



**Photograph: #16c-** View looking 150° at typical road conditions.



**Photograph: #16d-** View looking 0° at intact riparian forest along trail.

**Waypoint 17:** Lat./Long. 35.54984808, -82.23348149

**Location:** Main entry from southwestern boundary

**Land Cover:** Dirt Road/Montane Oak Hickory Forest



**Photograph: #17a-** View looking 40° into easement area at boundary.



**Photograph: #17b-** View looking 200° from Preserve into non-easement land.



**Photograph: #17c-** View looking 290° upslope of Mesic Oak forest



**Photograph: #17d-** View looking 140° of Mesic Oak forest, downslope.

**Waypoint 18:** Lat./Long. 35.55279390, -82.23303373

**Location:** Western Preserve area

**Land Cover:** Mesic Oak Forest



**Photograph: #18-**  
View of Broad-leaf  
Coreopsis(NC Rare  
List) in Mesic Oak  
Forest.



**Photograph: #18b**  
View looking 270°  
of 3 ½ ft. diameter-  
Northern Red Oak  
in Rich Cove  
forest.

**Waypoint 19:** Lat./Long. 35.55724461, -82.23490910

**Location:** Northwestern Preserve (in McDowell County)

**Land Cover:** Sub-mesic Oak Forest



**Photograph: #19a –**  
View 290° of  
Sub-mesic Oak forest

**Additional Photograph**



**Photograph:** Juvenile box turtle found by Alex Nadel.

Section E

**Resource Management**

---

1. Management Issues and/or Recommendations

## **1. Management Issues and/or Recommendations**

### Invasive Exotic Plants & Animals

Invasive exotic plants are a major threat to habitat diversity within many of North Carolina's protected lands because they can out-compete and displace native plants and alter entire plant communities, thus jeopardizing many of the conservation values of the property. It is thought that invasive plant infestations are one of the most significant threats to long term natural heritage protection. Clear cuts and exposed areas such as some of those areas found along the logging roads are sites which could be colonized by invasive exotic plants. Invasive exotic plants found on the property include: Tree of Heaven, Japanese Honeysuckle, Japanese Stiltgrass, Chinese Silvergrass, Princess Tree, and Multiflora Rose. It is recommended that eradication of invasive exotic plants be pursued before they become well established on the property. It is also recommended that an Invasive Exotic Management Plan be created to address this potential problem and the property be monitored on a yearly basis for invasive exotic plants. Evidence of the presence of the Hemlock Woolly Adelgid (*Adelges tsugae*) was found on the property. Its capacity to alter & destroy the Eastern Hemlock component of the forests is tremendous and the resulting effects on the associated shaded forest ecosystem are likely to be profound. It is recommended that measures be taken to prevent its spread and eradication should be explored.

### In-holding and Adjacent Properties

Within the Laurel Mountain Preserve, there exists two in-holding properties in the southern portion of the property, one of them containing 5 separate lots and the other consisting of approximately 10 acres. In addition, a campsite was observed just outside the northern property boundary along the trail parallel to Bird Creek. To avoid infringing on the conservation easement placed on the property, it is recommended that the conservation easement area be clearly marked and identified. The landowner might want to consider placing signs in key areas along the boundary indicating the property is in a conservation easement. As well, strategically located interpretive signs could be used to communicate the location and purposes of the conservation easement. These signs could be located at major entrances into sections of residential development. Ideally, the areas directly adjacent to the Property should be monitored overtime in case any potential violations occur along the boundary of the conservation easement and the in-holdings.

### Sedimentation of Streams

In general, the Laurel Mountain Preserve exhibits excellent water quality. It was observed, however, that sediment from road construction in the adjacent development was entering these waterways. Sediment is a source of pollution that has the potential to fill in aquatic habitat and clog the gills of aquatic organisms. It is recommended that best management practices are used during construction of adjacent parcels in addition to roads and trails being properly maintained over time to avoid sediment runoff into streams.

Section F

**Conservation Easement**

---

Section G

**Monitoring Reports, Notice, and Approvals**

---

## Section H

# **Attachments**

---

1. Plant Status & Ranks
2. List of Plants Found on the Property
3. List of Wildlife Found on the Property
4. Rare Plants Potentially Occurring on the Property
5. Rare Animals Potentially Occurring on the Property
6. Concept Master Plan

## 1. Plant Status & Ranks

The following codes are explained below and have been taken directly from the NC Natural Heritage Program's web page <http://www.ncsparksnet/nhp/codes.html>

Plant status is determined by the Plant Conservation Program (NC Department of Agriculture) and the Natural Heritage Program (NC Department of Environment and Natural Resources). E, T, and SC species are protected by state law (Plant Protection and Conservation Act, 1979). C and SR designations indicate rarity and the need for population monitoring and conservation action. Species may have a double status (e.g., E-SC, indicates that while the plant is endangered, it is collected or sold under regulation). See the *Natural Heritage Program List of the Rare Plant Species of North Carolina* for further explanation of these statuses.

Animal status that indicates state protection (E, T, and SC) is published in *Endangered Wildlife of North Carolina*, March 16, 1992, Nongame and Endangered Wildlife Program (NC Department of Environment and Natural Resources). SR and EX statuses are Natural Heritage Program designations. SR indicates rarity and the need for population monitoring and conservation action. See the *Natural Heritage Program List of the Rare Animal Species of North Carolina* for further explanation of these statuses.

### GLOBAL AND STATE STATUS

CODE	STATUS	CODE	STATUS
E	Endangered	SR	Significantly Rare
T	Threatened	EX	Extirpated
SC	Special Concern	D	De-listed
C	Candidate	P_	Proposed (E, T, SC, EX or D)

### FEDERAL STATUS

These ranks are determined by The Nature Conservancy's system of measuring rarity and threat status. "Global" refers to worldwide ranks and "State" to statewide ranks.

#### CODE DEFINITION

LE	A taxon "in danger of extinction throughout all or a significant portion of its range." (Listed at the Federal level.)
LT	A taxon "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." (Listed at the Federal level.)
C	A taxon under consideration for which there is sufficient information to support listing. This category was formerly designated as a Candidate 1 (C1) species.
LEXN	Endangered, nonessential experimental population. The Endangered Species Act permits the reintroduction of endangered animals as "nonessential experimental" populations. Such populations, considered nonessential to the survival of the species, are managed with fewer restrictions than populations listed as endangered.
FSC	Federal "Species of Concern" (also called "Species at Risk"). Formerly defined as a taxon



under consideration for which there is insufficient information to support listing; formerly designated as a Candidate 2 (C2) species. Currently, the US Fish and Wildlife Service does not recognize this as an official designation.

T(S/A) Threatened due to Similarity of Appearance. The Endangered Species Act authorizes the treatment of a species (subspecies or population segment) as threatened even though it is not otherwise listed as threatened if: (a) The species so closely resembles in appearance a threatened species that enforcement personnel would have substantial difficulty in differentiating between the listed and unlisted species; (b) the effect of this substantial difficulty is an additional threat to a threatened species; and (c) such treatment of an unlisted species will substantially facilitate the enforcement and further the policy of the Act. The American Alligator has this designation due to similarity of appearance to other rare crocodylians. The Bog Turtle (southern population) has this designation due to similarity of appearance to Bog Turtles in the threatened northern population.

PE Species has been proposed for listing as endangered.

PDL Species has been proposed for de-listing.

**STATE  
RANK      DEFINITIONS**

S1 Critically imperiled in North Carolina because of extreme rarity or otherwise very vulnerable to extirpation in the state.

S2 Imperiled in North Carolina because of rarity or otherwise vulnerable to extirpation in the state.

S3 Rare or uncommon in North Carolina.

S4 Apparently secure in North Carolina, with many occurrences.

S5 Demonstrably secure in North Carolina and essentially ineradicable under present conditions.

SA Accidental or casual; one to several records for North Carolina, but the state is outside the normal range of the species.

SH Of historical occurrence in North Carolina, perhaps not having been verified in the past 25 years, and suspected to be still extant in the state.

SR Reported from North Carolina, but without persuasive documentation for either accepting or rejecting the report.

SX Believed to be extirpated from North Carolina.

SU Possibly in peril in North Carolina, but status uncertain; more information is needed.

S? Unranked, or rank uncertain.

S\_B Rank of breeding population in the state. Used for migratory species only.

S\_N Rank of non-breeding population in the state. Used for migratory species only.

SZ\_ Population is not of significant conservation concern; applies to transitory, migratory species.

## 2. List of Plants Found on the Property

\*\*\* - indicates exotic plant species

S – Southern Appalachian Endemic species

FORM	COMMON NAME	SCIENTIFIC NAME	NCNHP LISTING	STATUS / RANK
Tree	Striped Maple	<i>Acer pensylvanicum</i>		
Tree	Red Maple	<i>Acer rubrum</i> var <i>rubr</i>		
Tree	Yellow Buckeye	<i>Aesculus flava</i> (S)		
Tree	Tree-of-Heaven***	<i>Ailanthus altissima</i> ***		
Tree	Serviceberry	<i>Amelanchier arborea</i>		
Tree	Black Birch	<i>Betula lenta</i>		
Tree	Bitternut Hickory	<i>Carya cordiformis</i>		
Tree	Pignut Hickory	<i>Carya glabra</i>		
Tree	Mockernut Hickory	<i>Carya tomentosa</i>		
Tree	American Chestnut	<i>Castanea dentata</i>		
Tree	Dogwood	<i>Cornus florida</i>		
Tree	American Beech	<i>Fagus grandifolia</i>		
Tree	White Ash	<i>Fraxinus americana</i>		
Tree	Silverbell	<i>Halesia tetraptera</i> var <i>monticola</i> (S)		
Tree	American Holly	<i>Ilex opaca</i>		
Tree	Tulip Poplar	<i>Liriodendron tulipifera</i>		
Tree	Fraser Magnolia	<i>Magnolia fraseri</i> (S)		
Tree	Black Gum	<i>Nyssa sylvatica</i>		
Tree	Sourwood	<i>Oxydendron arboreum</i>		
Tree	Princess Tree***	<i>Paulownia tomentosa</i> *		
Tree	Pitch Pine	<i>Pinus rigida</i>		
Tree	White Oak	<i>Quercus alba</i>		
Tree	Scarlet Oak	<i>Quercus coccinea</i>		
Tree	Chestnut Oak	<i>Quercus montana</i>		
Tree	Northern Red Oak	<i>Quercus rubra</i>		
Tree	Black Oak	<i>Quercus velutina</i>		
Tree	Black Locust	<i>Robinia psuedoacacia</i>		
Tree	Sassafras	<i>Sassafras albidum</i>		
Tree	White Basswood	<i>Tilia heterophylla</i>		
Tree	Canada Hemlock	<i>Tsuga canadensis</i>		
<b>Tree</b>	<b>Carolina Hemlock</b>	<b><i>Tsuga caroliniana</i> (S)</b>	<b>Watch</b>	<b>W5A/ - /S3/G3</b>
Shrub	Tag Alder	<i>Alnus serrulata</i>		
Shrub	Sweetshrub	<i>Calycanthus floridus</i>		
Shrub	Sweet Pepperbush	<i>Clethra acuminata</i> (S)		
Shrub	Silky Dogwood	<i>Cornus amomum</i>		
Shrub	Huckleberry	<i>Gaylussacia baccata</i>		
Shrub	Witch Hazel	<i>Hammamelis virginian</i>		
Shrub	Wild Hydrangea	<i>Hydrangea arborescens</i>		
Shrub	Mountain Laurel	<i>Kalmia latifolia</i>		
Shrub	Doghobble	<i>Leucothoe fontansiana</i> (S)		
Shrub	Spicebush	<i>Lindera benzoin</i>		
Shrub	Buffalo Nut	<i>Pyrularia pubera</i>		
Shrub	Flame Azalea	<i>Rhododendron calendulaceum</i>		
Shrub	Rosebay rhodendron	<i>Rhododendron maximum</i>		
Shrub	Elderberry	<i>Sambucus canadensis</i>		
Shrub	Horse Sugar	<i>Symplocos tinctoria</i>		
Shrub	Smooth Highbush Blueberry	<i>Vaccinium corymbosum</i>		

Shrub	Hillside Blueberry	Vaccinium pallidum		
Shrub	Appalachian Deerberry	Vaccinium staminium		
Shrub	Mapleleaf Viburnum	Viburnum acerfolium		
Vine	Virgin's Bower	Clematis virginiana		
Vine	Partridgeberry	Mitchella repens		
Vine	Virginia creeper	Parthenocissus quinq		
Vine	Multiflora Rose***	Rosa multiflora***		
Vine	Smooth Blackberry	Rubus canadensis (A)		
Vine	Wineberry***	Rubus phoenicolasius***		
<b>Vine</b>	<b>Biltmore Carrionflower</b>	<b>Smilax bitmoreana (S)</b>	<b>Watch</b>	<b>W1/ - /S3/G4?</b>
Vine	White Greenbrier	Smilax glauca		
Vine	Greenbrier	Smilax hispida		
Vine	Common Greenbrier	Smilax rotundifolia		
Vine	Poison Ivy	Toxicodendron radica		
Vine	Fox Grape	Vitis labrusca		
Wildflower	Monk's Hood	Aconitum uncinatum (S)		
<b>Wildflower</b>	<b>Black Cohosh</b>	<b>Actaea racemosa</b>	<b>Watch "Exploited"</b>	<b>W5B/ - /S4/G4</b>
Wildflower	Wingstem	Actinomeris alteranifolia		
Wildflower	White Snakeroot	Ageratina altissima		
Wildflower	Woodland Agrimony	Agrimonia rostellata		
<b>Wildflower</b>	<b>Colic Root</b>	<b>Aletris farinosa</b>	<b>Watch "Exploited"</b>	<b>W5B/ - /S5/G5</b>
Wildflower	Amaranth	Amaranthus sp.		
Wildflower	Canada Sicklepod	Arabis canadensis		
Wildflower	Spikenard	Aralia racemosa		
Wildflower	Common Jack in the Pulpit	Arisaema triphyllum		
Wildflower	Small Jack in the Pulpit	Arisaema triphyllum spp glauca		
Wildflower	Giant Indian Plantain	Arnoglossum muhlenbergia		
Wildflower	Woodland Milkweed	Asclepias incarnata		
Wildflower	Heartleaf Aster	Aster cordifolius		
Wildflower	White Wood Aster	Aster divaricatus		
Wildflower	Heath Aster	Aster pilosus		
Wildflower	Wavy Aster	Aster undulatus		
Wildflower	Native Astilbe	Astilbe biternatum (S)		
Wildflower	Begger's Tick	Bidens bipinnata		
Wildflower	Cutleaf Toothwort	Cardamine concatenat		
Wildflower	Large Toothwort	Cardamine diphylla		
Wildflower	Blue Cohosh	Caulophyllum thalictroides		
<b>Wildflower</b>	<b>Devils Bit</b>	<b>Chamaelarium luteum</b>	<b>Watch "Exploited"</b>	<b>W5B/ - /S4/G5</b>
Wildflower	Lamb's Quarters	Chenopodium album		
Wildflower	Enchanters Nightshade	Circaea quadrisculata		
Wildflower	Corn Lily	Clintonia umbellata (S)		
Wildflower	Stone-root	Collinsonia canadensis		
Wildflower	Asiatic Dayflower***	Commelina virginica***		
Wildflower	Cancer Root	Conopholis americana		
<b>Wildflower</b>	<b>Broadleaf Coreopsis</b>	<b>Coreopsis latifolia</b>	<b>Rare</b>	<b>SR/ - /S3/G3</b>
Wildflower	Greater Coreopsis	Coreopsis major var major		
Wildflower	Honewort	Cryptotaenia canadensis		
Wildflower	Naked-flower Trefoil	Desmodium nudiflorum		
Wildflower	Whorled Wild Yam	Dioscorea quaternata		

Wildflower	Epilobium	Epilobium coloratum		
Wildflower	Robins Plantain	Erigeron pulchellus		
Wildflower	Daisy Fleabane	Erigeron strigosus		
Wildflower	Woodland Joe Pye	Eupatorium purpureum		
Wildflower	Upland Boneset	Eupatorium sessilifolia		
Wildflower	Flowering Spurge	Euphorbia corallata		
Wildflower	Wild Strawberry	Fragaria virginiana		
<b>Wildflower</b>	<b>Galax</b>	<b>Galax aphylla</b>	<b>Watch "Exploited"</b>	<b>W5B/ - /S5/G5</b>
Wildflower	Bedstraw	Galium aparine		
Wildflower	Wild Licorice	Galium circaezans		
Wildflower	Wideleaf Bedstraw	Galium latifolium		
Wildflower	A Galium	Galium orizabense		
Wildflower	Sampson's Snakeroot	Gentiana villosa		
Wildflower	Wild Geranium	Geranium maculatum		
Wildflower	Common Avens	Geum canadense		
Wildflower	Bowman's Root	Gillenia trifoliata		
Wildflower	Rattlesnake Orchid	Goodyera pubescens		
Wildflower	Forest Sunflower	Helianthus decapetalus		
<b>Wildflower</b>	<b>White-leaf Sunflower</b>	<b>Helianthus glaucophyllus</b>	<b>Watch</b>	<b>W1/ - /S3/G3</b>
Wildflower	Quaker Bonnet Bluets	Houstonia caerulea		
Wildflower	Large Houstonia	Houstonia purpurea (S)		
Wildflower	Virginia Waterleaf	Hydrophyllum virginiana (S)		
Wildflower	Common St. Johnswort	Hypericum perforatum		
Wildflower	Yellow Star Grass	Hypoxis hirsuta		
Wildflower	Touch Me Not	Impatiens capensis		
Wildflower	Wild Iris	Iris cristata		
Wildflower	Wood Nettle	Laportea canadensis		
Wildflower	Korean Clover***	Lespedeza cuneata***		
Wildflower	Sweet Lovage	Ligusticum canadense		
Wildflower	Turks Cap Lily	Lilium superbum		
Wildflower	Great Lobelia	Lobelia siphilicata		
Wildflower	Bugleweed	Lycopus uniflorus		
Wildflower	Whorled Loostrife	Lysimachia quadrifolia		
Wildflower	Solomon's Plume	Maianthemum racemosum		
Wildflower	Indian Cucumber Root	Medeola virginiana		
Wildflower	Cow-wheat	Melampyrum lineare		
Wildflower	Bunchflower	Melanthium parviflora (A)		
Wildflower	Indian Pipes	Monotropa uniflora		
Wildflower	Evening Primrose	Oenothera biennis		
Wildflower	Sweet Cicely	Osmorhiza claytonii		
Wildflower	Sweet Cicely	Osmorhiza longistylis		
Wildflower	Great Wood Sorrel	Oxalis grandis		
Wildflower	Cowbane	Oxipolis rigidior		
<b>Wildflower</b>	<b>American Ginseng</b>	<b>Panax quinquefolius</b>	<b>Watch</b>	<b>W5B/SC/ - /S4/G4</b>
Wildflower	Lopseed	Phryma leptostachya		
Wildflower	Pokeweed	Phytolacca americana		
Wildflower	Clearweed	Pilea pumila		
Wildflower	English Plantain***	Plantago major***		
Wildflower	Mayapple	Podophyllum peltatum		
Wildflower	Smooth Solomons Seal	Polygonatum biflorum		
Wildflower	Common Knotweed***	Polygonum cespitosum		
Wildflower	Five Fingers	Potentilla canadensis		
Wildflower	Large Five Fingers	Potentilla simplex		

Wildflower	Tall Rattlesnake Root	<i>Prenanthes altissima</i>		
Wildflower	Lion's Foot	<i>Prenanthes serpentar</i>		
Wildflower	Orange Mandarin	<i>Prosartes lanuginosum (A)</i>		
Wildflower	Self Heal***	<i>Prunella vulgaris***</i>		
Wildflower	Mountain Mint	<i>Pycnanthemum incanum</i>		
Wildflower	Crowfoot	<i>Ranunculus arbortivus</i>		
Wildflower	Giant Coneflower	<i>Rudbeckia laciniata</i>		
Wildflower	Giant Coneflower	<i>Rudbeckia laciniata</i>		
<b>Wildflower</b>	<b>Bloodroot</b>	<b><i>Sanguinaria canadensis</i></b>	<b>Watch "Exploited"</b>	<b>W5B/ - /S5/G5</b>
Wildflower	Black Snakeroot	<i>Sanicula canadensis</i>		
Wildflower	Common Skullcap	<i>Scutellaria elliptic</i>		
Wildflower	Marchflower	<i>Senecia aureus</i>		
Wildflower	Fire Pink	<i>Silene virginica</i>		
Wildflower	Blue Eye Grass	<i>Sisyrinchium angustifolia</i>		
Wildflower	Tall Goldenrod	<i>Solidago altissima</i>		
Wildflower	Bluestem Goldenrod	<i>Solidago caesia</i>		
Wildflower	Curtis' Goldenrod	<i>Solidago curtisii</i>		
Wildflower	Zigzag Goldenrod	<i>Solidago flexicaulis</i>		
Wildflower	Bog Goldenrod	<i>Solidago patula</i>		
Wildflower	Roundleaf Goldenrod	<i>Solidago sphacelata</i>		
Wildflower	Hedge nettle	<i>Stachys cordata</i>		
Wildflower	Chickweed	<i>Stellaria pubera</i>		
Wildflower	Seep Rue	<i>Thalictrum clavatum (S)</i>		
Wildflower	Spring Woods Rue	<i>Thalictrum dioicum</i>		
Wildflower	Foamflower	<i>Tiarella cordifolia</i>		
Wildflower	Jumpseed	<i>Tovara virginiana</i>		
Wildflower	Spiderwort	<i>Tradescantia subaspera</i>		
Wildflower	Red Clover	<i>Trifolium pratense**</i>		
<b>Wildflower</b>	<b>Toad Trillium</b>	<b><i>Trillium cuneatum</i></b>	<b>Watch "Exploited"</b>	<b>W5B/ - /S3/G5</b>
<b>Wildflower</b>	<b>Wake Robin</b>	<b><i>Trillium erectum</i></b>	<b>Watch "Exploited"</b>	<b>W5B/ - /S5/G5</b>
<b>Wildflower</b>	<b>Large-flowered Trillium</b>	<b><i>Trillium grandiflorum</i></b>	<b>Watch "Exploited"</b>	<b>W5B/ - /S4/G4</b>
<b>Wildflower</b>	<b>Painted Trillium</b>	<b><i>Trillium undulatum</i></b>	<b>Watch "Exploited"</b>	<b>W5B/ - /S4/G4</b>
Wildflower	Perfoliate Bellwort	<i>Uvularia perfoliata</i>		
Wildflower	Common Bellwort	<i>Uvularia puberula</i>		
Wildflower	Bellwort	<i>Uvularia sessilifolia</i>		
Wildflower	Sweet White Violet	<i>Viola blanda</i>		
Wildflower	Canada Violet	<i>Viola canadensis</i>		
Wildflower	Red Veined Violet	<i>Viola cucullata</i>		
Wildflower	Halberd-leaf Violet	<i>Viola hastata</i>		
Wildflower	Wideleaf Wood Violet	<i>Viola laticula</i>		
Wildflower	Northern White Violet	<i>Viola pallens</i>		
Wildflower	Primrose-leaf Violet	<i>Viola primulifolia</i>		
Wildflower	Roundleaf Violet	<i>Viola rotundifolia</i>		
Wildflower	Common Violet	<i>Viola sororia</i>		
Wildflower	Yellow-eye grass	<i>Xyris torta</i>		
Wildflower	Common Alexanders	<i>Zizia aurea</i>		
Sedge	Bunched Seep Sedge	<i>Carex aestivalis</i>		
Sedge	S. Carolina Sedge	<i>Carex austro-carolin</i>		
Sedge	Brown Sedge	<i>Carex brunnescens</i>		
Sedge	Crown Sedge	<i>Carex laxiculmis var</i>		
Sedge	Pennsylvania sedge	<i>Carex pennsylvanica</i>		
Sedge	Broadleaf Sedge	<i>Carex platyphylla</i>		
Sedge	Rosy Sedge	<i>Carex rosea</i>		

Sedge	Common Seep Sedge	Carex scabrata		
Grass	Mountain Oat Grass	Danthonia compressa		
Grass	Deertongue Grass	Dicanthelium clandestinum		
Grass	Japanese Stiltgrass***	Microstegium vimineum***		
Grass	Silvergrass***	Miscanthus sinensis***		
Grass	Muhly Grass	Muhlenbergia tenuifl		
Rush	Needle Rush	Juncus effusus		
Rush	Path Rush	Juncus tenuis		
Rush	Wood Rush	Luzula acuminata		
Fern Ally	Common Clubmoss	Huperzia lucidula		
Fern	Maidenhair Fern	Adiantum pedatum		
Fern	Southern Lady Fern	Athyrium asplenoides		
Fern	Rattlesnake Fern	Botrychium virginiana		
Fern	Fragile Fern	Cystopteris fragilis		
Fern	Hayscented Fern	Dennstaedtia punctilobula		
Fern	Silvery Glade Fern	Deparia acrostichoides		
Fern	Broad Beech Fern	Hexagonoptera thelyptris		
Fern	Cinnamon Fern	Osmunda cinnamomea		
Fern	Interrupted Fern	Osmunda interruptus		
Fern	Rock Cap Fern	Polypodium virginiana		
Fern	Christmas Fern	Polystichum acrosticoides		
Fern	New York Fern	Thelypteris nova-boracensis		
Fern Ally	Running Cedar	Diphasiastrum digita		

### 3. Wildlife Existing on the Property

BIRDS			
		PIF Priority Ranking	
		Total Score / Tier	
Acadian Flycatcher	<i>Empidonax vireescens</i>	24	I.
American Crow	<i>Corvus brachyrhynchos</i>	11	-
American Goldfinch	<i>Carduelis tristis</i>	13	-
American Redstart	<i>Setophaga ruticilla</i>	15	-
Barred Owl	<i>Strix varia</i>	15	-
Black-and-white Warbler	<i>Mniotilta varia</i>	21	II.A.
Black-throated Green Warbler	<i>Dendroica virens</i>	21	II.A.
Blue-headed Vireo	<i>Vireo solitarius</i>	19	-
Broad-winged Hawk	<i>Buteo platypterus</i>	18	-
Carolina Chickadee	<i>Poecile carolinensis</i>	18	III.A.
Carolina Wren	<i>Thryothorus ludovicianus</i>	18	-
Downy Woodpecker	<i>Picoides pubescens</i>	19	II.A.
Eastern Towhee	<i>Pipilo erythrophthalmus</i>	20	II.A.
Eastern Wood-Pewee	<i>Contopus virens</i>	20	II.A.
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	17	-
Hooded Warbler	<i>Wilsonia citrina</i>	22	I.
House Wren	<i>Troglodytes aedon</i>	12	-
Indigo Bunting	<i>Passerina cyanea</i>	18	III.A.
Louisiana Waterthrush	<i>Zenaida macroura</i>	24	I.
Mourning Dove	<i>Seiurus motacilla</i>	10	-
Northern Cardinal	<i>Cardinalis cardinalis</i>	11	-
Northern Flicker	<i>Colaptes auratus</i>	14	-
Northern Parula	<i>Parula americana</i>	20	II.B.
Ovenbird	<i>Seiurus aurocapillus</i>	20	II.A.
Pileated Woodpecker	<i>Dryocopus pileatus</i>	18	III.A.
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	14	-
Red-eyed Vireo	<i>Vireo olivaceus</i>	17	-
Red-tailed Hawk	<i>Buteo jamaicensis</i>	13	-
Ruffed Grouse	<i>Bonasa umbellus</i>	18	-
Scarlet Tanager	<i>Piranga olivacea</i>	23	I.
Song Sparrow	<i>Melospiza melodia</i>	16	-
Tufted Titmouse	<i>Baeolophus bicolor</i>	15	-
White-breasted Nuthatch	<i>Sitta carolinensis</i>	15	-
Wood Thrush	<i>Hylocichla mustelina</i>	25	I.
Worm-eating Warbler	<i>Helmitheros vermivorus</i>	26	I.
<b>Yellow-bellied Sapsucker</b>	<b><i>Sphyrapicus varius</i></b>	15	-
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	17	-
Yellow-throated Vireo	<i>Vireo flavifrons</i>	24	I.
<b>BUTTERFLIES</b>			
American Lady	<i>Vanessa virginiensis</i>		
Eastern Tiger Swallowtail	<i>Papilio glaucus</i>		
Zebra Swallowtail	<i>Eurytides marcellus</i>		

Isabella Tiger Moth (caterpillar)	<i>Pyrrharctia isabella</i>		
Mourning Cloak	<i>Nymphalis antiopa</i>		
Silver-spotted Skipper	<i>Epargyreus clarus</i>		
Spicebush Swallowtail (instar)	<i>Papilio troilus</i>		
<b>MAMMALS</b>			
Black Bear (scat, digging)	<i>Ursus americanus</i>		
Eastern Chipmunk (call)	<i>Tamias striatus</i>		
Eastern Cottontail (browse, scat)	<i>Sylvilagus floridanus</i>		
Eastern Grey Squirrel (sight)	<i>Sciurus carolinensis</i>		
Raccoon (track)	<i>Procyon lotor</i>		
White-tailed Deer (browse, track)	<i>Odocoileus virginianus</i>		
<b>AMPHIBIANS</b>			
Blackbelly salamander	<i>Desmognathus quadramaculatus</i>		
Mountain dusky	<i>Desmognathus orestes</i>		
So. Redback salamander	<i>Plethodon serratus</i>		
White-spotted slimy salamander	<i>Plethodon cylindraceus</i>		
Spring peeper	<i>Hyla crucifer</i>		
<b>REPTILES</b>			
Eastern Box Turtle (obs.)	<i>Terrapine carolina</i>		
Copperhead (obs.)	<i>Agkistrodon contortrix</i>		



**4. Rare Plants Potentially Occurring on the Property**  
See NCNHP Rare Species Listing Manuals for Status and Rank Codes.

<b>LIFE FORM</b>	<b>COMMON NAME</b>	<b>SCIENTIFIC NAME</b>	<b>HABITAT</b>
Vascular Plant	<b>Climbing Fumitory</b>	<i>Adlumia fungosa</i>	M: coves and cliffs
Vascular Plant	<b>Creamy Wild Indigo</b>	<i>Baptisia bracteata</i> var <i>bracteata</i>	P: open woodlands
Vascular Plant	<b>Alabama Grape Fern</b>	<i>Botrychium jenmanii</i>	MP: moist woods
Vascular Plant	<b>Blunt-lobed Grape Fern</b>	<i>Botrychium oneidense</i>	MP: cove forests, bogs
Vascular Plant	<b>Hitchcock's Sedge</b>	<i>Carex hitchcockiana</i>	M: moist to dryish forests over calcareous or mafic rocks
Vascular Plant	<b>a wood sedge</b>	<i>Carex leptonevia</i>	M: rich cove forests and seepage slopes
Vascular Plant	<b>Roan Sedge</b>	<i>Carex roanensis</i>	M: forests
Vascular Plant	<b>Branching Draba</b>	<i>Draba ramosissima</i>	MP: calcareous and mafic rock outcrops
Vascular Plant	<b>Godfrey's Thoroughwort</b>	<i>Eupatorium godfreyanum</i>	PM: woodlands, especially over mafic rocks
Vascular Plant	<b>Glade Spurge</b>	<i>Euphorbia purpurea</i>	M: forests, especially over mafic rock
Vascular Plant	<b>Mountain Heartleaf</b>	<i>Hexastylis contracta</i>	M: acidic forests under rhododendron
Vascular Plant	<b>French Broad Heartleaf</b>	<i>Hexastylis rhombiformis</i>	MP: cove forests
Vascular Plant	<b>Goldenseal</b>	<i>Hydrastis canadensis</i>	MP: cove forests, other rich deciduous forests
Vascular Plant	<b>Largeleaf Waterleaf</b>	<i>Hydrophyllum macrophyllum</i>	M: rich woods, especially rocky calcareous forests and cliffs
Vascular Plant	<b>Small Whorled Pogonia</b>	<i>Isotria medeoloides</i>	MPS: forests, especially with white pine
Vascular Plant	<b>American Fly-honeysuckle</b>	<i>Lonicera canadensis</i>	M: bogs, moist woods
Vascular Plant	<b>Fraser's Loosestrife</b>	<i>Lysimachia fraseri</i>	M: forests, roadsides
Vascular Plant	<b>Appalachian Adder's-mouth</b>	<i>Malaxis bayardii</i>	MP: upland forests
Vascular Plant	<b>Sweet Pinesap</b>	<i>Monotropis odorata</i>	PM: dry forests and bluffs
Vascular Plant	<b>Northern Green Orchid</b>	<i>Platanthera flava</i> var <i>herbiola</i>	M: bogs and moist forests
Vascular Plant	<b>Purple Fringeless Orchid</b>	<i>Platanthera peramoena</i>	MP: bogs, forests
Vascular Plant	<b>Mountain Catchfly</b>	<i>Silene ovata</i>	M: rich slopes, cove forests, montane oak-hickory forests
Vascular Plant	<b>Ash-leaved Golden-banner</b>	<i>Thermopsis fraxinifolia</i>	MP: dry ridges
Vascular Plant	<b>Appalachian Golden-banner</b>	<i>Thermopsis mollis</i> sensu stricto	PM: dry ridges and open woodlands
Vascular Plant	<b>Sweet White Trillium</b>	<i>Trillium simile</i>	MP: rich coves

Moss	<b>Rota's Feather Moss</b>	Brachythecium rotaeanum	M: on bark or rock in cove forests
Moss	<b>Sullivant's Entodon</b>	Entodon sullivantii	M: on rocks or bark in humid gorges and cove forests
Moss	<b>Closter's Brook- hypnum</b>	Hygrohypnum closteri	MP: on rocks submersed in streams
Moss	<b>Budding Tortula</b>	Rhachithecium perpusillum	PM: bark of hardwoods

**5. Rare Animals Potentially Occurring on the Property**  
See NCNHP Rare Species Listing Manuals for Status and Rank Codes

<b>LIFE FORM</b>	<b>COMMON NAME</b>	<b>SCIENTIFIC NAME</b>	<b>HABITAT</b>
Bird	<b>Cooper's Hawk</b>	<i>Accipiter cooperii</i>	MPSC: forests and woodlands (for nesting) [breeding evidence only]
Bird	<b>Black Vulture</b>	<i>Coragyps atratus</i>	MPSC: forested areas for nesting; forests or open country for foraging [roosting and nesting sites only]
Bird	<b>Cerulean Warbler</b>	<i>Dendroica cerulea</i>	MC: mature hardwood forests; steep slopes and coves in mountains, natural levees in Coastal Plain [breeding season only]
Bird	<b>Appalachian Yellow-bellied Sapsucker</b>	<i>Sphyrapicus varius appalachiensis</i>	M: mature, open hardwoods with scattered dead trees [breeding season only]
Fish	<b>Santee Chub - Piedmont Population</b>	<i>Cyprinella zanema pop 1</i>	P: Catawba and Broad drainages
Insect	<b>Frosted Elfin</b>	<i>Callophrys irus</i>	MPSC: open woods and borders, usually in dry situations; host plants -- lupines ( <i>Lupinus</i> ) and wild indigos ( <i>Baptisia</i> )
Insect	<b>Appalachian Azure</b>	<i>Celastrina neglectamajor</i>	M: rich deciduous forests; host plant -- black cohosh ( <i>Cimicifuga</i> )
Insect	<b>Dusky Azure</b>	<i>Celastrina nigra</i>	M: rich, moist deciduous forests; host plant -- goat's-beard ( <i>Aruncus dioicus</i> )
Insect	<b>Smyth's Green Comma</b>	<i>Polytonia faunus smythi</i>	M: spruce, fir, or hemlock forests, where mixed with hardwoods; host plants -- varied, but mainly birches, willows, and alders
Insect	<b>Hickory Hairstreak</b>	<i>Satyrium caryaevorum</i>	M: deciduous forests; host plants -- primarily hickories ( <i>Carya</i> ), but other trees also
Insect	<b>Diana Fritillary</b>	<i>Speyeria diana</i>	MP: rich woods and adjacent edges and openings; believed extirpated from the lower Piedmont; host plants -- violets ( <i>Viola</i> )
Mammal	<b>Eastern Small-footed Bat</b>	<i>Myotis leibii</i>	M: roosts in hollow trees (warmer months), in caves and mines (winter)
Mammal	<b>Northern Long-eared Bat</b>	<i>Myotis septentrionalis</i>	MP: roosts in hollow trees and buildings (warmer months), in caves and mines (winter)
Mammal	<b>Eastern Woodrat (=Southern Appalachian Woodrat)</b>	<i>Neotoma floridana haematoxia</i>	MP: rocky places in deciduous or mixed forests, in southern mountains and adjacent Piedmont
Mammal	<b>Southern Pygmy Shrew</b>	<i>Sorex hoyi winnemana</i>	MC: montane deciduous forests; old fields and forests in northeastern Coastal Plain
Mammal	<b>Southern Water Shrew</b>	<i>Sorex palustris punctulatus</i>	M: stream banks in montane forests



# CAROLINA MOUNTAIN LAND CONSERVANCY

PO Box 2822 • 317 N. Washington Street, Suite 1 • Hendersonville, NC 28793-2822  
(828) 697-5777 (phone) • (828) 697-2602 (fax) • [info@carolinamountain.org](mailto:info@carolinamountain.org) • [www.carolinamountain.org](http://www.carolinamountain.org)

## For Immediate Release

June 4, 2008

Contact: Suzanne (Hohn) Mwengi, Carolina Mountain Land Conservancy Outreach Coordinator  
(828) 697-5777

## Hike at Laurel Mountain Preserve offers tour of 169-acre nature preserve

On Saturday, June 14<sup>th</sup> at 10AM, Carolina Mountain Land Conservancy (CMLC) and Laurel Mountain Preserve are co-hosting a Nature Open House that will offer the first guided trail tour of Laurel Mountain Preserve's beautiful—and rare—rich cove and old-growth forests. In 2005, CMLC completed a conservation agreement with Laurel Mountain Preserve, protecting forever 169 acres of the Laurel Mountain Preserve property.

Laurel Mountain Preserve, located on Black Mountain, serves as a natural haven for many native plant and wildlife species. A baseline inventory by Equinox Environmental identified 233 species that reside on the property. Equinox concluded "additional wildlife inventories would easily provide a much larger yield of wildlife, especially amphibians, mammals and fish, and potentially a few additional rare species," mentioning 49 rare species indigenous to the region that are among the most likely to be discovered.

The Nature Open House is designed to provide interested members of the community with a chance to view and appreciate the Preserve's unique natural assets. We'll begin with a pre-hike reception where both CMLC and Equinox Environmental will join the owners in giving hikers a brief overview of Laurel Mountain Preserve's ecological significance. Following the reception, we'll enjoy a moderately strenuous hike through the preserve.

To sign up and receive more details, please contact Carolina Mountain Land Conservancy at (828) 697-5777 or by email at [outreach@carolinamountain.org](mailto:outreach@carolinamountain.org).

Carolina Mountain Land Conservancy helps landowners protect local land and water resources vital to our natural heritage and quality of life. As a local nonprofit organization dedicated to saving the places you love, CMLC is helping to create a regional network of more than 17,700 acres of protected farm, forest, park and natural lands. To become a member or learn about other ways to support CMLC, visit [www.carolinamountain.org](http://www.carolinamountain.org) or call 697-5777.

###

### CMLC Board of Trustees

Bob Wald, President  
Rick Merrill, Treasurer  
Hilliard Staton, Secretary  
Jim Neal, Past-President

Jon Calabria  
David Efird  
Reg Heinitsh  
Suzanne Holbert  
John Humphrey

James Kessararis  
Bill McAninch  
Lee Mulligan  
Brent O'Conner  
Al Platt

Diana Richards  
Jerry Stone  
Mark Tooley  
Bob Youngerman