola canadensis</i>	33%	2		
<i>Carex plantaginea</i>	33%	2		
<i>Carex albicans</i>	33%	2		
<i>Cuscuta</i>	33%	2		
<i>Unknown</i>	33%	2		
<i>Calycanthus floridus</i>	33%	2		
<i>Carex crebriflora</i>	33%	2		
<i>Brachyelytrum</i>	33%	2		

**Floristic table for Group: IV.A.3**

**CEGL007711**

Number of Plots:

1

Average Species Richness:

51

Species listed:

**Species**

May be > avg. spp. richness

*Sanicula canadensis*

Average Plot Size:

1000

Homoteneity:

100 due to ties

*Sanguinaria canadensis*

*Prosartes lanuginosa*

*Isotrema macrophylla*

*Rubus odoratus*

*Quercus rubra*

*Hybanthus*

**Avg Cover**

*Hybanthus*

**Avg Cover**

**Constancy**

**Class**

100% 1

100% 1

100% 1

100% 1

100% 1

100% 1

100% 1

100% 1

**Species**

**Constancy**

**Class**

*Hydrophyllum canadense*

100% 7

*Ulmus rubra*

100% 7

*Juglans nigra*

100% 6

*Lindera benzoin*

100% 6

*Fraxinus americana*

100% 6

*Carya cordiformis*

100% 6

*Moss*

100% 6

*Betula lenta*

100% 6

*Impatiens pallida*

100% 5

*Paronychia virginica var. virginica*

100% 5

*Osmorrhiza claytonii*

100% 5

*Cystopteris protrusa*

100% 5

*Vitis aestivalis*

100% 5

*Maianthemum canadense*

100% 4

*Acer nigrum*

100% 4

*Sedum ternatum*

100% 4

*Cryptotaenia canadensis*

100% 4

*Dryopteris marginalis*

100% 3

*Podophyllum peltatum*

100% 3

*Solidago flexicaulis*

100% 2

*Sanicula trifoliata*

100% 2

*Viola canadensis*

100% 2

*Sympyotrichum urophyllum*

100% 2

*Tilia americana var. heterophylla*

100% 2

*Ranunculus recurvatus*

100% 2

*Arisaema triphyllum*

100% 2

*Viola*

100% 2

*Trillium vaseyi*

100% 2

*Polystichum acrostichoides*

100% 2

*Polygonatum pubescens*

100% 2

*Sambucus racemosa*

100% 2

*Astilbe biternata*

100% 2

*Phacelia bipinnatifida*

100% 2

*Pilea pumila*

100% 2

*Laportea canadensis*

100% 2

*Festuca paradoxa*

100% 2

*Galium aparine*

100% 2

*Asarum canadense*

100% 1

*Actaea podocarpa*

100% 1

*Adiantum pedatum*

100% 1

*Carex*

100% 1

*Smilax hispida*

100% 1

*Hydrangea arborescens*

100% 1

**Floristic table for Group: IV.A.4**

**CEGL007878**

Number of Plots:

1

Average Species Richness:

78 Species listed:

Species	Avg Cover		Avg Cover	
	Constancy	Class	Constancy	Class
<i>Fraxinus americana</i>	100%	2		
<i>Sanicula canadensis</i>	100%	1		
<i>Sanicula trifoliata</i>	100%	1		
<i>Cardamine concatenata</i>	100%	1		
<i>Botrypus virginianus</i>	100%	1		
<i>Boehmeria cylindrica</i>	100%	1		
<i>Silene stellata</i>	100%	1		
<i>Silene stellata</i>	100%	1		
<i>Amelanchier laevis</i>	100%	1		
<i>Solidago curtisii</i>	100%	1		
<i>Ageratina altissima</i>	100%	1		
<i>Actaea pachypoda</i>	100%	1		
<i>Uvularia perfoliata</i>	100%	1		
<i>Acer nigrum</i>	100%	1		
<i>Thalictrum dioicum</i>	100%	1		
<i>Asclepias exaltata</i>	100%	1		
<i>Lysimachia quadrifolia</i>	100%	1		
<i>Aralia nudicaulis</i>	100%	1		
<i>Castanea dentata</i>	100%	1		
<i>Hydrophyllum macrophyllum</i>	100%	1		
<i>Eutrochium steelei</i>	100%	1		
<i>Lactuca</i>	100%	1		
<i>Medeola virginiana</i>	100%	1		
<i>Desmodium nudiflorum</i>	100%	1		
<i>Monotropa uniflora</i>	100%	1		
<i>Nyssa sylvatica</i>	100%	1		
<i>Polygonatum pubescens</i>	100%	1		
<i>Prunus serotina</i>	100%	1		
<i>Panax quinquefolius</i>	100%	1		
<i>Cornus alternifolia</i>	100%	1		
<i>Phacelia bipinnatifida</i>	100%	1		
<i>Phryma leptostachya</i>	100%	1		
<i>Caulophyllum thalictroides</i>	100%	1		
<i>Poa compressa</i>	100%	1		
<i>Juglans nigra</i>	100%	1		
<i>Galium triflorum</i>	100%	1		
<i>Sedum ternatum</i>	2			
<i>Smilax biltmoreana</i>	2			
<i>Phegopteris hexagonoptera</i>	2			
<i>Acer rubrum</i>	2			
<i>Boechera laevigata</i>	2			
<i>Carya cordiformis</i>	2			
<i>Collinsonia verticillata</i>	2			
<i>Actaea racemosa</i>	2			
<i>Conopholis americana</i>	2			
<i>Dioscorea quaternata</i>	2			
<i>Desmodium glutinosum</i>	2			
<i>Collinsonia canadensis</i>	2			
<i>Circaeae lutetiana</i>	2			
<i>Festuca subverticillata</i>	2			
<i>Galium aparine</i>	2			

**Floristic table for Group: IV.B.1**

CEGL007692

Number of Plots: 5  
 Average Species Richness: 93 Species listed: 100  
 Average Plot Size: 1000 May be > avg. spp. richness  
 Homoteneity: 62 due to ties

Species	Constancy	Avg Cover
<i>Cornus florida</i>	100%	6
<i>Liriodendron tulipifera</i>	100%	6
<i>Acer rubrum</i>	100%	5
<i>Nyssa sylvatica</i>	100%	5
<i>Carya glabra</i>	100%	5
<i>Quercus alba</i>	100%	5
<i>Parthenocissus quinquefolia</i>	100%	4
<i>Toxicodendron radicans</i>	100%	3
<i>Polystichum acrostichoides</i>	100%	3
<i>Smilax rotundifolia</i>	100%	2
<i>Smilax glauca</i>	100%	2
<i>Carya alba</i>	80%	5
<i>Quercus velutina</i>	80%	5
<i>Ostrya virginiana</i>	80%	4
<i>Fagus grandifolia</i>	80%	4
<i>Amphicarpaea bracteata</i>	80%	4
<i>Quercus rubra</i>	80%	3
<i>Vitis aestivalis</i>	80%	3
<i>Oxydendrum arboreum</i>	80%	3
<i>Robinia pseudoacacia</i>	80%	3
<i>Ilex ambigua</i>	80%	2
<i>Chimaphila maculata</i>	80%	2
<i>Uvularia perfoliata</i>	80%	2
<i>Euonymus americanus</i>	80%	2
<i>Pinus strobus</i>	80%	2
<i>Arisaema triphyllum</i>	80%	2
<i>Dichanthelium boscii</i>	80%	2
<i>Panax quinquefolius</i>	80%	1
<i>Carpinus caroliniana</i>	60%	6
<i>Quercus montana</i>	60%	5
<i>Desmodium nudiflorum</i>	60%	5
<i>Fraxinus americana</i>	60%	4
<i>Betula lenta</i>	60%	3
<i>Sassafras albidum</i>	60%	3
<i>Desmodium glutinosum</i>	60%	2
<i>Magnolia fraseri</i>	60%	2
<i>Conopholis americana</i>	60%	2
<i>Vitis rotundifolia</i>	60%	2
<i>Halesia tetrapetala</i>	60%	2
<i>Stellaria pubera</i>	60%	2
<i>Morus rubra</i>	60%	2
<i>Trillium cuneatum</i>	60%	2
<i>Sanguinaria canadensis</i>	60%	2

Species	Constancy	Avg Cover	Class
<i>Scutellaria elliptica</i>	60%	2	
<i>Unknown</i>	60%	2	
<i>Polygonatum biflorum</i>	60%	2	
<i>Solidago</i>	60%	2	
<i>Galium circaeans</i>	60%	2	
<i>Vicia caroliniana</i>	60%	2	
<i>Solidago curtisii</i>	60%	2	
<i>Solidago curtisii</i>	60%	2	
<i>Lysimachia quadrifolia</i>	60%	2	
<i>Dichanthelium commutatum</i>	60%	2	
<i>Poa autumnalis</i>	60%	2	
<i>Hydrangea cinerea</i>	60%	2	
<i>Maianthemum canadense</i>	60%	2	
<i>Carex</i>	60%	2	
<i>Melica mutica</i>	60%	2	
<i>Goodyera pubescens</i>	60%	2	
<i>Helianthus microcephalus</i>	60%	1	
<i>Botrypus virginianus</i>	60%	1	
<i>Rubus</i>	60%	1	
<i>Prenanthes</i>	60%	1	
<i>Acer saccharum</i>	40%	3	
<i>Ilex opaca var. opaca</i>	40%	2	
<i>Tsuga canadensis</i>	40%	2	
<i>Acer pensylvanicum</i>	40%	2	
<i>Solidago flaccidifolia</i>	40%	2	
<i>Collinsonia canadensis</i>	40%	2	
<i>Adiantum pedatum</i>	40%	2	
<i>Vitis cinerea</i>	40%	2	
<i>Liquidambar styraciflua</i>	40%	2	
<i>Lonicera japonica</i>	40%	2	
<i>Diospyros virginiana</i>	40%	2	
<i>Trillium catesbeianum</i>	40%	2	
<i>Prunus serotina</i>	40%	2	
<i>Viola hastata</i>	40%	2	
<i>Viola</i>	40%	2	
<i>Eutrochium steelei</i>	40%	2	
<i>Agrimony gryposepala</i>	40%	2	
<i>Asclepias quadrifolia</i>	40%	2	
<i>Asclepias variegata</i>	40%	2	
<i>Tradescantia subaspera</i>	40%	2	
<i>Pycnanthemum montanum</i>	40%	2	
<i>Kalmia latifolia</i>	40%	2	
<i>Ligustrum sinense</i>	40%	2	
<i>Hypericum punctatum</i>	40%	2	
<i>Maianthemum canadense ssp. racemosum</i>	40%	2	
<i>Medeola virginiana</i>	40%	2	
<i>Houstonia purpurea</i>	40%	2	
<i>Carya pallida</i>	40%	2	
<i>Dioscorea quaternata</i>	40%	2	
<i>Asplenium platyneuron</i>	40%	2	
<i>Cynoglossum virginianum</i>	40%	2	

**Floristic table for Group: V.A.1**

CEGL006192

Number of Plots:

1

Average Species Richness:

50 Species listed:

**Species**

	<b>Avg Cover</b>	
	<b>Constancy</b>	<b>Class</b>
<i>Dichanthelium bosci</i>	100%	1
<i>Pinus strobus</i>	100%	1
<i>Polygonatum biflorum</i>	100%	1
<i>Polystichum acrostichoides</i>	100%	1
<i>Prenanthes</i>	100%	1
<i>Prunus serotina</i>	100%	1
<i>Monotropa uniflora</i>	100%	1
<i>Monotropa uniflora</i>	100%	1

Average Plot Size:

1000 May be > avg. spp. richness

Homoteneity:

100 due to ties

**Avg Cover**

**Species**

**Constancy**

**Class**

<i>Gaylussacia ursina</i>	100%	8
<i>Acer rubrum</i>	100%	7
<i>Quercus rubra</i>	100%	6
<i>Quercus montana</i>	100%	6
<i>Carya glabra</i>	100%	4
<i>Liriodendron tulipifera</i>	100%	4
<i>Magnolia fraseri</i>	100%	3
<i>Nyssa sylvatica</i>	100%	2
<i>Medeola virginiana</i>	100%	2
<i>Moss</i>	100%	2
<i>Oxydendrum arboreum</i>	100%	2
<i>Viola hastata</i>	100%	2
<i>Smilax rotundifolia</i>	100%	2
<i>Thelypteris noveboracensis</i>	100%	2
<i>Tsuga canadensis</i>	100%	2
<i>Vitis aestivalis</i>	100%	2
<i>Lichen</i>	100%	2
<i>Sassafras albidum</i>	100%	2
<i>Kalmia latifolia</i>	100%	2
<i>Carya</i>	100%	2
<i>Halesia tetrapetala</i>	100%	2
<i>Amelanchier laevis</i>	100%	2
<i>Unknown</i>	100%	1
<i>Veratrum parviflorum</i>	100%	1
<i>Goodyera pubescens</i>	100%	1
<i>Solidago</i>	100%	1
<i>Acer pensylvanicum</i>	100%	1
<i>Desmodium nudiflorum</i>	100%	1
<i>Smilax glauca</i>	100%	1
<i>Castanea dentata</i>	100%	1
<i>Rhododendron maximum</i>	100%	1
<i>Rhododendron calendulaceum</i>	100%	1
<i>Conopholis americana</i>	100%	1
<i>Carex</i>	100%	1
<i>Dioscorea quaternata</i>	100%	1
<i>Lilium michauxii</i>	100%	1
<i>Hamamelis virginiana</i>	100%	1
<i>Lysimachia quadrifolia</i>	100%	1
<i>Magnolia acuminata</i>	100%	1
<i>Fraxinus americana</i>	100%	1
<i>Trillium catesbeianum</i>	100%	1
<i>Eutrochium dubium</i>	100%	1
<i>Pyrularia pubera</i>	100%	1

Floristic table for Group: V.A.2

CEGL007691

Number of Plots:

1

Average Species Richness:

96 Species listed:

**Species**

**Avg Cover**

**Constancy** **Class**

Average Plot Size:

1000 May be > avg. spp. richness

Homoteneity:

100 due to ties

**Avg Cover**

**Species**

**Constancy**

**Class**

<i>Quercus falcata</i>	100%	7	<i>Dichanthelium commutatum</i>	100%	2
<i>Oxydendrum arboreum</i>	100%	6	<i>Dichanthelium dichotomum</i>	100%	2
<i>Kalmia latifolia</i>	100%	5	<i>Carex</i>	100%	2
<i>Quercus velutina</i>	100%	4	<i>Adiantum pedatum</i>	100%	2
<i>Acer rubrum</i>	100%	4	<i>Erigeron pulchellus</i>	100%	2
<i>Carpinus caroliniana</i>	100%	3	<i>Arundinaria tecta</i>	100%	2
<i>Amelanchier arborea</i>	100%	3	<i>Fagus grandifolia</i>	100%	2
<i>Cornus florida</i>	100%	3	<i>Galium circaeans</i>	100%	2
<i>Carya alba</i>	100%	3	<i>Ageratina altissima</i>	100%	2
<i>Pinus echinata</i>	100%	3	<i>Lichen</i>	100%	2
<i>Nyssa sylvatica</i>	100%	3	<i>Lespedeza</i>	100%	2
<i>Symplocos tinctoria</i>	100%	3	<i>Ilex opaca var. opaca</i>	100%	2
<i>Pinus rigida</i>	100%	3	<i>Hypericum stragulum</i>	100%	2
<i>Phegopteris hexagonoptera</i>	100%	2	<i>Goodyera pubescens</i>	100%	2
<i>Physalis</i>	100%	2	<i>Hypericum</i>	100%	2
<i>Parthenocissus quinquefolia</i>	100%	2	<i>Hieracium venosum</i>	100%	2
<i>Pyrularia pubera</i>	100%	2	<i>Viola</i>	100%	1
<i>Lysimachia quadrifolia</i>	100%	2	<i>Campanula aparinoides</i>	100%	1
<i>Pinus strobus</i>	100%	2	<i>Betula lenta</i>	100%	1
<i>Pityopsis graminifolia</i>	100%	2	<i>Silene virginica</i>	100%	1
<i>Polystichum acrostichoides</i>	100%	2	<i>Aureolaria laevigata</i>	100%	1
Moss	100%	2	<i>Sorghastrum nutans</i>	100%	1
<i>Potentilla</i>	100%	2	<i>Carex venusta</i>	100%	1
<i>Pteridium aquilinum</i>	100%	2	<i>Carya glabra</i>	100%	1
<i>Lobelia puberula</i>	100%	2	<i>Lilium michauxii</i>	100%	1
<i>Smilax rotundifolia</i>	100%	2	<i>Ceanothus americanus</i>	100%	1
<i>Liriodendron tulipifera var. tulipifera</i>	100%	2	<i>Antennaria plantaginifolia</i>	100%	1
<i>Vitis aestivalis</i>	100%	2	<i>Arisaema triphyllum</i>	100%	1
<i>Vaccinium stamineum</i>	100%	2	<i>Vitis rotundifolia</i>	100%	1
<i>Vaccinium pallidum</i>	100%	2	<i>Oxalis</i>	100%	1
<i>Tsuga canadensis</i>	100%	2	<i>Scleria</i>	100%	1
<i>Toxicodendron radicans</i>	100%	2	<i>Magnolia acuminata</i>	100%	1
<i>Tephrosia virginiana</i>	100%	2	<i>Magnolia fraseri</i>	100%	1
<i>Viola hastata</i>	100%	2	<i>Angelica venenosa</i>	100%	1
<i>Solidago</i>	100%	2	<i>Hypoxis hirsuta</i>	100%	1
<i>Quercus alba</i>	100%	2	<i>Houstonia purpurea</i>	100%	1
<i>Smilax glauca</i>	100%	2	<i>Helianthus microcephalus</i>	100%	1
<i>Silphium</i>	100%	2	<i>Polygonatum biflorum</i>	100%	1
<i>Schizachyrium scoparium</i>	100%	2	<i>Quercus stellata</i>	100%	1
<i>Sassafras albidum</i>	100%	2	<i>Eupatorium</i>	100%	1
<i>Sanicula</i>	100%	2	<i>Rudbeckia hirta</i>	100%	1
<i>Rubus</i>	100%	2	<i>Dichanthelium</i>	100%	1
<i>Quercus coccinea</i>	100%	2	<i>Prunus serotina</i>	100%	1

**Floristic table for Group: V.B.1**

**CEGL006271**

Number of Plots: 2  
Average Species Richness: 63  
Average Plot Size: 1000  
Homoteneity:

Species listed: 68  
May be > avg. spp. richness  
due to ties 70

Species	Constancy	Avg Cover
<i>Acer rubrum</i>	100%	7
<i>Quercus montana</i>	100%	7
<i>Oxydendrum arboreum</i>	100%	5
<i>Kalmia latifolia</i>	100%	4
<i>Nyssa sylvatica</i>	100%	4
<i>Amelanchier</i>	100%	4
<i>Quercus rubra</i>	100%	4
<i>Tsuga canadensis</i>	100%	3
<i>Quercus alba</i>	100%	3
<i>Smilax rotundifolia</i>	100%	3
<i>Sassafras albidum</i>	100%	3
<i>Smilax glauca</i>	100%	2
<i>Viola hastata</i>	100%	2
<i>Goodyera pubescens</i>	100%	2
<i>Castanea dentata</i>	100%	2
<i>Galax urceolata</i>	100%	2
<i>Rhododendron maximum</i>	100%	2
<i>Dioscorea quaternata</i>	100%	2
<i>Quercus velutina</i>	100%	2
<i>Polystichum acrostichoides</i>	100%	2
<i>Pinus strobus</i>	100%	2
<i>Acer pensylvanicum</i>	100%	2
<i>Chimaphila maculata</i>	100%	2
<i>Halesia tetrapeta</i>	100%	2
<i>Parthenocissus quinquefolia</i>	100%	1
<i>Gaylussacia ursina</i>	50%	7
<i>Pyrularia pubera</i>	50%	4
<i>Carya glabra</i>	50%	3
<i>Fagus grandifolia</i>	50%	3
<i>Vaccinium pallidum</i>	50%	3
<i>Liriodendron tulipifera</i>	50%	2
<i>Magnolia acuminata</i>	50%	2
<i>Vitis aestivalis</i>	50%	2
<i>Vaccinium simulatum</i>	50%	2
<i>Magnolia fraseri</i>	50%	2
<i>Vaccinium stamineum</i>	50%	2
<i>Zizia trifoliata</i>	50%	2
<i>Vitis rotundifolia</i>	50%	2
<i>Viola</i>	50%	2
<i>Carex pensylvanica</i>	50%	2
<i>Solidago curtisiae</i>	50%	2
<i>Uvularia perfoliata</i>	50%	2
<i>Solidago flexicaulis</i>	50%	2

Species	Constancy	Avg Cover	Class
<i>Thelypteris noveboracensis</i>	50%	2	
<i>Ulota</i>	50%	2	
<i>Carex</i>	50%	2	
<i>Desmodium nudiflorum</i>	50%	2	
<i>Solidago flaccidifolia</i>	50%	2	
<i>Cornus florida</i>	50%	2	
<i>Carya alba</i>	50%	2	
<i>Carya alba</i>	50%	2	
<i>Uvularia sessilifolia</i>	50%	2	
<i>Dichanthelium dichotomum var. dichotomum</i>	50%	2	
<i>Fraxinus pennsylvanica</i>	50%	2	
<i>Galium lanceolatum</i>	50%	2	
<i>Gentiana decora</i>	50%	2	
<i>Hieracium paniculatum</i>	50%	2	
<i>Houstonia purpurea</i>	50%	2	
<i>Ilex opaca var. opaca</i>	50%	2	
<i>Leucobryum</i>	50%	2	
<i>Medeola virginiana</i>	50%	2	
<i>Conopholis americana</i>	50%	2	
<i>Poa</i>	50%	2	
<i>Polytrichum</i>	50%	2	
<i>Potentilla</i>	50%	2	
<i>Prunus serotina</i>	50%	2	
<i>Pycnanthemum montanum</i>	50%	2	
<i>Dichanthelium</i>	50%	2	
<i>Hypnum imponens</i>	50%	2	

## Floristic table for Group: VI.A.1

CEGL007493

Number of Plots: 2  
 Average Species Richness: 67  
 Average Plot Size: 1000  
 Homoteneity: 72

Species listed: 76  
 May be > avg. spp. richness  
 due to ties

## Avg Cover

Species	Species		Avg Cover	
	Constancy	Class	Constancy	Class
<i>Acer rubrum</i>	100%	6	<i>Schizachyrium scoparium</i>	50% 2
<i>Oxydendrum arboreum</i>	100%	6	<i>Scleria nitida</i>	50% 2
<i>Pinus echinata</i>	100%	6	<i>Desmodium nudiflorum</i>	50% 2
<i>Quercus coccinea</i>	100%	6	<i>Desmodium</i>	50% 2
<i>Quercus velutina</i>	100%	5	<i>Dennstaedtia punctilobula</i>	50% 2
<i>Quercus alba</i>	100%	5	<i>Sorghastrum nutans</i>	50% 2
<i>Vaccinium pallidum</i>	100%	5	<i>Tephrosia virginiana</i>	50% 2
<i>Carya glabra</i>	100%	4	<i>Tephrosia virginiana</i>	50% 2
<i>Vaccinium stamineum</i>	100%	4	<i>Rhododendron periclymenoides</i>	50% 2
<i>Cornus florida</i>	100%	4	<i>Castanea pumila</i>	50% 2
<i>Nyssa sylvatica</i>	100%	4	<i>Castanea dentata</i>	50% 2
<i>Pinus strobus</i>	100%	4	<i>Carpinus caroliniana</i>	50% 2
<i>Pyrularia pubera</i>	100%	4	<i>Baptisia tinctoria</i>	50% 2
<i>Sassafras albidum</i>	100%	3	<i>Arundinaria appalachiana</i>	50% 2
<i>Toxicodendron radicans</i>	100%	3	<i>Maianthemum racemosum</i>	50% 2
<i>Quercus falcata</i>	100%	3	<i>Lyonia ligustrina</i>	50% 2
<i>Smilax rotundifolia</i>	100%	3	<i>Trillium catesbeiae</i>	50% 2
<i>Ilex opaca</i>	100%	4	<i>Gaultheria procumbens</i>	50% 2
<i>Magnolia fraseri</i>	100%	4	<i>Parthenocissus quinquefolia</i>	50% 2
<i>Smilax glauca</i>	100%	4	<i>Trillium</i>	50% 2
<i>Polystichum acrostichoides</i>	100%	4	<i>Lichen</i>	50% 2
<i>Carex</i>	100%	3	<i>Pinus virginiana</i>	50% 2
<i>Solidago</i>	100%	3	<i>Monotropsis odorata</i>	50% 2
<i>Chimaphila maculata</i>	100%	3	<i>Moss</i>	50% 2
<i>Tsuga canadensis</i>	100%	3	<i>Rhododendron calendulaceum</i>	50% 2
<i>Lysimachia quadrifolia</i>	100%	2	<i>Gillenia trifoliata</i>	50% 2
<i>Asteraceae</i>	100%	2	<i>Hexastylis arifolia</i>	50% 2
<i>Coreopsis major</i>	100%	1	<i>Galium circaeans</i>	50% 2
<i>Diospyros virginiana</i>	100%	1	<i>Galax urceolata</i>	50% 2
<i>Polygonatum biflorum</i>	100%	1	<i>Euonymus americanus</i>	50% 2
<i>Gaylussacia baccata</i>	50%	6	<i>Quercus montana</i>	50% 2
<i>Gaylussacia ursina</i>	50%	6	<i>Quercus rubra</i>	50% 2
<i>Pinus rigida</i>	50%	6	<i>Epigaea repens</i>	50% 2
<i>Carya pallida</i>	50%	5	<i>Monotropa uniflora</i>	50% 2
<i>Amelanchier laevis</i>	50%	4		
<i>Amelanchier arborea</i>	50%	4		
<i>Vitex rotundifolia</i>	50%	3		
<i>Pteridium aquilinum</i>	50%	3		
<i>Kalmia latifolia</i>	50%	3		
<i>Liriodendron tulipifera var. tulipifera</i>	50%	3		
<i>Corylus cornuta var. cornuta</i>	50%	3		
<i>Magnolia acuminata var. acuminata</i>	50%	2		
<i>Dichanthelium commutatum</i>	50%	2		

**Floristic table for Group: VI.B.1**

**CEGL007097**

Number of Plots:	2
Average Species Richness:	32
Average Plot Size:	May be > avg. spp. richness
Homoteneity:	84 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Pinus pungens</i>	100%	7
<i>Kalmia latifolia</i>	100%	7
<i>Gaylussacia baccata</i>	100%	7
<i>Quercus coccinea</i>	100%	6
<i>Vaccinium pallidum</i>	100%	5
<i>Smilax rotundifolia</i>	100%	5
<i>Nyssa sylvatica</i>	100%	5
<i>Oxydendrum arboreum</i>	100%	5
<i>Vaccinium stamineum</i>	100%	4
<i>Gaylussacia ursina</i>	100%	4
<i>Acer rubrum</i>	100%	4
<i>Amelanchier arborea</i>	100%	4
<i>Gaultheria procumbens</i>	100%	3
<i>Castanea pumila</i>	100%	3
<i>Epigaea repens</i>	100%	2
<i>Smilax glauca</i>	100%	2
<i>Ilex ambigua</i>	100%	2
<i>Schizachyrium scoparium</i>	100%	2
<i>Sassafras albidum</i>	100%	2
Moss	100%	2
<i>Pteridium aquilinum</i>	100%	2
<i>Castanea dentata</i>	100%	2
<i>Quercus velutina</i>	50%	3
<i>Tephrosia virginiana</i>	50%	2
<i>Baptisia tinctoria</i>	50%	2
<i>Sorghastrum nutans</i>	50%	2
<i>Galax urceolata</i>	50%	2
<i>Ilex opaca</i>	50%	2
Lichen	50%	2
<i>Rhododendron maximum</i>	50%	2
<i>Quercus marilandica</i>	50%	2
<i>Dichanthelium commutatum</i>	50%	2

**Floristic table for Group: VI.B.2**

CEGL008500-2010Mtn

Number of Plots: 2  
 Average Species Richness: 87  
 Average Plot Size: 900 May be > avg. spp. richness  
 Homoteneity: 77 due to ties

Species	Constancy	Avg Cover
	Class	Class
<i>Pinus rigida</i>	100%	7
<i>Acer rubrum</i>	100%	5
<i>Carya alba</i>	100%	4
<i>Liriodendron tulipifera</i>	100%	4
<i>Vaccinium pallidum</i>	100%	4
<i>Sassafras albidum</i>	100%	4
<i>Pyrularia pubera</i>	100%	4
<i>Quercus alba</i>	100%	4
<i>Carya pallida</i>	100%	4
<i>Rhus copallina</i>	100%	4
<i>Oxydendrum arboreum</i>	100%	4
<i>Quercus coccinea</i>	100%	3
<i>Solidago odora</i>	100%	3
<i>Quercus falcata</i>	100%	3
<i>Smilax rotundifolia</i>	100%	3
<i>Desmodium nudiflorum</i>	100%	2
<i>Quercus velutina</i>	100%	2
<i>Schizachyrium scoparium</i>	100%	2
<i>Smilax glauca</i>	100%	2
<i>Pteridium aquilinum</i>	100%	2
<i>Polystichum acrostichoides</i>	100%	2
<i>Toxicodendron radicans</i>	100%	2
<i>Lysimachia quadrifolia</i>	100%	2
<i>Vaccinium arboreum</i>	100%	2
<i>Helianthus microcephalus</i>	100%	2
<i>Dichanthelium bosci</i>	100%	2
<i>Lespedeza</i>	100%	2
<i>Symplocos tinctoria</i>	100%	2
<i>Carex</i>	100%	2
<i>Coreopsis major</i>	100%	2
<i>Dichanthelium commutatum</i>	100%	2
<i>Castanea dentata</i>	100%	2
<i>Diospyros virginiana</i>	100%	2
<i>Cornus florida</i>	100%	2
<i>Asteraceae</i>	100%	2
<i>Amelanchier arborea</i>	100%	2
<i>Vitis aestivalis</i>	100%	2
<i>Pinus strobus</i>	100%	2
<i>Euphorbia corollata</i>	100%	2
<i>Scutellaria</i>	100%	2
<i>Lilium michauxii</i>	100%	2
<i>Robinia pseudoacacia</i>	100%	2
<i>Nyssa sylvatica</i>	100%	2

Species	Constancy	Avg Cover
	Class	Class
<i>Viola</i>	100%	2
<i>Antennaria</i>	100%	1
<i>Magnolia fraseri</i>	100%	1
<i>Pinus virginiana</i>	100%	1
<i>Arundinaria tecta</i>	50%	5
<i>Vitis rotundifolia</i>	50%	3
<i>Arundinaria appalachiana</i>	50%	2
<i>Corylus americana</i>	50%	2
<i>Fraxinus americana</i>	50%	2
<i>Tephrosia spicata</i>	50%	2
<i>Ilex</i>	50%	2
<i>Sericocarpus</i>	50%	2
<i>Sericocarpus asteroides</i>	50%	2
<i>Silphium</i>	50%	2
<i>Hieracium venosum</i>	50%	2
<i>Asclepias exaltata</i>	50%	2
<i>Solidago curtissii</i>	50%	2
<i>Endodeca serpentaria</i>	50%	2
<i>Danthonia</i>	50%	2
<i>Gaylussacia baccata</i>	50%	2
<i>Carya glabra</i>	50%	2
<i>Galium</i>	50%	2
<i>Unknown</i>	50%	2
<i>Fraxinus pennsylvanica</i>	50%	2
<i>Vitis rotundifolia var. rotundifolia</i>	50%	2
<i>Vaccinium stamineum</i>	50%	2
<i>Viburnum</i>	50%	2
<i>Fabaceae</i>	50%	2
<i>Eurybia surculosa</i>	50%	2
<i>Sorghastrum nutans</i>	50%	2
<i>Dichanthelium dichotomum</i>	50%	2
<i>Pinus echinata</i>	50%	2
<i>Dennstaedtia punctilobula</i>	50%	2
<i>Moss</i>	50%	2
<i>Monotropa uniflora</i>	50%	2
<i>Pityopsis graminifolia</i>	50%	2
<i>Polygonatum biflorum</i>	50%	2
<i>Danthonia spicata</i>	50%	2
<i>Potentilla canadensis</i>	50%	2
<i>Pseudognaphalium</i>	50%	2
<i>Scleria triglomerata</i>	50%	2
<i>Mimosa microphylla</i>	50%	2
<i>Ilex ambigua</i>	50%	2
<i>Dichanthelium acuminatum</i>	50%	2
<i>Chimaphila maculata</i>	50%	2
<i>Quercus montana</i>	50%	2
<i>Quercus stellata</i>	50%	2
<i>Ceanothus americanus</i>	50%	2
<i>Lichen</i>	50%	2
<i>Lespedeza repens</i>	50%	2

**Floristic table for Group: VII.A.1**
**CEGL003752**

Number of Plots:

1

Average Species Richness:

97 Species listed:

<b>Species</b>	<b>Constancy</b>	<b>Avg Cover</b>	<b>Species</b>	<b>Constancy</b>	<b>Avg Cover</b>
<i>Asplenium platyneuron</i>	100%	2	<i>Danthonia spicata</i>	100%	2
<i>Desmodium</i>	100%	2	<i>Sympyotrichum undulatum</i>	100%	2
<i>Ceanothus americanus</i>	100%	2	<i>Coreopsis major</i>	100%	2
<i>Dichanthelium</i>	100%	2	<i>Dichanthelium</i>	100%	2
<i>Desmodium paniculatum</i>	100%	2	<i>Carya alba</i>	100%	2
<i>Dichanthelium latifolium</i>	100%	2	<i>Tradescantia subaspera</i>	100%	2
<i>Thalictrum revolutum</i>	100%	2	<i>Euphorbia corollata</i>	100%	2
<i>Festuca</i>	100%	2	<i>Vicia caroliniana</i>	100%	2
<i>Viola</i>	100%	1	<i>Andropogon gerardii</i>	100%	1
<i>Trillium cuneatum</i>	100%	1	<i>Ageratina altissima</i>	100%	1
<i>Sympyotrichum patens</i>	100%	1	<i>Agrostis</i>	100%	1
<i>Saxifraga michauxii</i>	100%	1	<i>Acer rubrum</i>	100%	1
<i>Solidago nemoralis</i>	100%	1	<i>Solidago</i>	100%	1
<i>Sphenopholis obtusata</i>	100%	1	<i>Ambrosia</i>	100%	1
<i>Sanicula canadensis</i>	100%	1	<i>Houstonia purpurea</i>	100%	1
<i>Carex laeviginata</i>	100%	1	<i>Betula lenta</i>	100%	1
<i>Carya cordiformis</i>	100%	1	<i>Conopholis americana</i>	100%	1
<i>Cheilanthes tomentosa</i>	100%	1	<i>Desmodium glutinosum</i>	100%	1
<i>Desmodium viridiflorum</i>	100%	1	<i>Diospyros virginiana</i>	100%	1
<i>Elymus villosus</i>	100%	1	<i>Elymus</i>	100%	1
<i>Endodeca serpentaria</i>	100%	1	<i>Asclepias tuberosa</i>	100%	1
<i>Phacelia purshii</i>	100%	1	<i>Phacelia</i>	100%	1
<i>Galium pilosum</i>	100%	1	<i>Lespedeza violacea</i>	100%	1
<i>Quercus alba</i>	100%	1	<i>Lilium michauxii</i>	100%	1
<i>Lespedeza</i>	100%	1	<i>Luzula</i>	100%	1
<i>Lespedeza violacea</i>	100%	1	<i>Maianthemum racemosum</i>	100%	1
<i>Oxalis</i>	100%	1	<i>Woodsia obtusa</i>	100%	1
<i>Woodsia obtusa</i>	100%	1	<i>Arisaema triphyllum</i>	100%	1

**Floristic table for Group: VII.A.2**

**CEGL004991**

Number of Plots: 1  
 Average Species Richness: 55 Species listed: 55 May be > avg. spp. richness  
 Average Plot Size: 100 due to ties  
 Homoteneity: 100

**Species**

	<b>Species</b>	<b>Avg Cover</b>		<b>Avg Cover</b>
		<b>Constancy</b>	<b>Class</b>	
	<i>Lespedeza virginica</i>	100%	2	
	<i>Ambrosia artemisiifolia</i>	100%	2	
	<i>Lilium michauxii</i>	100%	2	
	<i>Linum</i>	100%	2	
	<i>Poaceae</i>	100%	2	
	<i>Luzula</i>	100%	2	
	<i>Oenothera fruticosa var. fruticosa</i>	100%	2	
	<i>Oenothera fruticosa var. fruticosa</i>	100%	2	
	<i>Polygonatum biflorum</i>	100%	2	
	<i>Penstemon laevigatus</i>	100%	2	
	<i>Coreopsis</i>	100%	2	
	<i>Polygonatum biflorum var. commutatum</i>	100%	1	
	<i>Polygala</i>	100%	1	
	<i>Quercus rubra</i>	100%	4	
	<i>Vaccinium stamineum</i>	100%	4	
	<i>Lechea racemulosa</i>	100%	3	
	<i>Moss</i>	100%	3	
	<i>Packera millefolium</i>	100%	3	
	<i>Quercus montana</i>	100%	3	
	<i>Solidago</i>	100%	3	
	<i>Unknown</i>	100%	3	
	<i>Hypoxis hirsuta</i>	100%	3	
	<i>Thalictrum revolutum</i>	100%	3	
	<i>Carex pensylvanica</i>	100%	3	
	<i>Amorpha glabra</i>	100%	3	
	<i>Dichanthelium</i>	100%	3	
	<i>Coreopsis major</i>	100%	3	
	<i>Asteraceae</i>	100%	2	
	<i>Prenanthes</i>	100%	2	
	<i>Carex</i>	100%	2	
	<i>Rubus</i>	100%	2	
	<i>Saxifraga</i>	100%	2	
	<i>Scleria pauciflora var. pauciflora</i>	100%	2	
	<i>Silene virginica</i>	100%	2	
	<i>Potentilla</i>	100%	2	
	<i>Smilax rotundifolia</i>	100%	2	
	<i>Campanula divaricata</i>	100%	2	
	<i>Asplenium platyneuron</i>	100%	2	
	<i>Sympyotrichum undulatum</i>	100%	2	
	<i>Antennaria plantaginifolia</i>	100%	2	
	<i>Andropogon gerardii</i>	100%	2	
	<i>Eupatorium</i>	100%	2	
	<i>Coreopsis pubescens var. robusta</i>	100%	2	
	<i>Smilax glauca</i>	100%	2	
	<i>Hypericum</i>	100%	2	
	<i>Euphorbia</i>	100%	2	
	<i>Helianthus</i>	100%	2	
	<i>Selaginella rupestris</i>	100%	2	
	<i>Houstonia montana</i>	100%	2	
	<i>Hypericum gentianoides</i>	100%	2	
	<i>Erigeron strigosus var. strigosus</i>	100%	2	

**Floristic table for Group: VII.B.1**

**CEGL007720**

Number of Plots:

1

Average Species Richness:

62 Species listed:

Species	Avg Cover		Avg Cover	
	Constancy	Class	Constancy	Class
<i>Hieracium venosum</i>	100%	2		
<i>Houstonia tenuifolia</i>	100%	2		
<i>Hypericum punctatum</i>	100%	2		
<i>Polygonatum biflorum</i>	100%	2		
<i>Lespedeza</i>	100%	2		
<i>Maianthemum canadense</i>	100%	2		
<i>Ostrya virginiana</i>	100%	2		
<i>Ostrya virginiana</i>	100%	2		
<i>Packera anonyma</i>	100%	1		
<i>Acer pensylvanicum</i>	100%	1		
<i>Parthenocissus quinquefolia</i>	100%	1		
<i>Smilax glauca</i>	100%	1		
<i>Dryopteris marginalis</i>	100%	1		
<i>Fraxinus americana</i>	100%	1		
<i>Gnaphalium</i>	100%	1		
<i>Heuchera</i>	100%	1		
<i>Potentilla canadensis</i>	100%	1		
<i>Clitoria</i>	100%	1		
<i>Asteraceae</i>	100%	1		
<i>Lactuca</i>	100%	1		
<i>Rubus</i>	100%	2		
<i>Penstemon smallii</i>	100%	2		
<i>Viburnum acerifolium</i>	100%	2		
<i>Vaccinium stamineum</i>	100%	2		
<i>Ulmus americana</i>	100%	2		
<i>Poa</i>	100%	2		
<i>Penstemon canescens</i>	100%	2		
<i>Tradescantia subaspera</i>	100%	2		
<i>Robinia pseudoacacia</i>	100%	2		
<i>Solidago arguta</i>	100%	2		
<i>Rubus flagellaris</i>	100%	2		
<i>Saxifraga careyana</i>	100%	2		
<i>Schizachyrium scoparium</i>	100%	2		
<i>Silene virginica</i>	100%	2		
<i>Solidago sphacelata</i>	100%	2		
<i>Smilax hispida</i>	100%	2		
<i>Solanum</i>	100%	2		
<i>Solidago juncea</i>	100%	2		
<i>Toxicodendron radicans</i>	100%	2		
<i>Acer rubrum</i>	100%	2		
<i>Coreopsis major</i>	100%	2		
<i>Arabis</i>	100%	2		
<i>Dichanthelium commutatum</i>	100%	2		
<i>Dichanthelium dichotomum</i>	100%	2		
<i>Dichanthelium laxiflorum</i>	100%	2		
<i>Antennaria</i>	100%	2		
<i>Eupatorium sessilifolium</i>	100%	2		
<i>Ambrosia artemisiifolia</i>	100%	2		
<i>Asplenium platyneuron</i>	100%	2		
<i>Ailanthus altissima</i>	100%	2		
<i>Campanula divaricata</i>	100%	2		

**Floristic table for Group: VIII.A.1**
**CEGL004094**

Number of Plots:

2

Average Species Richness:

45 Species listed:

**Species**
**Avg Cover**
**Constancy**
**Class**

Average Plot Size:

150 May be &gt; avg. spp. richness

Homoteneity:

86 due to ties

**Avg Cover**
**Species**
**Constancy**
**Class**

<i>Carex pensylvanica</i>	100%	7
<i>Vaccinium corymbosum</i>	100%	6
<i>Schizachyrium scoparium</i>	100%	4
<i>Poa pratensis</i>	100%	4
<i>Danthonia compressa</i>	100%	4
<i>Solidago arguta</i>	100%	4
<i>Packera schweinitziana</i>	100%	4
<i>Fragaria virginiana</i>	100%	4
<i>Rumex acetosella</i>	100%	4
<i>Penstemon laevigatus</i>	100%	4
<i>Houstonia montana</i>	100%	4
<i>Potentilla simplex</i>	100%	3
<i>Luzula bulbosa</i>	100%	3
<i>Hieracium caespitosum</i>	100%	3
<i>Rudbeckia hirta</i>	100%	3
<i>Crataegus</i>	100%	3
<i>Lysimachia quadrifolia</i>	100%	3
<i>Sisyrinchium angustifolium</i>	100%	2
<i>Leucanthemum vulgare</i>	100%	2
<i>Pedicularis canadensis</i>	100%	2
<i>Holcus lanatus</i>	100%	2
<i>Epigaea repens</i>	100%	2
<i>Anthoxanthum odoratum</i>	100%	2
<i>Dactylis glomerata</i>	100%	2
<i>Arnoglossum atriplicifolium</i>	100%	2
<i>Diphasiastrum digitatum</i>	100%	2
<i>Erigeron philadelphicus</i>	100%	2
<i>Erigeron strigosus</i>	100%	2
<i>Helianthus</i>	100%	2
<i>Achillea millefolium</i>	100%	2
<i>Hypericum punctatum</i>	100%	2
<i>Viola</i>	100%	2
<i>Quercus rubra</i>	50%	4
<i>Crocanthemum</i>	50%	3
<i>Castilleja coccinea</i>	50%	2
<i>Thalictrum revolutum</i>	50%	2
<i>Solidago</i>	50%	2
<i>Veronica</i>	50%	2
<i>Stellaria graminea</i>	50%	2
<i>Antennaria plantaginifolia</i>	50%	2
<i>Veronica officinalis</i>	50%	2
<i>Trifolium pratense</i>	50%	2
<i>Lilium superbum</i>	50%	2

**Floristic table for Group: VIII.A.2**

**CEGL004242**

Number of Plots:	4
Average Species Richness:	27
Average Plot Size:	28
Homoteneity:	100 May be > avg. spp. richness
	68 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Packera schweinitziana</i>	100%	7
<i>Carex cristatella</i>	100%	6
<i>Poa</i>	100%	6
<i>Potentilla simplex</i>	100%	4
<i>Hieracium caespitosum</i>	100%	4
<i>Carex</i>	100%	2
<i>Sibbaldiopsis tridentata</i>	75%	6
<i>Phleum pratense</i>	75%	6
<i>Danthonia compressa</i>	75%	6
<i>Solidago</i>	75%	2
<i>Achillea millefolium</i>	75%	2
<i>Prenanthes serpentaria</i>	75%	2
<i>Luzula</i>	75%	2
<i>Juncus</i>	75%	2
<i>Fragaria virginiana</i>	50%	5
<i>Festuca</i>	50%	4
<i>Carex debilis</i>	50%	3
<i>Castilleja coccinea</i>	50%	3
<i>Athyrium angustum</i>	50%	2
<i>Rumex acetosella</i>	50%	2
<i>Asteraceae</i>	50%	2
<i>Rhododendron calendulaceum</i>	50%	2
<i>Amelanchier laevis</i>	50%	2
<i>Gentiana</i>	50%	2
<i>Crataegus</i>	50%	2
<i>Pedicularis canadensis</i>	25%	4
<i>Schizachyrium scoparium</i>	25%	4
<i>Trautvetteria caroliniensis var. carolinensis</i>	25%	4

**Floristic table for Group: IX.A.1**

**CEGL004420**

<b>Species</b>	<b>Avg Cover</b>
<b>Constancy</b>	<b>Class</b>
<i>Cephalanthus occidentalis</i>	100% 1

Number of Plots: 1  
 Average Species Richness: 44 Species listed: 44  
 Average Plot Size: 500 May be > avg. spp. richness  
 Homotogeneity: 100 due to ties

<b>Species</b>	<b>Avg Cover</b>	
	<b>Constancy</b>	<b>Class</b>
<i>Fraxinus pennsylvanica</i>	100%	8
<i>Acer rubrum var. trilobum</i>	100%	8
<i>Platanus occidentalis var. occidentalis</i>	100%	6
<i>Carex lupulina</i>	100%	4
<i>Toxicodendron radicans</i>	100%	3
<i>Betula nigra</i>	100%	3
<i>Boehmeria cylindrica</i>	100%	3
<i>Carex</i>	100%	3
<i>Cornus amomum</i>	100%	3
<i>Carpinus caroliniana</i>	100%	3
<i>Rosa multiflora</i>	100%	2
<i>Onoclea sensibilis var. sensibilis</i>	100%	2
<i>Ligustrum sinense</i>	100%	2
<i>Microstegium vimineum</i>	100%	2
<i>Festuca subverticillata</i>	100%	2
<i>Euonymus americanus</i>	100%	2
<i>Carex stipata</i>	100%	2
<i>Cinna arundinacea</i>	100%	2
<i>Celastrus orbiculatus</i>	100%	2
<i>Bidens</i>	100%	2
<i>Carex crinita</i>	100%	2
<i>Acer negundo</i>	100%	2
<i>Alliaria petiolata</i>	100%	2
<i>Poa</i>	100%	1
<i>Prunus serotina var. serotina</i>	100%	1
<i>Ranunculus recurvatus var. recurvatus</i>	100%	1
<i>Sium suave</i>	100%	1
<i>Vitis labrusca</i>	100%	1
<i>Solidago</i>	100%	1
<i>Taraxacum officinale</i>	100%	1
<i>Vitis rotundifolia</i>	100%	1
<i>Parthenocissus quinquefolia</i>	100%	1
<i>Rosaceae</i>	100%	1
<i>Lycopus</i>	100%	1
<i>Lonicera japonica</i>	100%	1
<i>Liriodendron tulipifera</i>	100%	1
<i>Leersia virginica</i>	100%	1
<i>Ipomoea</i>	100%	1
<i>Impatiens capensis</i>	100%	1
<i>Glyceria striata var. striata</i>	100%	1
<i>Amelanchier arborea</i>	100%	1
<i>Carya cordiformis</i>	100%	1
<i>Erechtites hieracifolia</i>	100%	1

**Floristic table for Group: IX.A.2**

CEGL007143

		<b>Species</b>	<b>Avg Cover</b>	
			<b>Constancy</b>	<b>Class</b>
Number of Plots:	1	<i>Poa</i>	100%	1
Average Species Richness:	47	<i>Poa compressa</i>	100%	1
Average Plot Size:	200	<i>Chelone</i>	100%	1
Homoteneity:	100	<i>Polygonatum pubescens</i>	100%	1
			<b>Avg Cover</b>	
			<b>Constancy</b>	<b>Class</b>
<b>Species</b>				
<i>Betula lenta</i>		100%	7	
<i>Tilia americana var. heterophylla</i>		100%	7	
<i>Rhododendron maximum</i>		100%	7	
<i>Liriodendron tulipifera</i>		100%	6	
<i>Asteraceae</i>		100%	6	
<i>Monarda fistulosa</i>		100%	4	
<i>Acer pensylvanicum</i>		100%	3	
<i>Acer rubrum</i>		100%	3	
<i>Polystichum acrostichoides</i>		100%	3	
<i>Polygonatum biflorum</i>		100%	2	
<i>Parthenocissus quinquefolia</i>		100%	2	
<i>Luzula</i>		100%	2	
<i>Mitchella repens</i>		100%	2	
<i>Quercus rubra</i>		100%	2	
<i>Ranunculus</i>		100%	2	
<i>Houstonia serpyllifolia</i>		100%	2	
<i>Solidago flexicaulis</i>		100%	2	
<i>Trillium</i>		100%	2	
<i>Tsuga canadensis</i>		100%	2	
<i>Viola</i>		100%	2	
<i>Viola rotundifolia</i>		100%	2	
<i>Solidago</i>		100%	2	
<i>Acer nigrum</i>		100%	2	
<i>Cardamine diphylla</i>		100%	2	
<i>Anemone quinquefolia</i>		100%	2	
<i>Carex plantaginea</i>		100%	2	
<i>Amelanchier laevis</i>		100%	2	
<i>Ageratina altissima</i>		100%	2	
<i>Athyrium asplenoides</i>		100%	2	
<i>Aesculus flava</i>		100%	2	
<i>Acer saccharum</i>		100%	2	
<i>Hamamelis virginiana</i>		100%	2	
<i>Dioscorea quaternata</i>		100%	2	
<i>Dryopteris carthusiana</i>		100%	2	
<i>Eupatorium</i>		100%	2	
<i>Galium triflorum</i>		100%	2	
<i>Tiarella cordifolia</i>		100%	2	
<i>Unknown</i>		100%	1	
<i>Collinsonia canadensis</i>		100%	1	
<i>Adiantum pedatum</i>		100%	1	
<i>Impatiens pallida</i>		100%	1	
<i>Carex</i>		100%	1	
<i>Phryma leptostachya</i>		100%	1	

**Floristic table for Group: X.A.1****CEGL006277**

Number of Plots: 2  
 Average Species Richness: 16 Species listed: 18  
 Average Plot Size: 650 May be > avg. spp. richness  
 Homoteneity: 72 due to ties

Species	Avg Cover	
	Constancy	Class
<i>Picea rubens</i>	100%	8
<i>Rhododendron maximum</i>	100%	7
<i>Kalmia latifolia</i>	100%	7
Moss	100%	6
<i>Viburnum cassinoides</i>	100%	5
<i>Amelanchier laevis</i>	100%	4
<i>Acer rubrum</i>	100%	1
<i>Quercus velutina</i>	50%	6
<i>Ilex</i>	50%	5
<i>Ilex verticillata</i>	50%	4
<i>Sphagnum</i>	50%	2
<i>Fraxinus americana</i>	50%	2
<i>Vaccinium corymbosum</i>	50%	2
<i>Vaccinium</i>	50%	2
<i>Prunus pensylvanica</i>	50%	2
<i>Trillium</i>	50%	2
<i>Aronia melanocarpa</i>	50%	2
<i>Chimaphila maculata</i>	50%	2

**Floristic table for Group: X.B.1**

CEGL004296

Number of Plots:

3

Average Species Richness:

47

Species listed: 81

Average Plot Size:

233

May be > avg. spp. richness

Homoteneity:

67 due to ties

**Species**

Species	Constancy	Avg Cover
		Constancy
<i>Acer saccharum</i>	100%	7
<i>Aesculus flava</i>	100%	7
<i>Laportea canadensis</i>	100%	7
<i>Acer pensylvanicum</i>	100%	4
<i>Hydrangea arborescens</i>	100%	4
<i>Hydrophyllum canadense</i>	100%	3
<i>Diphylleia cymosa</i>	100%	3
<i>Monarda didyma</i>	100%	3
<i>Dryopteris intermedia</i>	100%	2
<i>Polystichum acrostichoides</i>	100%	2
<i>Prenanthes</i>	100%	2
<i>Eurybia divaricata</i>	100%	2
<i>Osmorrhiza claytonii</i>	100%	2
<i>Arisaema triphyllum</i>	100%	2
<i>Trillium erectum</i>	100%	2
Moss	67%	7
<i>Tiarella cordifolia</i>	67%	2
<i>Podophyllum peltatum</i>	67%	2
<i>Stellaria pubera</i>	67%	2
<i>Impatiens pallida</i>	67%	2
<i>Dryopteris marginalis</i>	67%	2
<i>Chelone lyonii</i>	67%	2
<i>Thalictrum clavatum</i>	67%	2
<i>Cryptotaenia canadensis</i>	67%	2
<i>Astilbe biternata</i>	67%	2
<i>Viola cucullata</i>	67%	2
<i>Viola pubescens</i>	67%	2
<i>Maianthemum canadense</i>	67%	2
<i>Prosartes lanuginosa</i>	67%	2
<i>Cardamine angustata</i>	67%	2
<i>Galium triflorum</i>	67%	2
<i>Actaea podocarpa</i>	67%	2
<i>Fagus grandifolia</i>	33%	6
<i>Fraxinus americana</i>	33%	6
<i>Betula alleghaniensis</i>	33%	5
<i>Carya cordiformis</i>	33%	5
<i>Hamamelis virginiana</i>	33%	4
<i>Stellaria corei</i>	33%	3
<i>Fraxinus pennsylvanica</i>	33%	3
<i>Saxifragaceae</i>	33%	3
<i>Liriodendron tulipifera</i>	33%	3
<i>Deparia acrostichoides</i>	33%	2
<i>Smilax rotundifolia</i>	33%	2

Species	Constancy	Avg Cover
		Class
<i>Ribes cynosbati</i>	33%	2
<i>Viola canadensis</i>	33%	2
<i>Sambucus</i>	33%	2
<i>Sambucus canadensis</i>	33%	2
<i>Veratrum viride</i>	33%	2
<i>Veratrum virginicum</i>	33%	2
<i>Sanguinaria canadensis</i>	33%	2
<i>Sanguinaria canadensis</i>	33%	2
<i>Saxifraga micranthidifolia</i>	33%	2
<i>Uvularia sessilifolia</i>	33%	2
<i>Unknown</i>	33%	2
<i>Solidago curtisii</i>	33%	2
<i>Solidago flexicaulis</i>	33%	2
<i>Tilia americana</i>	33%	2
<i>Sedum ternatum</i>	33%	2
<i>Anemone americana</i>	33%	2
<i>Prunus serotina</i>	33%	2
<i>Polygonatum biflorum</i>	33%	2
<i>Acer spicatum</i>	33%	2
<i>Actaea racemosa</i>	33%	2
<i>Angelica triquinata</i>	33%	2
<i>Arnoglossum reniforme</i>	33%	2
<i>Botrypus virginianus</i>	33%	2
<i>Cardamine diphylla</i>	33%	2
<i>Caulophyllum thalictroides</i>	33%	2
<i>Chrysosplenium americanum</i>	33%	2
<i>Euonymus obovatus</i>	33%	2
<i>Parthenocissus quinquefolia</i>	33%	2
<i>Goodyera pubescens</i>	33%	2
<i>Huperzia lucidula</i>	33%	2
<i>Isotrema macrophylla</i>	33%	2
<i>Lilium superbum</i>	33%	2
<i>Lindera benzoin</i>	33%	2
<i>Magnolia acuminata</i>	33%	2
<i>Mitella diphylla</i>	33%	2
<i>Phlox stolonifera</i>	33%	2
<i>Oxalis violacea</i>	33%	2
<i>Aconitum reclinatum</i>	33%	2
<i>Geranium maculatum</i>	33%	2

**Floristic table for Group: X.C.1**
**CEGL003914**

Number of Plots:

2

Average Species Richness:

39 Species listed:

**Species**
**Avg Cover**  
**Constancy**      **Class**
*Sympyotrichum patens*

50%

2

*Scutellaria integrifolia*

50%

2

*Eupatorium hyssopifolium*

50%

2

*Eutrochium fistulosum*

50%

2

*Sabatia campanulata*

50%

2

*Lysimachia terrestris*

50%

2

*Lobelia*

50%

2

**Avg Cover****Species****Constancy****Class**

<i>Acer rubrum</i>	100%	4	<i>Oxydendrum arboreum</i>	50%	2
<i>Dichanthelium</i>	100%	4	<i>Panicum virgatum</i>	50%	2
<i>Rhynchospora</i>	100%	4	<i>Dichanthelium scoparium</i>	50%	2
<i>Sympyotrichum</i>	100%	4	<i>Danthonia compressa</i>	50%	2
<i>Poaceae</i>	100%	4	<i>Quercus falcata</i>	50%	2
<i>Helianthus angustifolius</i>	100%	4	<i>Juncus effusus</i>	50%	2
<i>Liriodendron tulipifera var. tulipifera</i>	100%	4	<i>Rhexia virginica</i>	50%	2
<i>Saccharum giganteum</i>	100%	3	<i>Croton michauxii</i>	50%	2
<i>Solidago rugosa</i>	100%	2	<i>Juncus biflorus</i>	50%	2
<i>Viola primulifolia</i>	100%	2	<i>Aletris farinosa</i>	50%	2
<i>Eupatorium rotundifolium</i>	100%	2	<i>Rubus hispидus</i>	50%	2
<i>Ludwigia hirtella</i>	100%	2	<i>Panicum</i>	50%	2
<i>Polygala cruciata</i>	100%	2			
<i>Lichen</i>	50%	7			
<i>Sphagnum</i>	50%	5			
<i>Rubus</i>	50%	5			
<i>Eleocharis tuberculosa</i>	50%	5			
<i>Scleria pauciflora</i>	50%	4			
<i>Sarracenia oreophila</i>	50%	4			
<i>Moss</i>	50%	4			
<i>Aronia arbutifolia</i>	50%	3			
<i>Rosa palustris</i>	50%	3			
<i>Schizachyrium scoparium</i>	50%	3			
<i>Sanguinaria canadensis</i>	50%	3			
<i>Carex</i>	50%	3			
<i>Rhexia mariana</i>	50%	3			
<i>Pinus echinata</i>	50%	3			
<i>Drosera brevifolia</i>	50%	2			
<i>Vaccinium</i>	50%	2			
<i>Thelypteris palustris var. pubescens</i>	50%	2			
<i>Scirpus cyperinus</i>	50%	2			
<i>Andropogon glomeratus</i>	50%	2			
<i>Baptisia tinctoria</i>	50%	2			
<i>Eutrochium maculatum</i>	50%	2			
<i>Lobelia siphilitica var. siphilitica</i>	50%	2			
<i>Eupatorium perfoliatum</i>	50%	2			
<i>Galium</i>	50%	2			
<i>Eupatorium pilosum</i>	50%	2			
<i>Eutrochium purpureum</i>	50%	2			
<i>Scutellaria</i>	50%	2			
<i>Sisyrinchium angustifolium</i>	50%	2			
<i>Solidago patula</i>	50%	2			
<i>Andropogon</i>	50%	2			