

*Victor Emanuel Nature Tours*

***Spring in the Great Smoky Mountains National Park:  
Birds and Botany***

April 17 to 24, 2006

Guides: Steve Hilty and Chris Merkord

This was the fifth birds and botany trip offered by Victor Emanuel Nature Tours to this area. The itinerary included Sharp's Ridge Memorial Park in Knoxville, Seven Islands Wildlife Refuge, and numerous areas inside and around the border of Great Smoky Mountains National Park. We began mostly at low elevations and then, by traveling to higher elevations, gradually experienced a reversal of spring, ending with early spring plants and birds at the highest elevations. Spring started dry in the southern Appalachians but midway through our tour the rains arrived, and for two days we had to keep umbrellas at hand. As one local fellow noted wryly, "When there is thunder and lightening over Rich Mountain it's a gon'na rain. You can take it to the bank."

The botanical diversity in the park is daunting—the highest anywhere, for the size of the area, in North America. We searched for flowers and plants at every turn, inside and outside of the park and, despite the cool temperatures, ended our trip with the longest list of plants to date. Birds were generally more difficult to see in the park, but we had fine looks repeatedly at several of warblers including Ovenbirds, Louisiana Waterthrush, Hooded Warbler, and even Worm-eating Warbler. Sharp's Ridge was excellent this year and one area, in particular, along the Blue Ridge Parkway, provided us with some of our best and easiest viewing of migrant warblers.

We were a bit early for some orchids this year, although we found them either just beginning to flower, or within a day or two of flowering. Some good finds were Pink Lady-Slipper Orchids (never quite in flower), Large Yellow Lady-Slipper Orchid (one plant in flower), many trilliums (especially Large-flowering Trillium and Sweet White Trillium), carpets of phacelias, Dutchman's Pipe, and Spotted Mandarin.

The Smokies also provide a rare opportunity to stand in the shade of some beautiful old growth forest where one can view immense yellow birch, buckeye, beech, and maple trees. Once virtually blanketing the eastern half of the continent, such remnants now survive in few places outside of this park and, but for the work and foresight of a few, we and our future generations might never have been able to experience this magnificent sight. May your travels always include many birds and flowers!

**ITINERARY**

- Day 1. Arrival in Knoxville, Tennessee, and check in to Hotel
- Day 2. Sharp's Ridge Memorial Park; Seven Islands Wildlife Area; and Chestnut Tops Trail
- Day 3. Cades's Cove Loop drive, and Rich Mountain Road
- Day 4. Morning at Cove Hardwood Trail; afternoon at Porter's Creek Trail

Day 5. Newfound Gap, Clingman's Dome (foggy), and the Blue Ridge parkway to Waynesville  
Day 6. Birding and botanizing along the Blue Ridge Parkway, Big Cove Rd., and Clingman's Dome. Return to Townsend  
Day 7. Schoolhouse Gap trail and White Oak Sink Trail in morning; afternoon on Rich Mountain  
Day 8. Morning transfer to airport for mid-day flights home

**CHECKLIST OF BIRDS** (\*\* heard only)

Great Blue Heron, *Ardea herodias*, rookery at Seven Islands (10+)  
Green Heron, *Butorides virescens*, Little River in Townsend  
Canada Goose, *Branta canadensis*, Almost daily in Townsend  
Wood Duck, *Aix sponsa*, sewage lagoons at Cade's Cove  
Mallard, *Anas platyrhynchos* pair on Little River in Townsend  
Blue-winged Teal, *Anas discors*, pair on sewage lagoons at Cade's Cove  
Turkey Vulture, *Cathartes aura*, 35+ migr's over Sharp's Ridge; etc.;  
Townsend  
Black Vulture, *Coragyps atratus*, 1 over Gatlinburg  
Sharp-shinned Hawk, *Accipiter striatus*, 3-4 on Sharp's Ridge; 1 on Blue Ridge Pkwy  
Red-tailed Hawk, *Buteo jamaicensis*, 1 over Townsend  
**Bald Eagle**, *Haliaeetus leucocephalus*, we only saw a nest at Seven Islands]  
Osprey, *Pandion haliaetus*, 1 at Seven Islands Refuge  
Wild Turkey, *Meleagris gallopavo*, from 1-20 seen almost every day  
Solitary Sandpiper, *Tringa solitaria*, 3 at Cade's Cove Sewage Lagoons  
Spotted Sandpiper, *Actitis macularia*, Cade's Cove Sewage Lagoons  
Mourning Dove, *Zenaida macroura*, disturbed areas  
Barred Owl, *Strix varia*, pair seen on Blue Ridge Parkway  
Chimney Swift, *Chaetura pelagica*, Sharp's Ridge (1); Townsend (a few)  
Ruby-thr. Hummingbird, *Archilochus colubris*, 1 at Sharp's Ridge; 1 on parkway  
Red-bellied Woodpecker, *Melanerpes carolinus*, almost daily all areas  
Downy Woodpecker, *Picoides pubescens*, Cade's Cove and parkway (5000 ft)  
Hairy Woodpecker, *Picoides villosus*, parkway and hd on Rich Mt last p.m.  
Pileated Woodpecker, *Dryocopus pileatus*, Sharp's Ridge; Cade's Cove and Rich Mt; hd elsewhere  
Least Flycatcher, *Empidonax minimus*, 3 seen in one area on Blue Ridge Parkway (ca. 3500 ft)  
Eastern Phoebe, *Sayornis phoebe*, Almost daily  
Eastern Kingbird, *Tyrannus tyrannus*, 1 at "Food on the River" BB-Q  
\*\*Great Crested Flycatcher, *Myiarchus crinitus*, hd. Cade's Cove and Rich Mt.  
Red-eyed Vireo, *Vireo olivaceus*, all areas (common)  
White-eyed Vireo, *Vireo griseus*, Blue Ridge Parkway (ca. Milepost 364); seen well  
Blue-headed Vireo, *Vireo solitarius*, Common, esp. at higher els.  
Yellow-throated Vireo, *Vireo flavifrons*, Sharp's Ridge (seen 3+ times); hd elsewhere  
Blue Jay, , *Cyanocitta cristata*, hd. daily; a few seen  
Common Raven, *Corvus corax*, 1 seen briefly at Chimney Tops parking lot as we drove past  
American Crow, *Corvus brachyrhynchos*, All elevations and areas  
Northern Rough-winged Swallow, *Stelgidopteryx serripennis*, rivers and around Townsend  
Tree Swallow, *Tachycineta bicolor*, Little River in Townsend  
Barn Swallow, *Hirundo rustica*, Seven Islands; Cade's Cove; Townsend etc

Tufted Titmouse, *Baeolophus bicolor*, all areas up to ca. 5000 ft  
 Black-capped Chickadee, *Poecile atricapilla*, Upper elevations  
 Carolina Chickadee, *Poecile carolinensis*, Lower elevations  
 Red-breasted Nuthatch, *Sitta canadensis*, Cade's Cove (Sewage lagoons);  
 Rich Mt.; parkway  
 White-breasted Nuthatch, *Sittta carolinensis*, Sharp's Ridge (1 seen)  
 Carolina Wren, *Thryothorus ludovicianus*, seen Cade's Cove; hd. everywhere  
 \*Winter Wren, *Troglodytes troglodytes*, hd. at Cove Hardwoods & Clingman's  
 Dome  
 Golden-crowned Kinglet, *Regulus satrapa*, Newfound Gap (pair); parkway  
 (mostly hd)  
 Ruby-crowned Kinglet, *Regulus calendula*, Sharp's Ridge (50+ = peak  
 migratory movement); parkway  
 Blue-gray Gnatcatcher, *Polioptila caerulea*, Lower elevations  
 Eastern Bluebird, *Sialis sialis*, Seven Islands; Townsend and Cade's Cove  
 American Robin, *Turdus migratorius*, clearings, towns, etc. (all areas up  
 to 6600 ft)  
 Wood Thrush, *Hylocichla mustelina*, Waynesville (seen beautifully); hd at  
 Sharp's Ridge etc  
 Gray Catbird, *Dumatella carolinensis*, 2 at Smokin' Joe's  
 Northern Mockingbird, *Mimus polyglottos*, towns  
 Brown Thrasher, *Toxostoma rufum*, Sharp's Ridge and Cade's Cove  
 European Starling, *Sturnus vulgaris*, settled areas and Cade's Cove (pair  
 over field)  
 Cedar Waxwing, *Bombycilla cedrorum*, Sharp's Ridge (25+); many more  
 Townsend etc  
 Northern Parula, *Parula americana*, seen well along parkway; hd many areas  
 Orange-crowned Warbler, *Vermivora celata*, 3 on Sharp's Ridge  
Blue-winged Warbler, *Vermivora pinus*, Sharp's Ridge (1 seen very well)  
 Nashville Warbler, *Vermivora ruficapilla*, Sharp's Ridge (4-5)  
 Chestnut-sided Warbler, *Dendroica pensylvanica*, parkway; 2-3 seen very  
 well along parkway  
 Black-thr. Blue Warbler, *Dendroica caerulescens*, 1 seen very well along  
 parkway (3500 ft)  
Cerulean Warbler, *Dendroica cerulea*, Sharp's Ridge (1 male seen very well)  
 Blackburnian Warbler, *Dendroica fusca*, 2 (M and F) along parkway (3500 ft)  
 Yellow-rumped Warbler, *Dendroica coronata*, Many at Sharp's; also in park  
 Black-throated Green Warbler, *Dendroica virens*, Commonest warbler in park;  
 all areas  
Prairie Warbler, *Dendroica discolor*, Sharp's Ridge (2); parkway (1 at  
 >3500 ft)  
Palm Warbler, *Dendroica palmarum*, Sharp's Ridge (1); parkway (1 seen  
 well); Clingman's Dome (another seen very well)  
 Pine Warbler, *Dendroica pinus*, Sharp's Ridge (2); Cade's Dove (pair seen  
 close)  
 Yellow-throated Warbler, *Dendroica dominica*, Cade's Cove Sewage Lagoons (1  
 came down to within 3-4 meters of us and perched on fence)  
Worm-eating Warbler, *Helmitheros vermivora*, Rich Mt and Schoolhouse Gap  
 Trail (excellent studies)  
 Black-and-white Warbler, *Mniotilta*, Sharp's Ridge; Cade's Cove; parkway  
 and most other areas  
 American Redstart, *Setophaga ruticilla*, Parkway (1 male)  
 Ovenbird, *Seiurus aurocapillus*, seen in several areas; hd. daily  
 Louisiana Waterthrush, *Seiurus motacilla*, road to Cade's Cove (seen two  
 different days)  
 Common Yellowthroat, *Geothlypis trichas*, Seven Isles

Hooded Warbler, *Wilsonia citrina*, Sharp's Ridge (excellent study); Rich Mt; parkway and hd all areas  
 \*Yellow-breasted Chat, *Icteria virens*, Seven Islands (hd. only)  
 Scarlet Tanager, *Piranga olivacea*, Seven Isls (male); parkway (male near Waynesville);  
 Northern Cardinal, *Cardinalis cardinalis*, settled areas  
 Rose-breasted Grosbeak, *Pheucticus ludovicianus*, Waynesville (1 seen by Lisa)  
 Indigo Bunting, *Passerina cyanea*, Waynesville; Rich mt. (male seen well))  
 Rufous-sided Towhee, *Pipilo erythrophthalmus*, Sharp's Ridge; Parkway up to 5500 ft)  
 Field Sparrow, *Spizella pusilla*, Seven Islands  
 Chipping Sparrow, *Spizella passerina*, Cade's Cove; parkway (migratory flock of 12-15; >3500 ft)  
 White-throated Sparrow, *Zonotrichia albicollis*, Sharp's Ridge; Cade's Cove  
 Song Sparrow, *Melospiza melodia*, Daily around hotel, etc.  
 Dark-eyed Junco, *Junco hyemalis carolinensis*, High els. (white-billed form)  
 Eastern Meadowlark, *Sturnella magna*, Seven Islands; 1 at pullout inside park (5000 ft)  
 Brown-headed Cowbird, *Molothrus ater*, Seven Islands; Townsend (at hotel)  
 Red-winged Blackbird, *Agelaius phoeniceus*, Seven Islands  
 Common Grackle, *Quiscalus quiscula*, settled areas  
 House Finch, *Carpodacus mexicanus*, Townsend  
 American Goldfinch, *Carduelis tristis*, Sharp's; Seven Isls; Cade's Cove; Townsend etc

#### **MAMMALS**

Eastern Cottontail, last day at Rich Mt; 1 seen earlier by Lisa  
**Eastern Chipmunk**, *Tamias striatus*, Cove Hardwood  
 Gray Squirrel, *Sciurus carolinensis*, widespread at lower els.  
 Fox Squirrel, *Sciurus niger*, Cade's Cove (seen by some)  
 Red Squirrel, *Tamiasciurus hudsonicus*, Cove Hardwoods trail  
 White-tailed Deer, *Odocoileus virginianus*, too many at Cade's Cove

#### **Reptiles and Amphibians** (found by Chris Merkord)

Imitator Salamander, *Desmognathus imitator*, Cove Hardwood trail  
 Shovel-nosed Salamander, *Desmognathus marmoratus*, Cove Hardwood trail  
 Seal Salamander, *Desmognathus monticola*, Cade's Cove  
 Blue-ridged Two-lined Salamander, *Eurycea wilderae*, Porter's Creek  
 Red-cheeked (Jordan's) Salamander, *Plethodon jordani*, Cove Hardwood trail  
 Southern Red-backed Salamander, *Plethodon serratus*, Porter's Creek; Rich Mt (last day)  
 Southern Zigzag Salamander, *Plethodon ventralis*, Cove Hardwood trail; Porter's Creek  
 Spotted Dusky Salamander, *Desmognathus conanti*, Big Cove Rd  
 Southern Appalachian Salamander, *Plethodon oconaluftee*, Big Cove Rd  
 Northern Slimy Salamander, *Plethodon glutinosus*, Schoolhouse Gap trail  
 Black-bellied Salamander, *Desmognathus quadramaculatus*, Schoolhouse Gap trail  
 Eastern Red-spotted Newt, *Notophthalmus viridescens*. Cove Hardwood trail (photographed by Lisa)  
*Desmognathus* sp. (unidentified), Cove Hardwood trail (photographed by Lisa)  
 American Toad, *Bufo Americana*, frog pond at hotel in Townsend Tennessee

Spring Peeper, *Pseudacris crucifer*, frog pond at hotel in Townsend  
Tennessee  
Cope's Gray Treefrog, *Hyla chrysocelis*, frog pond at hotel in Townsend  
Tennessee  
Northern Green Frog, *Rana clamitans*, frog pond at hotel in Townsend  
Tennessee  
Ring-necked Snake, Cade's Cove

**LIST OF TREES, SHRUBS AND VINES**

[The following list is an approximation of what we saw]

<b>Ground Pine</b> (not a woody plant)	Division: <i>Lycophyta</i> ; Family: <i>Lycopodiaceae</i>	
Genus: <i>Lycopodium</i>	sp. ?	Parkway (3500 ft)
<b>Allspice Family</b>	<b><i>Calycanthaceae</i></b>	
Sweet Shrub (or Allspice)	<i>Calycanthus floridus</i>	Rich Mt etc
<b>Ash Family</b>	<b><i>Oleaceae</i></b>	
Green Ash	<i>Fraxinus americana</i>	Many areas
<b>Beech Family</b>	<b><i>Fagaceae</i></b>	
American Beech	<i>Fagus grandifolia</i>	Cove Hardwood etc
Common Alder	<i>Alnus serrulata</i>	Little River ini Townsend
American Chestnut	<i>Castanea dentate</i>	Sprouts; Parson's Creek
White Oak	<i>Quercus alba</i>	Sharp's Ridge; Rich Mt.
Southern Red Oak	<i>Quercus falcata</i>	Sharp's Ridge
Chestnut Oak	<i>Quercus montana</i>	Common/widespread
Northern Red Oak	<i>Quercus rubra</i>	Lower els.
<b>Birch or Hazel Family</b>	<b><i>Betulaceae</i></b>	
River Birch	<i>Betula nigra</i>	River by Smokin' Joe's
Yellow Birch	<i>Betula alleghaniensis</i>	Cove Hardwood etc.
Ironwood; Musclewood	<i>Carpinus carolineana</i>	Widespread at lower els.
<b>Buckeye Family</b>	<b><i>Hippocastanaceae</i></b>	
Yellow Buckeye	<i>Aesculus flava</i>	Common at lower els.
<b>Cashew Family</b>	<b><i>Anacardiaceae</i></b>	
Smooth Sumac	<i>Rhus glabra</i>	Sharp's Ridge
Poison Ivy	<i>Toxicodendron radicans</i>	Disturbed areas (scarce inside old forest)
<b>Cedar Family</b>	<b><i>Cupressaceae</i></b>	
Eastern Red Cedar	<i>Juniperus virginiana</i>	Seven Islands
<b>Custard-Apple Family</b>	<b><i>Annonaceae</i></b>	
Paw-Paw	<i>Asimina triloba</i>	Cade's Cove (in flower)

<b>Ebony Family</b>		
Persimmon	<i>Diospyros virginiana</i>	Sharp's Ridge
Empress Tree	<i>Paulownia tomentosa</i>	Blooming in urban areas
<b>Elm Family</b>	<b>Ulmaceae</b>	
Slippery Elm	<i>Ulmus rubra</i>	Cade's Cove etc
Common Hackberry	<i>Celtis occidentalis</i>	Sharp's Ridge; Sugarlands Visitor's Center
<b>Ginseng Family</b>	<b>Araliaceae</b>	
Hercules' Club (Devil's Walking-Stick)	<i>Aralia spinosa</i>	Chestnut tops trail; parkway
<b>Grape Family</b>	<b>Vitaceae</b>	
Virginia Creeper	<i>Parthenocissus quinquefolia</i>	Widespread at lower els
Summer Grape	<i>Vitis spp. (prob. aestivalis)</i>	Widespread at lower els
<b>Heath Family</b>	<b>Ericaceae</b>	
Mountain Laurel	<i>Kalmia latifolia</i>	Rich Mts; parkway (NIF)
Dog-hobble	<i>Leucothoe fontanesiana</i>	Lower elevations; flowering
Flame Azalea	<i>Rhododendron</i>	Schoolhouse Gap trail (F)
Catawba Rhododendron	<i>Rhododendron catawbiense</i>	Common; not in flower
Rosebay Rhododendron	<i>Rhododendron maximum</i>	Common; not in flower
Small-leaved Rhododendron	<i>Rhododendron minimus</i>	Parkway (high els)
Lowbush Blueberry	<i>Vaccinium pallidum</i>	Schoolhouse Gap trail
<b>Holly Family</b>	<b>Aquifoliaceae</b>	
American Holly	<i>Ilex opaca</i>	Lower elevations (common)
<b>Honeysuckle Family</b>	<b>Caprifoliaceae</b>	
Japanese Honeysuckle	<i>Lonicera japonica</i>	Sharp's Ridge
Trumpet Honeysuckle	<i>Lonicera sempervirens</i>	Sugarlands Visitor Center (seen by your guides)
Common Elder-Berry	<i>Sambucus canadensis</i>	Sharp's; Cade's Cove; Rich Mt
<b>Lily Family</b>	<b>Liliaceae</b>	
greenbrier spp.	<i>Smilax spp)</i>	Widespread at lower els.
<b>Pine Family</b>	<b>Pinaceae</b>	
Fraser Fir	<i>Abies fraseri</i>	Clingman's; parkway (Waterknob rest stop)

		etc)
Red Spruce	<i>Picea rubens</i>	High els.
Eastern Hemlock	<i>Tsuga canadensis</i>	Low els.
Short-leaf Pine	<i>Pinus echinata</i>	Common; needles longer than next sp.
Virginia Pine	<i>Pinus virginiana</i>	Seven Islands
Pitch Pine	<i>Pinus rigida</i>	Cade's Cove/Rich Mts area
White Pine	<i>Pinus strobes</i>	Common at most els in park
<b>Laurel Family</b>	<b>Lauraceae</b>	
Spicebush	<i>Lindera benzoin</i>	Cove Hardwoods; Porter's Creek
<b>Linden Family</b>	<b>Tiliaceae</b>	
White Basswood	<i>Tilia americana</i>	common
<b>Magnolia Family</b>	<b>Magnoliaceae</b>	
Yellow-Popular; Tulip Tree	<i>Liriodendron tulipifera</i>	Common at lower els (not many flowering)
Fraser Magnolia	<i>Magnolia acuminata</i>	Flowering on Rich Mt.
<b>Mulberry Family</b>	<b>Moraceae</b>	
Osage Orange	<i>Maclura pomifera</i>	Seven Islands (introduced here)
<b>Maple Family</b>	<b>Aceraceae</b>	
Box Elder	<i>Acer negundo</i>	Seven Isls; Sugarlands
Sugar Maple	<i>Acer saccharum</i>	Widespread at lower els
Silver Maple	<i>Acer saccharinum</i>	Seven Islands
Striped Maple	<i>Acer pensylvanicum</i>	Common up to mid-els
<b>Pea Family</b>	<b>Legumosidae</b>	
Redbud	<i>Cercis canadensis</i>	All lower els (flowering)
Yellow Wood	<i>Cladrastis kentuckea</i>	Rich Mts.
Black Locust	<i>Robinia pseudo-acacia</i>	Roadcuts near Knoxville; Cove Hardwoods; parkway
Honey Locust	<i>Gleditsia triacanthos</i>	Seven Isls; etc.
<b>Plane Tree Family</b>	<b>Platanaceae</b>	
Sycamore	<i>Platanus occidentalis</i>	
<b>Rose Family</b>	<b>Rosaceae</b>	
Smooth Serviceberry	<i>Amelanchier sp. (laevis?)</i>	Commonest of the 3 spp.
Black Cherry	<i>Prunus serotina</i>	Sharp's; parkway; Rich Mts etc
Blackberry	<i>Rubus alumnus</i>	Most lower els (NIF)
Northern Dewberry	<i>Rubus (flagellaris?)</i>	Schoolhouse Gap (a few plants flowering)

<b>Saxifrage Family</b>	<b>Saxifragaceae</b>	
Wild Hydrangea	<i>Hydrangea arborescens</i>	Common; not in flower
Sassafras	<i>Sassafras albidum</i>	Sharp's etc.
<b>Storax Family</b>	<b>Styracaceae</b>	
Silverbell Tree	<i>Halesia tetraptera</i>	Lower and middle els.
<b>Walnut Family</b>	<b>Juglandaceae</b>	
Shagbark or Shellbark Hickory	<i>Carya sp.</i>	Chestnut Tops trail
Pignut Hickory	<i>Carya ovata</i>	Sharp's etc
Mockernut Hickory	<i>Carya tomentosa</i>	Rich Mt (1 along road; strong odor to leaves)
<b>Willow Family</b>	<b>Salicaceae</b>	
Eastern Cottonwood	<i>Populus deltoides</i>	Townsend
willow sp.	<i>Salix sp.</i>	Little River in Townsend
<b>Witch Hazel Family</b>	<b>Hamamelidaceae</b>	
Sweetgum	<i>Liquidambar styraciflua</i>	Seven Islands; Rich Mt.
Common Witch-Hazel	<i>Hamamelis virginiana</i>	Lower els. (common)

**LIST OF HERBACEOUS PLANTS**

**NIF = Not in flower**

**F = Flowering**

<b>Arum Family</b>	<b>Araceae</b>	
Jack-in-the-Pulpit	<i>Arisaema triphyllum</i> ( <i>atrorubens</i> )	Many areas (F)
<b>Barberry Family</b>	<b>Berberidaceae</b>	
Blue Cohosh	<i>Caulophyllum</i> <i>thalictroides</i>	Cove Hardwoods etc
May-apple	<i>Podophyllum peltatum</i>	Widespread (F)
<b>Bean Family</b>	<b>Fabaceae</b>	
White Sweet-Clover	<i>Melilotus albus</i> (or <i>sp.?</i> )	Roadsides (flowering)
Yellow Hop Clover	<i>Trifolium aureum</i>	Roadsides (F)
Wood Vetch or Carolina Vetch	<i>Vicia caroliniana</i>	Rich Mts. Etc. (F)
Vetch sp.	<i>Vicia sp.</i>	Roadsides (F)

<b>Birchwort Family</b>	<b>Aristolochiaceae</b>	
Dutchman's Pipe or Pipevine	<i>Aristolochia tomentosa</i>	Parkway (>3000 ft)
Wild Ginger	<i>Asarum canadense</i>	
<b>Broomrape Family</b>	<b>Orobanchaceae</b>	
Squawroot	<i>Conopholia americana</i>	Rich Mt.; Big Cove Rd
One-flowered Cancer-root	<i>Orobanche uniflora</i>	Chestnut tops (F)
<b>Buttercup Family</b>	<b>Ranunculaceae</b>	
White Baneberry; Doll's Eyes	<i>Actaea pachypoda</i>	Cove Hardwood (2 flowering); not flowering in other areas
Sharp-lobed Hepatica	<i>Hepatica nobilis</i>	Cove Hardwood; Rich Mountain
Hispid Buttercup	<i>Ranunculus hispidus</i>	Widespread (F)
Hooked Buttercup	<i>Ranunculus recurvatus</i>	Everywhere (F)
Early Meadow Rue	<i>Thalictrum dioicum</i>	Higher els. (not flowering)
Rue Anemone	<i>Thalictrum thalictroides</i>	Chestnut tops etc.; flowering
Columbine	<i>Aquilegia canadensis</i>	Cliffs along Little River
Dwarf Larkspur	<i>Delphinium tricorne</i>	Rich mountain (near a house)
Tall Buttercup	<i>Ranunculus acris</i>	Cades Cove
<b>Diapensia Family</b>	<b>Diapensiaceae</b>	
Galax	<i>Galax urceolata</i>	Many areas (NIF)
<b>Figworts or Snapdragons</b>	<b>Scrophulariaceae</b>	
Wood Betony	<i>Pedicularis canadensis</i>	Big Cove Rd; Rich Mt.
Woolly Mullein	<i>Verbascum thapsus</i>	Seven Islands; roadsides (NIF)
Bird's eye Speedwell	<i>Veronica perscia</i>	Seven Islands (F)
Gray Beard-Tongue	<i>Penstemon canescens</i>	Seven Islands (large clump on roadbank)
Indian Paint-Brush	<i>Castilleja coccinea</i>	Parkway (1 on roadbank by SH)
<b>Forget-me-not Family</b>	<b>Boraginaceae</b>	
Wild Comfrey	<i>Cynoglossum virginianum</i>	Cade's Cove (NIF)
Virginia Bluebells	<i>Mertensia virginica</i>	Cade's Cove; parkway etc.
<b>Fumitory Family</b>	<b>Fumariaceae</b>	
Dutchman's Britches	<i>Dicentra cucullaria</i>	Higher els. (F)
Squirrel Corn	<i>Dicentra canadensis</i>	Higher els. (F)
<b>Grass Family</b>	<b>Poaceae</b>	
Virginia Broomsedge	<i>Andropogon virginicus</i>	Cade's Cove; Seven Islands

<b>Geranium Family</b>	<b>Geraniaceae</b>	
Wild Geranium	<i>Geranium maculatum</i>	Mostly in park (F)
<b>Heath Family</b>	<b>Ericaceae</b>	
Trailing Arbutus	<i>Epigaea repens</i>	Parkway at ca. 3000 ft.
<b>Iris Family</b>	<b>Iridaceae</b>	
Dwarf Crested Iris	<i>Iris cristata</i>	Many places (F)
<b>Lily Family</b>	<b>Liliaceae</b>	
False Hellebore	<i>Smilacina racemosa</i>	Parkway (not flowering)
Speckled Wood Lily	<i>Clintonia umbellulata</i>	Porter Creek (NIF)
Yellow Mandarin	<i>Disporum lanuginosum</i>	Cove Hardwood (F)
Speckled Mandarin	<i>Disporum maculatum</i>	Rich Mt. (scarce; F)
Yellow Trout-lily	<i>Erythronium umbilicatum</i>	Parkway (F)
False Solomon's Seal	<i>Smilacina racemosa</i>	Many lower els.
Great Solomon's Seal	<i>Polygonatum biflorum</i>	Many lower els.
Catesby's Trillium	<i>Trillium cuneatum</i>	Schoolhouse Gap (F)
Large flowering Trillium	<i>Trillium grandiflorum</i>	Rich Mountain (F)
Sweet White Trillium	<i>Trillium simile</i>	Common (F)
Yellow Trillium	<i>Trillium luteum</i>	Widespread (F)
Fairy Wand	<i>Chamaelirium luteum</i>	Schoolhouse Gap (F)
Sessile-flowered Bellwort	<i>Uvularia sessilifolia</i>	Parkway (ca. Mile 364)
Yellow Star Grass	<i>Hypoxis hirsute</i>	Schoolhouse Gap trail (numerous)
<b>Madder Family</b>	<b>Rubiaceae</b>	
Rough Bedstraw	<i>Galium asperellum</i>	Seven Islands; Cade's Cove; etc
Thyme-leaved Bluets	<i>Houstonia serpyllifolia</i>	Cade's Cove; Newfound Gap; etc.
Partridge-berry	<i>Mitchella repens</i>	Almost all areas (red berries)
<b>Mint Family</b>	<b>Lamiaceae</b>	
Purple Dead Nettle	<i>Lamium purpureum</i>	Roadsides (F)
Lyre-leaved Sage	<i>Salvia lyrata</i>	Cade's Cove; Schoolhouse Gap; Roadsides (F)
Henbit	<i>Lamium amphexicaule</i>	roadsides
<b>Mustard Family</b>	<b>Brassicaceae</b>	
Cut-leaved Toothwort	<i>Cardamine concatenata</i>	Many areas
Smooth Rock Cress	<i>Arabis laevigata</i>	Rich Mt. (already flowered)
Winter Cress or Yellow Rocket	<i>Barbarea vulgaris</i>	Roadsides (F)
Garlic Mustard	<i>Alliaria petiolata</i>	Chestnut tops (a few)
<b>Nettle Family</b>	<b>Urticaceae</b>	
Wood-Nettle, Stinging	<i>Laportea canadensis</i>	(NIF)

<b>Orchid Family</b>	<b>Orchidaceae</b>	
<u>Pink Lady's Slipper</u>	<i>Cypripedium acaule</i>	Porter's Creek (not flowering); Schoolhouse Gap trail (not flowering)
Showy Orchis	<i>Galearis spectabilis</i>	Commonest at Porter's Creek
Downy Rattlesnake-Plantain	<i>Goodyera pubescens</i>	Many areas (leaves only)
<u>Large Yellow Lady's Slipper</u>	<i>Cypripedium pubescens</i>	White Oak Sink (only one in flower)
Adam and Eve Orchid (Puttyroot)	<i>Aplectrum hyemale</i>	Cove Hardwood (4 plants); Rich Mt (2 plants); none in flower
<b>Poppy Family</b>	<b>Papaveraceae</b>	
Poppy sp.	<i>Papaver sp. (rheas)</i>	Seven Islands (introduced in field)
<b>Parsley Family</b>	<b>Apiaceae (Umbelliferaceae )</b>	
Sweet Cicely	<i>Osmorhiza claytonii</i>	Chestnut Tops; widespread (F)
Meadow Parsnip (umbels of tiny yellow flower)	<i>Thaspium trifolium flavum</i>	Chestnut tops; widespread (F)
Meadow Parsnip (umbels of tiny red flowers)	<i>T. trifolium trifolium</i>	Big Cove Rd (at lunch stop)
Yellow Pimpernel	<i>Taenidia integerrima</i>	Big Cove Rd; Rich Mt Rd (last p.m.)
<b>Pink (Carnation) Family</b>	<b>Caryophyllaceae</b>	
Fire Pink	<i>Silene virginica</i>	Chestnut Tops (widespread) (F)
Great Chickweed	<i>Stellaria pubera</i>	Chestnut Tops etc; widespread (F)
<b>Phlox Family</b>	<b>Polemoniaceae</b>	
Blue Phlox	<i>Phlox stolonifera/divaricata</i>	Widespread (F)
<b>Plantain Family</b>	<b>Plantaginaceae</b>	
plantain spp. (at least 4 spp)	<i>Plantago spp.</i>	Roadsides (NIF)
<b>Poppy Family</b>	<b>Papaveraceae</b>	
Bloodroot	<i>Sanguinaria canadensis</i>	Many areas (NIF)
<b>Purslane Family</b>	<b>Portulacaceae</b>	
Spring-beauty	<i>Claytonia caroliniana</i>	Newfound Gap (only a few in flower)
<b>Rose Family</b>	<b>Rosacea</b>	
Wild Strawberry	<i>Fragaria virginiana</i>	A few areas (F)
Common Cinquefoil	<i>Potentilla simplex</i>	Widespread (F)

Bowman's Root	<i>Porteranthus trifoliatu</i> s	Schoolhouse Gap trail (NIF); 1 clump
<b>Saxifrage Family</b>	<b>Saxifragaceae</b>	
Alumroot	<i>Heuchera americana/villosa</i>	Chestnut Tops and many other areas; almost flowering on Rich Mt last day
Wild Hydrangea	<i>Hydrangea arborescens</i>	Widespread in lower els (NIF)
Miterwort (Bishop's Cap)	<i>Mitella diphylla</i>	Chestnut Tops (F); many other areas
Brook Lettuce	<i>S. micranthidifolia</i>	Cove Hardwood; Big Cove Rd; streams (F)
Carey's Saxifrage	<i>S. careyana</i>	Chestnut Tops (F)
Foamflower	<i>Tiarella cordifolia</i>	Common (F)
<b>Sedge Family</b>		
Plantain-leaf Sedge	<i>Carex plantaginea</i>	Chestnut Tops (F)
<b>Smartweed Family</b>	<b>Polygonaceae</b>	
Lady's Thumb	<i>Polygonum persicaria</i> (V on leaf)	Chestnut Tops; (widespread (NIF))
Curled Dock	<i>Rumex crispus</i>	Widespread (NIF)
<b>Sunflower Family</b>	<b>Asteraceae)</b>	
Pussy's Toes	<i>Antennaria plantaginifolia</i>	Seven Islands; roadsides
Daisy Fleabane	<i>Erigeron strigosus</i>	Fields; waste areas
Robin's-plantain	<i>Erigeron pulchellus</i>	Roadsides common in park (F)
Rattlesnake Hawkweed	<i>Hieracium venosum</i>	Chestnut tops; Rich Mt; Schoolhouse Gap (only leaves)
Golden Ragwort	<i>Senecio aureus</i>	Widespread along roadsides (F)
Common Dandelion	<i>Taraxacum officinale</i>	Settled areas
Joe-Pye-Weed	<i>Eupatorium sp.</i>	Schoolhouse gap trail
Hollow-stemmed Joe-Pye-Weed	<i>Eupatorium maculatum</i>	Little River by "Food on the River" restaurant
Lobed Coreopsis	<i>Coreopsis auriculata</i>	Near Townsend (road to Rich Mt.); prob this sp along roadside last p.m.
<b>Stonecrop Family</b>	<b>Crassulaceae</b>	
Wild Stonecrop	<i>Sedum ternatum</i>	Widespread (F)
<b>Touch-Me-Not Family</b>	<b>Balsaminaceae</b>	
Orange Jewelweed	<i>Impatiens capensis</i>	Common (NIF)
<b>Waterleaf Family</b>	<b>Hydrophyllaceae</b>	
Purple Phacelia	<i>Phacelia bepinnatifida</i>	Chestnut Tops (F)
Fringed Phacelia	<i>Phacelia fimbriata</i>	Cove Hardwd (F)

Small-flowered Phacelia		Parkway ca milepost 465
<b>Wood Sorrel Family</b>	<b>Oxalidaceae</b>	
Yellow Wood-sorrel	<i>Oxalis stricta</i>	(F)
Violet wood-sorrel	<i>Oxalis violacea</i>	Cade's Cove (F)
<b>Valerian Family</b>	<b>Valerianaceae</b>	
Corn Salad	<i>Valerianella radiata</i>	Seven islands
<b>Violet Family</b>	<b>Violaceae</b>	
Sweet White Violet	<i>Viola blanda</i>	Schoolhouse Gap trail (white flowers; common)
Canadian Violet	<i>Viola canadensis</i>	Widespread (white flowers)
Halbert-leaved Violet	<i>Viola hastate</i>	Parkway lunch stop (yellow flowers)
Beaked (Long-spurred) Violet	<i>Viola rostrata</i>	Chestnut Tops; Schoolhouse gap etc (blue flowers)
Bird-s Foot Violet	<i>Viola pedata</i>	Rich Mountain (pale blue)
Common Blue Violet	<i>Viola sororia</i> or <i>papilionacea</i>	Widespread (blue flowers)
"Confederate " Violet	<i>Viola sororia</i> var. <i>priceana</i>	Roadside pullout below Newfound gap; whitish with "blue eyes"
Smooth Yellow Violet	<i>Viola pubescens</i>	Cove Hardwoods (common)
<b>Wintergreen Family</b>	<b>Pyrolaceae</b>	
Spotted Wintergreen or Pipsissewa	<i>Chimaphila maculata</i>	Schoolhouse Gap etc. (NIF)
<b>Yam Family</b>	<b>Dioscoreaceae</b>	
Wild Yam	<i>Dioscorea quaternata</i>	Chestnut tops (NIF)
<b>Ferns</b>		
Maidenhair Fern		All lower els.
Christmas Fern		Most lower els.

Total miles driven: 525