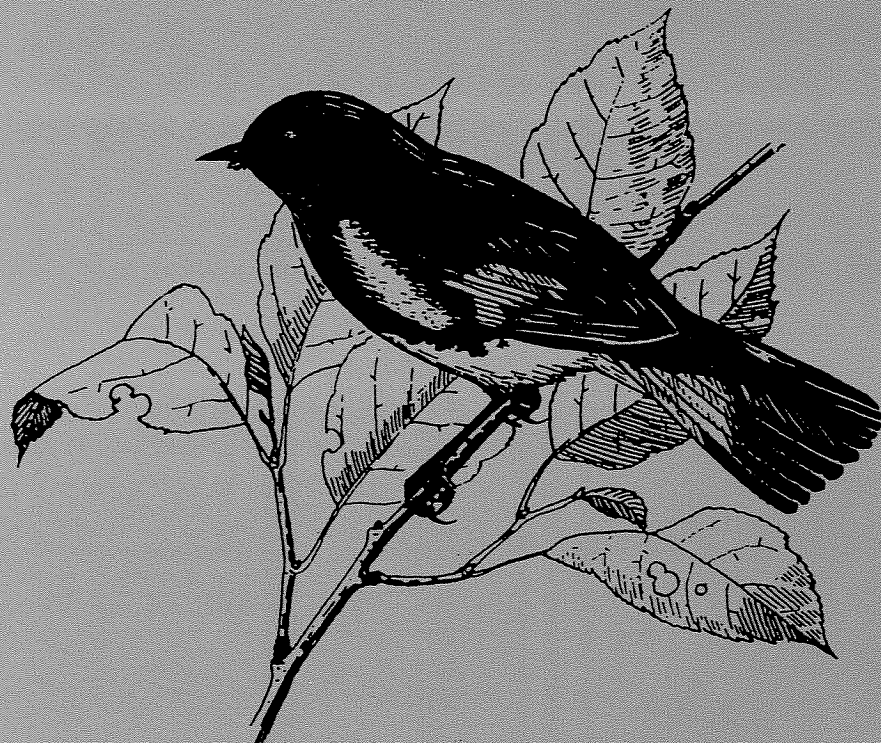


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The REDSTART

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JULY, 1998



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Listening for Nocturnal Thrush Calls in West Virginia

Stauffer Miller

Recent work has established that thrushes frequently call as they move through the night skies during their fall migration. Further, it has been determined which thrushes make which calls. With this new information in mind, I decided to set up a thrush listening post. The listening site I selected was Mills Gap in Berkeley County, West Virginia. Mills Gap is just west of Gerrardstown on North Mountain, on the easternmost of the series of parallel ridges that traverse the Eastern Panhandle. I arrived there at 5:30 a.m. on September 14, 1997. It was calm, partially overcast, and a Sunday morning, which meant that traffic noise would be at a minimum.

As I stepped out of my car, the first thing I heard was crickets. Then, there was the distant barking of a dog and the faraway drone of an airplane. Slowly, the canine and Cessna noise dissipated, and I blocked out the crickets. At last, relative quiet surrounded me as I sat in the darkness by the small monument at the Gap. Shortly, I heard the soft spring peeper-like note of the Swainson's Thrush. Then I heard the more harsh and emphatic note of a Grey-cheeked Thrush. In about a half hour of listening, I heard about 20 Swainson's Thrushes and 2 or 3 Grey-cheeked Thrushes.

A tape that is very helpful for learning these thrush calls is "Nocturnal Flight Calls of Migrating Thrushes" by Bill Evans. It is available by contacting Bill Evans, P. O. Box 46, Mecklenberg, NY 14863.

The thrushes can be very difficult to see in fall migration in the daytime. However, if it's any consolation, with some nighttime listening at the proper place and time, at least they can be heard.

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Winter Rough-legged Hawk Observations from Tucker County, West Virginia, 1990-1998

John E. Northeimer

Rough-legged Hawks have been consistent winter residents in eastern Tucker County from 1990 to 1998. These large buteos can be seen in the large, open areas of Canaan Valley and the reclaimed strip mines near the Fairfax Stone Monument as well as in open areas along State Route 93. Observations were made each season to determine arrival and departure dates and the relative number of birds present.

The earliest arrival date was November 9, 1993, and the latest departure date was April 27, 1993. In general, these hawks arrive in mid-December and depart by mid-March. Canaan Christmas Count results for a 7-year period show an average of 2.6 birds per count and 0.27 birds per party hour (in appropriate habitat). All sightings occurred east of Backbone Mountain at elevations above 2,500 feet. The ratio of light phase to dark phase hawks was 5 to 1.

Hall (1983) reported Christmas Bird Count Rough-legged Hawk records from Ohio County and three counties in the eastern panhandle: Jefferson, Berkeley, and Hampshire. Most recent winter reports of Rough-legged Hawks come from the lower Kanawha River Valley, the Ohio River Valley, and Tucker County. The following table shows the seasonable distribution of Rough-legged Hawks in Tucker County.

Rough-legged Hawk Observations

Season	First Seen Date	Last Seen Date	Christmas Count Total	Birds per Party Hour
90/91	1/11/91	3/10/91	-	-
91/92	12/18/91	-	2	0.17
92/93	12/17/92	4/27/93	3	0.35
93/94	11/9/93	1/30/94	2	0.17
94/95	12/20/94	3/11/95	Count Week	0.00
95/96	12/8/95	3/17/96	5	0.37
96/97	12/18/96	3/17/97	2	0.32
97/98	12/13/97	3/18/98	4	0.46

Reference

Hall, G.A. (1983). *West Virginia Birds*. Pittsburgh: Carnegie Museum of Natural History, Special Publication No. 7.

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Sortie 1997 and the Singing Male Census for Panther State Forest

Greg Eddy

The 1997 Sortie was held in Panther State Forest, McDowell County, West Virginia. We were last here in 1986. The results of that Sortie were never published, but some of them will be included in this report.

The terrain of McDowell County, as many of the southern counties, is different from most of the rest of the state. The hills seem steeper and the valleys narrower, with barely room for only a stream and a road. Most of the ridges are so narrow that roads cannot follow them. Therefore, flat space for buildings is very limited, and the few towns are long and narrow. The territory was limited to the western part of McDowell County and bounded by U.S. Route 52 and State Routes 80, 83, and 635.

In 1986 three 10-hectare (24.7 acre) singing male census plots were studied, but only the Hurricane Branch plot was finished and is available for comparison. That plot was originally reported as the Tulip-Beech-Hemlock plot. Four 15-acre plots were studied this year. The plots were similar in that they all followed one side of a narrow ravine, but they all faced different directions. Hurricane Branch plot was on an east-facing slope; Crane Branch was on a north-facing slope; White Oak Branch was a southwest-facing slope; and Drift Branch was a south-facing slope. Because all plots contained at least part of a ravine, Acadian Flycatchers were the most common species on each plot.

CRANE BRANCH (Beech-Hemlock-Maple)—Location: West Virginia; McDowell County; 4.0 miles south of Panther; 37° 25' 26" N, 81° 51' 40" W, Jaeger Quadrangle, USGS, extends east. Continuity: Established 1997. Size: 6.07 ha = 15 acres (rectangular, 110 x 660 yards, measured longitudinally and estimated laterally). Description of plot: A vegetative survey gave the following results. The dominant canopy trees are American Beech (*Fagus grandifolia*), Hemlock (*Tsuga canadensis*) and Sugar Maple (*Acer saccharum*). Most prominent in the understory are Spicebush (*Lindera benzoin*) and Witch Hazel (*Hamamelis virginiana*). The ground cover is primarily Virginia Creeper (*Parthenocissus quinquefolia*) and Meehanian (*Meehanian cordata*). A quantitative survey of the vegetation gave the following results: Trees 3-inches diameter and over, based on three 0.1-acre circular samples, 160/acre; total basal area 286 sq. ft./acre. Species comprising 89% of the total number of trees: American Beech, 46.6, 29.1, 34.4, 100; Hemlock, 23.3, 14.5, 31.2, 66; Sugar Maple, 20, 12.5, 17.8, 66; Yellow Poplar (*Liriodendron tulipifera*), 6.6, 4.1, 3.7, 66; Basswood (*Tilia heterophylla*), 13.3, 8.3, 2.6, 100; Black Birch (*Betula lenta*), 33.3, 20.8, 1.6, 66. Figures following each species are number of trees per acre, relative density %, relative dominance %, and

relative frequency %. Trees by diameter class: A (3-6 in.) 70, 43.7, 7, 2.4; B (6-9 in.) 13.3, 8.3, 4, 1.3; C (9-15 in.) 6.6, 4.1, 5.3, 1.8; D (15-21 in.) 13.3, 8.3, 24, 8.3; E (21-27 in.) 30, 18.7, 93, 32.5; F (27-33 in.) 16.6, 10.4, 81.6, 28.5; G (33-40 in.) 10, 6.2, 71, 24.8. Figures following each class are number of trees per acre, relative density %, basal area per acre for that class, and relative dominance %. Shrub stems/acre 1,233; ground cover 73.3%; canopy cover 92.5%; average canopy height 103 ft. (range 88-122). Edge: County road 3/2 is approximately 200 feet from the end of the plot. A small (0.5 acre) clearing is located on the center line. Otherwise similar forest continues in all directions. Topography: The plot is located in a steep-sided hollow on an old logging road running basically parallel to and on the SW slope from Crane Branch. Elevation: 1,250 feet at the west end and 1,450 feet at the east end. Coverage: June 2 to June 7, 1997. All trips between dawn and 0755 hours. Total party hours: 11.5. Census: Acadian Flycatcher, 8.5 (140, 57); Ovenbird, 4.5 (74, 30); Red-eyed Vireo, 4 (66, 27); American Redstart, 3.5 (58, 23); Hooded Warbler, 2.5; Kentucky Warbler, 2; Black-throated Green Warbler, 1.5; Northern Cardinal, 1.5; Solitary Vireo, 1; Louisiana Waterthrush, 1; Swainson's Warbler, 0.5; Scarlet Tanager, 0.5; Northern Parula, +. Total 13 species; 31 territorial males (511/sq. km., 207/100 acres). Visitors: Ruby-throated Hummingbird, Hairy Woodpecker, Pileated Woodpecker, Carolina Chickadee, Tufted Titmouse, White-breasted Nuthatch, Carolina Wren, Blue-gray Gnatcatcher, Wood Thrush, Black-and-white Warbler. Remarks: The Swainson's Warbler sang on the centerline of the plot just after dawn, but moved up slope off the plot as the mornings progressed. Census participants: A. R. Buckelew Jr., Elizabeth Bullard, Greg Eddy, Virginia Johnson, Marjorie Keatley, Juanita Slater, Judith Ward (compiler). Vegetation surveyors: Dawn Fox, Thomas Fox, Marjorie Keatley, Jane Whitaker, Virginia Johnson, Juanita Slater, Judith Ward.

DRIFT BRANCH (Beech-Poplar-Hemlock)—Location: West Virginia; McDowell County; 3.5 miles south of Panther; 37° 25' 57" N, 81° 52' 11" W, Iaeger Quadrangle, USGS, extends west. Continuity: Established 1997. Size: 6.07 ha. = 15 acres (rectangular, 110 x 660 yards, measured longitudinally and estimated laterally). Description of plot: A vegetative survey gave the following results. The dominant canopy trees are American Beech (*Fagus grandifolia*), Yellow Poplar (*Liriodendron tulipifera*) and Hemlock (*Tsuga canadensis*). Most prominent in the understory are Rhododendron (*Rhododendron maximum*), Spicebush (*Lindera benzoin*), and seedlings of the canopy trees. The ground cover is Stinging Nettle (*Urtica dioica*), Pale Touch-me-not (*Impatiens pallida*), and ferns of various species. A quantitative survey of the vegetation gave the following results: Trees 3-inches diameter and over, based on three 0.1-acre circular samples, 103/acre; total basal area and over, 152 sq. ft./acre. Species comprising 87% of the total number of trees: American Beech, 16.6, 16.1, 35.8, 66; Yellow Poplar, 16.6, 16.1,

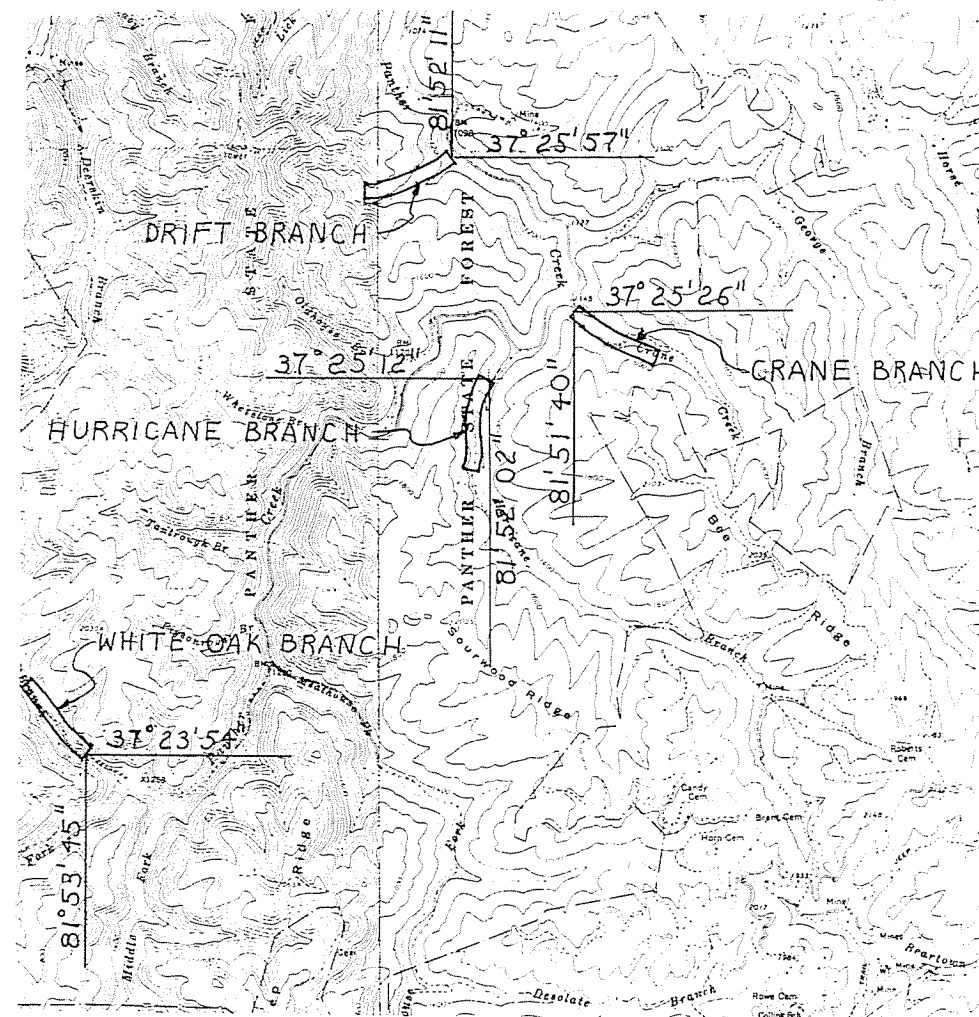
18.1, 66; Hemlock, 3.3, 3.2, 17.5, 33; Yellow Birch (*Betula alleghaniensis*), 26.6, 25.8, 10.7, 100; Witch Hazel (*Hamamelis virginiana*), 6.6, 6.4, 0.4, 33; Dogwood (*Cornus florida*), 6.6, 6.4, 0.4, 33; Mockernut Hickory (*Carya tomentosa*), 6.6, 6.4, 0.4, 33; Basswood (*Tilia heterophylla*), 3.3, 3.2, 0.2, 33; Sugar Maple (*Acer saccharum*), 3.3, 3.2, 0.2, 33. Figures following each species are number of trees per acre, relative density %, relative dominance %, and relative frequency %. Trees by diameter class: A (3-6 in.) 14, 45.1, 4.6, 3; B (6-9 in.) 3, 9.6, 3, 1.9; C (9-15 in.) 3, 9.6, 8, 5.2; D (15-21 in.) 6, 19.3, 36, 23.6; E (21-27 in.) 1, 3.2, 10.3, 6.7; F (27-33 in.) 1, 3.2, 16.3, 10.7; G (33-40 in.) 2, 6.4, 47.3, 31; H (40 in. +) 1, 3.2, 26.6, 17.5. Figures following each class are number of trees per acre, relative density %, basal area per acre for that class, and relative dominance. Shrub stems/acre 1,750; ground cover 67%; canopy cover 68%; average canopy height 125 ft. (range 120-129). Edge: Similar forest continues in all directions. Topography: The center line follows a steep trail on a south facing slope. Elevation: The centerline runs from 1,120 to 1,500 feet. Coverage: June 3 to June 7, 1997. All trips between dawn and 0735 hours EDT. Total party hours: 8. Census: Acadian Flycatcher, 7 (115, 47); American Redstart, 4 (66, 27); Red-eyed Vireo, 3.5 (58, 23); Scarlet Tanager, 1.5; Kentucky Warbler, 1; Hooded Warbler, 1; Wood Thrush, 0.5; Northern Parula, 0.5; Black-throated Green Warbler, +. Total 9 species; 19 territorial males (312 km., 128/100 acres). Visitors: Ruby-throated Hummingbird, Pileated Woodpecker, Carolina Chickadee, Tufted Titmouse, Carolina Wren, Solitary Vireo, Worm-eating Warbler, Ovenbird, Louisiana Waterthrush, Northern Cardinal. Remarks: A pair of Kentucky Warblers was seen carrying food. Census participants: Dawn Fox (compiler), Thomas Fox, Virginia Johnson, Marjorie Keatley, and Juanita Slater. Vegetation surveyors: Dawn Fox, Thomas Fox, Marjorie Keatley, and Judith Ward.

WHITE OAK BRANCH (Beech-Oak-Poplar)—Location: West Virginia; McDowell County, 6.5 miles south of Panther; 37° 23' 54" N, 81° 53' 45" W, Panther Quadrangle, USGS, extends N.W. Continuity: Established 1997. Size: 6.07 ha. = 15 acres (rectangular, 110 x 660 yards, measured longitudinally and estimated laterally). Description of plot: A vegetative survey gave the following results. The dominant canopy trees are American Beech (*Fagus grandifolia*), Oak species (*Quercus alba*, *Q. rubra*), and Yellow Poplar (*Liriodendron tulipifera*). Most prominent in the understory are Redbud (*Cercis canadensis*) and Wild Hydrangea (*Hydrangea arborescens*). The ground cover is primarily Poison Ivy (*Toxicodendron radicans*) and Virginia Creeper (*Parthenocissus quinquefolia*). A quantitative survey of the vegetation gave the following results: Trees 3-inches diameter and over, based on four 0.1-acre circular samples, 75/acre; total basal area 67.7 sq. ft./acre. Species comprising 90% of the total number of trees: American Beech, 25, 33.3, 38, 50; White Oak, 20, 26.6, 21, 100; Red Oak, 5, 6.6, 14.3, 50; Yellow Poplar, 15, 20, 16.2, 75. Figures following each

species are number of trees per acre, relative density %, relative dominance %, and relative frequency %. Trees by diameter class: A (3-6 in.) 20, 12.5, 2, 2.9; B (6-9 in.) 20, 12.5, 6, 8.8; C (9-15 in.) 17.5, 10.9, 14, 20.6; D (15-21 in.) 10, 6.2, 18, 26.5; E (21-27 in.) 5, 3.1, 15.5, 22.8; F (27-33 in.) 2.5, 1.5, 12.2, 18. Figures following each class are number of trees per acre, relative density %, basal area per acre for that class, and relative dominance %. Shrub, stems/acre 2,112; ground cover 55.6%; canopy cover 88.7%; average canopy height 100 ft. (range 84-141). Edge: Similar forest continues in all directions. Topography: The plot traverses a steep slope, only 40 feet change in elevation along the center line, very sloped laterally. Elevation: 1,400 feet. Coverage: June 2 to June 7, 1997. All trips between dawn and 0800 hours, or 1900 and 2100 hours EDT. Total party hours: 13.6. Census: Acadian Flycatcher, 4.5 (74, 30); Red-eyed Vireo, 4 (66, 27); Ovenbird, 3.5; Wood Thrush, 2.5; Kentucky Warbler, 2.5; Scarlet Tanager, 2; Tufted Titmouse, 1; American Redstart, 1, Hooded Warbler, 1; Eastern Towhee, 1; Eastern Wood-Pewee, 0.5. Total: 11 species; 23.5 territorial males (385/sq. km., 158/100 acres). Visitors: Ruffed Grouse, Black-billed Cuckoo, Red-bellied Woodpecker, Carolina Chickadee, White-breasted Nuthatch, Carolina Wren, Blue-gray Gnatcatcher, American Robin, Solitary Vireo, Northern Parula, Black-throated Green Warbler, Cerulean Warbler, Worm-eating Warbler, Northern Cardinal. Remarks: This is a rich and varied plot. Although American Beech was the dominant tree species, it was only located in the first 300 feet of the plot. Oak species predominated elsewhere. No nests were found but an agitated pair of Kentucky Warblers was seen carrying food. Census participants: A. R. Buckelew Jr., Elizabeth Bullard (compiler), James Bullard, Virginia Johnson, Juanita Slater, and Jane Whitaker. Vegetation surveyors: A. R. Buckelew Jr., Elizabeth Bullard, James Bullard, Greg Eddy, Cynthia Ellis, Juanita Slater, and Arline Thorn.

HURRICANE BRANCH (Poplar-Hemlock-Beech)—Location: West Virginia; McDowell County; 4.5 miles south of Panther; 37° 25' 12" N, 81° 52' 02" W, Iaeger Quadrangle, USGS, extends south. Continuity: Established 1986 as 10 ha. = 24.7 acres (rectangular, 425 x 2,550 feet, measured longitudinally and estimated laterally). Studied in 1997 as 6.07 ha. = 15 acres (rectangular, 110 x 660 yards, measured longitudinally and estimated laterally). Description of plot: A vegetative survey gave the following results. The dominant canopy trees are Yellow Poplar (*Liriodendron tulipifera*), Hemlock (*Tsuga canadensis*), and American Beech (*Fagus grandifolia*). Most prominent in the understory are seedlings of the canopy trees and Spicebush (*Lindera benzoin*). The ground cover is Stinging Nettle (*Urtica dioica*), Wild Geranium (*Geranium maculatum*), and Christmas Fern (*Polystichum acrostichoides*). A quantitative survey of the vegetation gave the following results: Trees 3-inches diameter and over, based on four 0.1-acre circular samples, 162.5/acre; total basal area 121.7 sq. ft./acre. Species compris-

ing 90% of the total number of trees: Yellow Poplar, 37.5, 23, 37.9, 100; Hemlock, 7.5, 4.6, 16.4, 50; American Beech, 62.5, 38.4, 13.5, 100; White Oak (*Quercus alba*), 12.5, 7.6, 7.8, 75; Sugar Maple (*Acer saccharum*), 10, 6.1, 7.3, 75; Black Birch (*Betula lenta*), 5, 3, 7.3, 50; Basswood (*Tilia heterophylla*), 5, 3, 3.2, 50; Red Oak (*Q. rubra*), 2.5, 1.5, 0.6, 25. Figures following each species are number of trees per acre, relative density %, relative dominance %, and relative frequency. Trees by diameter class: A (3-6 in.) 77.5, 47.6, 7.7, 6.3; B (6-9 in.) 17.5, 10.7, 5.2, 4.3; C (9-15 in.) 32.5, 20, 26, 21.3; D (15-21 in.) 27.5, 16.9, 49.5, 40.6; E (21-27 in.) 5, 3, 15.5, 12.7; G (33-40 in.) 2.5, 1.5, 17.7, 14.5. Figures following each class are number of trees per acre, relative density %, basal area per acre for that class, and relative dominance %. Shrub stems/acre 387; ground cover 60%; canopy cover



95.6%; average canopy height 95 ft. (range 72-120). Edge: Similar forest continues in all directions. Topography: The plot is near the bottom of a narrow, steep ravine. Elevation: Center line is 1,200 feet at start and climbs to 1,260 at the end. Coverage: June 3 to June 7, 1997. All trips between 0530 and 0810 hours. Total party hours: 12.

Census	1997	1986
Acadian Flycatcher	8 (131, 54)	9 (49, 20)
Red-eyed Vireo	5 (82, 34)	7 (38, 15)
Black-throated Green Warbler	1.5	5 (27, 11)
Solitary Vireo	1	
American Redstart	1	
Ovenbird	1	7 (38, 15)
Kentucky Warbler	1	1
Wood Thrush	0.5	7.5 (41, 16)
Northern Parula Warbler	0.5	1.5
Hooded Warbler	0.5	2
Scarlet Tanager	0.5	1.5
Black-and-white Warbler	+	1
Louisiana Waterthrush	+	2
Tufted Titmouse		1
Carolina Wren		0.5
Northern Cardinal		0.5
Ruby-throated Hummingbird		+
Carolina Chickadee		+
Worm-eating Warbler		+
Total Species:	13	18

1997 Territorial Males: 19.5 (320/sq. km., 130/100 acres)

1986 Territorial Males: 47 (254/sq. km., 103/100 acres)

Remarks: The steep mountain slopes, lush vegetation, and rushing stream lent a rain forest aspect to this plot. There seemed to be a nice variety of both territorial and visiting birds. Two participants and two coyotes were surprised to see each other near the southern end of the plot on the first trip of the third day. Remains of a feathery carcass (probably turkey) near midplot might have been a sign of the coyotes' hunting success. Participants: Cynthia D. Ellis (compiler), A. R. Buckelew Jr., Virginia Johnson, Marjorie Keatley, Juanita Slater, and Arline Thorn. Vegetation surveyors: A. R. Buckelew Jr., Elizabeth Bullard, James Bullard, Greg Eddy, Cynthia D. Ellis, Juanita Slater, and Arline Thorn.

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The 1997 Sortie Bird List: Panther State Forest, West Virginia

Thomas R. Fox

The 1997 Sortie was held at Panther State Forest in McDowell County, West Virginia, from June 1 through June 7. This was the second Sortie held at Panther, and it was a pleasant change to bird the southern-most county in West Virginia. Eighty-six species of birds were found.

Twelve species were found in 1986 that were not found in 1997: Great Blue Heron, Cooper's Hawk, Rough-legged Hawk, Cliff Swallow, Northern Mockingbird, Chestnut-sided Warbler, Black-throated Blue Warbler, Prairie Warbler, Rose-breasted Grosbeak, Blue Grosbeak, Vesper Sparrow, and Red-winged Blackbird. Ten species were found in 1997 that were not found in 1986: Sharp-shinned Hawk, Wild Turkey, Chimney Swift, Great Crested Flycatcher, House Wren, Eastern Bluebird, Veery, Warbling Vireo, Blackburnian Warbler, and House Finch. Most of the differences are represented by only one individual and are therefore not very important. The Wild Turkey was not seen in 1986, but is now considered common, as it is in many parts of the state. The Chimney Swift was not on the 1986 list and was found to be common in 1997. I have no explanation other than they may have been left off the 1986 list by mistake. Apparently the House Finch moved into the area since 1986. Six Swainson's Warblers in Panther State Forest seems like a lot; but 10 were reported in 1986. It is interesting to report that in 1986 Golden-winged Warblers were reported as more common than Blue-winged Warblers. In 1997 the reverse was reported.

The study area contained very little farm land and most of the edge and open areas were around the houses that were scattered along the roads.

The terms used to describe abundance are the standard terms the Brooks Bird Club has used for the past several years for use during studies of a short duration, such as forays and sorties.

Very common - Seen in large numbers every day in all appropriate habitats.

Common - Seen in appropriate habitat every day without any special effort.

Uncommon - Seen in appropriate habitat only with a lot of effort.

Rare - One or two only seen in the entire study region during the study period.

Data used to determine the abundance of each species were gleaned from Breeding Bird Surveys (BBS), Singing Male Censuses (SMC), personal observations of participants, and group discussion.

Green Heron—Rare. One seen on Panther Creek in Panther State Forest.

Wood Duck—Common. Several broods observed in the study area.

Turkey Vulture—Uncommon. Only three reported on BBS runs. All commentators felt the number was unusually low.

Sharp-shinned Hawk—Rare. One observed on Rock Ridge.

Red-shouldered Hawk—Rare. One observed on Rock Ridge.

Broad-winged Hawk—Uncommon.

Red-tailed Hawk—Rare. No hawks of any species were reported on the BBS runs.

Ruffed Grouse—Common. Several broods observed.

Wild Turkey—Common. Several broods observed.

Rock Dove—Uncommon.

Mourning Dove—Common.

Black-billed Cuckoo—Rare. One on the White Oak SMC plot.

Yellow-billed Cuckoo—Rare. On the ridge along Route 5/1.

Eastern Screech-Owl—Uncommon. One on Panther Forest and one along Tug Fork.

Barred Owl—Common.

Whip-poor-will—Uncommon. A few found on Panther Creek near the mouth of White Oak Branch.

Ruby-throated Hummingbird—Uncommon.

Chimney Swift—Common.

Belted Kingfisher—Common. Adult observed feeding young.

Red-bellied Woodpecker—Uncommon. Only one observed on BBS.

Downy Woodpecker—Common.

Hairy Woodpecker—Common.

Northern Flicker—Common.

Pileated Woodpecker—Common.

Eastern Wood-Pewee—Uncommon. Only one observed on BBS, perhaps due to the reduced amount of edge in the area.

Acadian Flycatcher—Very common.

Eastern Phoebe—Common.

Great Crested Flycatcher—Uncommon. Found on only one of the four BBS runs.

Purple Martin—Uncommon. Seventeen Martins were observed at a box in Iaeger at the intersection of routes 5/1 and 80.

Northern Rough-winged Swallow—Common.

Barn Swallow—Uncommon. Habitat for this species was limited in the study area.

Blue Jay—Common.

American Crow—Common.

Common Raven—Rare. At Hurricane Branch and one on a dumpster at the Park Office.

Carolina Chickadee—Common.

Tufted Titmouse—Common.

White-breasted Nuthatch—Common.

Carolina Wren—Very common.

House Wren—Rare.

Blue-gray Gnatcatcher—Uncommon

Eastern Bluebird—Uncommon, but habitat was very limited.

Veery—Rare. Found only on Crane Branch study plot.

Wood Thrush—Common. Found with young.

American Robin—Very common. Found with young.

Gray Catbird—Common.

Brown Thrasher—Uncommon.

Cedar Waxwing—Uncommon.

European Starling—Common.

White-eyed Vireo—Common.

Solitary Vireo—Common.

Yellow-throated Vireo—Common.

Warbling Vireo—Rare. None reported on BBS. Reported at one location on the Tug Fork.

Red-eyed Vireo—Very common. Of the 80 stops done on the BBS runs, 140 Red-eyed Vireos were recorded at 62 of the stops, which attests to the amount of forest habitat in this study area.

Blue-winged Warbler—Common.

Golden-winged Warbler—Uncommon.

Northern Parula—Common.

Yellow Warbler—Common.

Black-throated Green Warbler—Common.

Blackburnian Warbler—Uncommon. Found on the forested ridges on Panther State Forest.

Yellow-throated Warbler—Common. Like the Blackburnian, it was found on the forested ridges on Panther.

Cerulean Warbler—Common.

Black-and-white Warbler—Common.

American Redstart—Very common.

Worm-eating Warbler—Uncommon.

Swainson's Warbler—Common. At least six different singing males were reported in the area of Panther State Forest, which probably makes it one of the most densely populated areas of the state for this species.

Ovenbird—Common. Found with young.

Louisiana Waterthrush—Common.

Kentucky Warbler—Common.

Common Yellowthroat—Uncommon. Only one recorded on BBS runs.
Hooded Warbler—Very common. Found with young.
Yellow-breasted Chat—Common.
Summer Tanager—Rare. One found on Panther State Forest.
Scarlet Tanager—Common.
Northern Cardinal—Common. Found with young.
Indigo Bunting—Common.
Eastern Towhee—Common.
Chipping Sparrow—Uncommon.
Field Sparrow—Rare. Only one found at Rockridge.
Song Sparrow—Common.
Common Grackle—Common.
Brown-headed Cowbird—Uncommon.
Orchard Oriole—Rare. One each found at Rockridge and Mohawk.
Northern Oriole—Uncommon.
House Finch—Rare. Rockridge.
American Goldfinch—Common.
House Sparrow—Common.

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Panther State Forest Sortie: 1986 Breeding Bird Survey

Ann Pyle

The roads in the Panther Creek areas nestled between very steep hillsides with a few exceptions. On the first 10-mile run, May 27, from camp to Panther and on to Krollitz, there was a steady drizzle of rain. We left camp at 6:20 a.m., nearly an hour later than usual, as visibility was poor for birding or for driving a car in a new territory. Yet we heard or saw 43 species of birds, including a Swainson's Warbler, with 235 birds for the run.

On the second morning, May 28, which was cloudy and rainy, we took a Panther Creek circle (north of the forest). At times the rain was very heavy, but we listed 43 species with 304 birds. The last run was on May 29, from camp to Beartown, and the sky was clear. We counted 48 species with 251 birds.

Although the habitat was rather restricted, our final number of 59 species and 790 birds was good. The three surveys were made by the team of Don Nemanich, Reba Pfalzgraf, and Ann Pyle. We were assisted on run three by Kyle Bush.

Table 1
 The 10 Most Common Birds

Species	Number
Red-eyed Vireo	66
Song Sparrow	51
Northern Cardinal	47
Wood Thrush	34
American Robin	34
Acadian Flycatcher	33
Indigo Bunting	31
Ovenbird	29
Tufted Titmouse	28
American Goldfinch	28

Table 2 is a detailed list of birds identified on the 60 stops made on the 30 miles surveyed:

Table 2
Number of Birds by Species

Species	Number	Stops Present
Rock Dove	7	2
Yellow-billed Cuckoo	4	4
Ruby-throated Hummingbird	5	3
Belted Kingfisher	7	7
Downy Woodpecker	3	3
Northern Flicker	2	2
Pileated Woodpecker	6	6
Eastern Wood-Pewee	1	1
Acadian Flycatcher	33	23
Eastern Phoebe	16	13
Northern Rough-winged Swallow	7	3
Barn Swallow	1	1
Blue Jay	8	7
American Crow	24	19
Common Raven	1	1
Carolina Chickadee	18	16
Tufted Titmouse	28	23
Carolina Wren	15	13
Wood Thrush	34	26
American Robin	34	14
Gray Catbird	19	15
Northern Mockingbird	1	1
Brown Thrasher	1	1
Cedar Waxwing	15	1
European Starling	6	3
White-eyed Vireo	3	3
Yellow-throated Vireo	11	8
Red-eyed Vireo	66	39
Blue-winged Warbler	2	2
Golden-winged Warbler	3	2
Northern Parula Warbler	10	10
Yellow Warbler	22	15
Black-throated Green Warbler	5	5
Prairie Warbler	1	1
Cerulean Warbler	9	6
Black-and-white Warbler	14	13

Species	Number	Stops Present
American Redstart	17	11
Worm-eating Warbler	1	1
Swainson's Warbler	1	1
Ovenbird	29	22
Louisiana Waterthrush	10	9
Kentucky Warbler	18	16
Common Yellowthroat	9	7
Hooded Warbler	11	11
Yellow-breasted Chat	5	5
Summer Tanager	1	1
Scarlet Tanager	17	15
Northern Cardinal	47	37
Indigo Bunting	31	24
Eastern Towhee	9	9
Chipping Sparrow	10	9
Field Sparrow	1	1
Song Sparrow	51	36
Red-winged Blackbird	2	1
Common Grackle	7	6
Brown-headed Cowbird	14	1
Northern Oriole	3	3
American Goldfinch	28	9
House Sparrow	25	10
Total Species for Survey	59	
Total Individuals for Survey	790	

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Panther State Forest Sortie: 1997 Breeding Bird Survey

Ann H. Pyle

During the 1997 Brooks Bird Club Sortie, four 10-mile Breeding Bird Surveys were made. All surveys were by van beginning about a half hour before sunrise. Each half mile, a 3-minute stop was made to record each bird seen or heard.

This was the second survey covering Panther State Forest. Extra camping time allowed us to make an additional survey over the BBS in 1986, which provided more information on birds in the eastern area of the Sortie. We were pleased to find the Swainson's Warbler continuing to thrive and to see a busy Purple Martin colony.

The first 10-mile survey was to Panther Circle on June 2, 1997, and the weather to start was cloudy and 67°. Only 39 species with 237 birds were listed on that run.

On the second run, which was foggy, on June 3, the route was south of camp. Forty-three species were counted with 234 birds, which included a Swainson's Warbler.

Morning three, June 4, which was from camp north to Krollitz on a cloudy 56° morning, resulted in 340 birds of 52 species. This was better than the rainy morning 11 years ago. Three Swainson's Warblers were recorded and others were heard between stops.

Morning survey four, June 6, started on the road about eight miles south of camp and followed a narrow road north and to the east of camp. It skipped the road and bridge construction and coal facilities, continuing north to routes 1/5 and 1/3 to complete the 10-mile run. Wind was 10-15 miles per hour at the end. An interesting colony of Purple Martins was seen and heard at Iaeger. Forty-six species and 281 birds were found on survey four.

Table 1
Number of Birds by Species

Species	Number	Stops Present
Wood Duck (with 4 young)	1	1
Turkey Vulture	3	3
Rock Dove	14	3
Mourning Dove	10	6
Yellow-billed Cuckoo	1	1
Barred Owl	1	1

Species	Number	Stops Present
Chimney Swift	5	2
Belted Kingfisher	5	5
Red-bellied Woodpecker	1	1
Downy Woodpecker	3	3
Hairy Woodpecker	2	1
Pileated Woodpecker	4	4
Yellow-shafted Flicker	3	3
Eastern Wood-Pewee	1	1
Acadian Flycatcher	34	22
Great Crested Flycatcher	4	2
Eastern Phoebe	16	12
Purple Martin	17	1
Rough-winged Swallow	2	2
Blue Jay	16	10
American Crow	37	30
Carolina Chickadee	22	19
Tufted Titmouse	36	32
White-breasted Nuthatch	12	10
Carolina Wren	44	28
Blue-Gray Gnatcatcher	2	1
Eastern Bluebird	1	1
Wood Thrush	51	35
American Robin	73	42
Gray Catbird	15	12
Northern Mockingbird	1	1
Brown Thrasher	3	3
Cedar Waxwing	5	1
European Starling	17	13
White-eyed Vireo	11	7
Solitary Vireo	2	2
Yellow-throated Vireo	3	3
Red-eyed Vireo	140	62
Blue-winged Warbler	9	8
Northern Parula Warbler	15	11
Yellow Warbler	21	18
Black-throated Green Warbler	15	13
Yellow-throated Warbler	3	3
Cerulean Warbler	14	11
Black-and-white Warbler	7	7

Species	Number	Stops Present
Worm-eating Warbler	3	3
Kentucky Warbler	15	13
Hooded Warbler	20	15
American Redstart	33	23
Ovenbird	40	33
Louisiana Waterthrush	11	11
Common Yellowthroat	1	1
Yellow-breasted Chat	2	2
Scarlet Tanager	24	18
Northern Cardinal	51	42
Indigo Bunting	30	26
Eastern Towhee	21	21
Chipping Sparrow	5	4
Song Sparrow	45	34
Common Grackle	22	13
Brown-headed Cowbird	5	4
Orchard Oriole	1	1
Baltimore Oriole	1	1
American Goldfinch	20	8
House Sparrow	34	26
Swainson's Warbler	4	4

Total species for the four surveys at Panther State Forest in 1997 was 66 with 1,092 birds.

Table 2
Most Abundant Species

Species	Number	Percent of Total
Red-eyed Vireo	140	12.8
American Robin	73	6.7
Northern Cardinal	51	5.6
Wood Thrush	51	5.6
Song Sparrow	45	4.1
Carolina Wren	44	4.0
Ovenbird	40	3.7

Species	Number	Percent of Total
American Crow	37	3.4
Tufted Titmouse	36	3.3
Acadian Flycatcher	34	3.1
House Sparrow	34	3.1
American Redstart	33	3.0
Indigo Bunting	30	2.7

The following campers participated in the 1997 Sortie survey: James Bullard, Dawn Fox, Thomas Fox, Greg Eddy, Eugene E. Hutton, Jr., Reba Hutton, Ann Pyle, Arline Thorn, and Judith Ward. Two members of this team, Reba (Pfalzgraf) Hutton and Ann Pyle, were principals in the 1986 survey team in Panther State Forest.

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Lepidoptera of the 1997 Panther State Forest Sortie

Virginia Johnson

The following butterflies and moths were found at the Panther State Forest Sortie, more toward the end of the period due to the very cloudy days at the beginning. Thanks to all the members who reported lepidoptera and special thanks to Jane Whitaker for her help in identification.

Butterflies

Pipe-vine Swallowtail	<i>Battus philenor</i>
Zebra Swallowtail	<i>Eurytides marcellus</i>
Tiger Swallowtail	<i>Papilio glaucus</i>
Spicebush Swallowtail	<i>Papilio troilus</i>
Clouded Sulphur	<i>Colias philodice</i>
Alfalfa Butterfly	<i>Colias eurytheme</i>
Spring Azure	<i>Celastrina argiolus</i>
Great Spangled Fritillary	<i>Speyeria cybele</i>
Silvery Checkerspot	<i>Chlosyne nycteis</i>
Pearl Crescent	<i>Phyciodes tharos</i>
Question Mark	<i>Polygonia interrogationis</i>
Red Admiral	<i>Vanessa atalanta</i>
Red-spotted Purple	<i>Limenitis arthemis astyanax</i>
Viceroy	<i>Limenitis archippus</i>
Pearly Eye	<i>Enodia portlandia</i>
Carolina Satyr	<i>Hermeuptychia sosybius</i>
Little Wood Satyr	<i>Megisto cymela</i>
Monarch	<i>Danaus plexippus</i>
Silver-spotted Skipper	<i>Epargyreus clarus</i>
Gold-banded Skipper	<i>Autochton cellus</i>
Northern Cloudy Wing	<i>Thorybes pylades</i>
Dreamy Dusky Wing	<i>Erynnis icelus</i>
Indian Skipper	<i>Hesperia sassacus</i>
Zabulon Skipper	<i>Poanes zabulon</i>

Moths

One-eyed Sphinx Moth	<i>Smerinthus cerisyi</i>
Io Moth	<i>Automeris io</i>
Luna Moth	<i>Actias luna</i>
Leconte's Haploa	<i>Haploa lecontei</i>

Fall Webworm Moth
Virgin Tiger Moth
Hickory Tussock Moth
Eight-spotted Forester
Orange-patched Smoky Moth

Hyphantria cunea
Grammia virgo
Lophocampa caryae
Alypia octomaculata
Pyromorpha dimidiata

References

- Opler, P. A. (1992). *A Field Guide to Eastern Butterflies*. Boston MA: Houghton Mifflin Company
- Covell, C. V., Jr. (1984). *A Field Guide to Eastern Moths*. Boston, MA: Houghton Mifflin Company

24 Robinson Street
Uniontown, PA 15401

Amphibians and Reptiles of the 1997 Sortie

Jane J. Whitaker

CLASS AMPHIBIA

Order Caudata

- Red-spotted Newt, Eft (*Notophthalmus v. viridescens*)
- Mountain Dusky Salamander (*Desmognathus ochrophaeus*)
- Appalachian Seal Salamander (*Desmognathus quadramaculatus*)

Order Salienta - Toads and Frogs

- Eastern American Toad (*Bufo a. americanus*)
- Northern Spring Peeper (*Hyla c. crucifer*)
- Gray Treefrog (*Hyla versicolor* complex)
- Mountain Chorus Frog (*Pseudacris brachyphona*)

CLASS REPTILIA

Order Testudines - Turtles

- Common Snapping Turtle (*Chelydra s. serpentina*)
- Eastern Box Turtle (*Terrapene c. carolina*) - one reported.

Order Squamata - Lizards and Snakes

Sub-order Sauria - Lizards

- Northern Fence Lizard (*Sceloporus undulatus hyacinthinus*)
- Five-lined Skink (*Eumeces fasciatus*)

Sub-order Serpentes - Snakes

- Northern Water Snake (*Nerodia s. sipedon*)
- Eastern Garter Snake (*Thamnophis s. sitalis*)
- Black Rat Snake (*Elaphe o. obsoleta*)
- Northern Copperhead (*Agkistrodon contortrix mokasen*)

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Washington, DC 20016

Mammals of the 1997 Sortie

Jane J. Whitaker

The following mammals were seen at the Sortie held at Panther Creek State Forest in McDowell County in June, 1997. Mice were seen in the dorms but not specifically identified. An abandoned beaver dam was in the park with felled trees about six months old, but no new cuttings were observed.

Order Marsupialia

- Opossum - (*Didelphis marsupialis*)

Order Insectivora

- Mole - numerous tunnels were evident behind the dormitories.

Order Chiroptera

- Little Brown Bat (*Myotis lucifugus*)

Order Lagomorpha

- Eastern Cottontail (*Sylvilagus floridanus*)

Order Rodentia

- Woodchuck (*Marmota monax*)
- Eastern Chipmunk (*Tamias striatus*)
- Eastern Gray Squirrel (*Sciurus carolinensis*)
- Eastern Fox Squirrel (*Sciurus niger*)

Order Carnivora

- Coyote (*Canis latrans*)
- Raccoon (*Procyon lotor*)
- Striped Skunk (*Mephitis mephitis*)

Order Artiodactyla

- White-tailed Deer (*Odocoileus virginianus*)

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Ferns and Fern Allies at the Panther State Forest 1986 Sortie

Ann H. Pyle

The following ferns and fern allies are those identified from May 27 to May 30, 1986, during the Sortie at Panther State Forest:

<i>Equisetum arvense</i>	Common Horsetail
<i>Lycopodium flabelliforme</i>	Groundpine
<i>Botrychium dissectum</i>	Cutleaf Grapefern
<i>B. dissectum f. obliquum</i>	Oblique Grapefern
<i>B. virginianum</i>	Rattlesnake Fern
<i>Osmunda cinnamomea</i>	Cinnamon Fern
<i>O. claytoniana</i>	Interrupted Fern
<i>Cystopteris fragilis</i>	Brittle Fern
<i>Onoclea sensibilis</i>	Sensitive Fern
<i>Phegopteris hexagonoptera</i>	Broad Beech Fern
<i>Thelypteris noveboracensis</i>	New York Fern
<i>Dryopteris marginalis</i>	Marginal Shield Fern
<i>D. spinulosa</i>	Spinulose Wood Fern
<i>D. intermedia</i>	Intermediate Wood Fern
<i>Polystichum acrostichoides</i>	Christmas Fern
<i>P. acrostichoides v. incisum</i>	Incised Christmas Fern
<i>Dennstaedtia punctilobula</i>	Hay Scented Fern
<i>Athyrium pycnocarpon</i>	Glade Fern
<i>A. thelypteroides</i>	Silver Athyrium
<i>A. angustum v. rubellum</i>	Northeastern Lady Fern
<i>Camptosorus rhizophyllus</i>	Walking Fern
<i>Asplenium platyneuron</i>	Ebony Spleenwort
<i>A. Platyneuron v. incisum</i>	Incised Ebony Spleenwort
<i>A. trichomanes</i>	Maidenhair Spleenwort
<i>Adiantum pedatum</i>	Maidenhair Fern
<i>Polypodium virginianum</i>	Common Polypody

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1997 Additions to the Ferns and Fern Allies at the Panther State Forest Sortie

Ann H. Pyle

The following are the additional ferns and fern allies identified from June 1 to June 7, 1997, during the second Brooks Bird Club Sortie at Panther State Forest:

<i>Equisetum arvense</i>	Variety of Common Horsetail
<i>E. Hyemale</i>	Scouring Rush
<i>Woodsia obtusa</i>	Blunt-lobed Woodsia
<i>Asplenium pinnatifidum</i>	Pinnatifid Spleenwort
<i>Pteridium aquilinum</i>	Bracken

The Common Horsetail was a large, densely clumped colony of branched and much-forked variety found by Ann Pyle just north of the forest boundary on the upper side of a dead-end county road 3/1.

Reba Hutton found the Pinnatifid Spleenwort growing on a northern rocky ledge by the roadside located beside a branch of the Tug River near the Panther Creek junction.

Specimens of the *Equisetum arvense* variety and the *Asplenium pinnatifidum* were sent to William Grafton for the West Virginia University herbarium. They appear to be McDowell County records.

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Panther State Forest Herbaceous Plant List

Steven D. Mace

This plant list covers the herbaceous plants (excluding fern and fern allies) seen during the 1986 and 1997 Sorties. An asterisk (*) denotes plants seen during the 1986 Sortie that were not seen at the 1997 Sortie.

All 1997 Sortie participants helped in listing plants seen, but especially helpful were A. R. Buckelew, Jr., Elizabeth Bullard, James Bullard, Greg E. Eddy, Dawn Fox, Thomas R. Fox, Eugene E. Hutton, Jr., Reba Hutton, Nevada Laitsch, Ann H. Pyle, William Smith, and Jane Whitaker. Reba (Pfalzgraf) Hutton prepared the 1986 Sortie list with the help of Kyle Bush, Eugene E. Hutton, Jr., and Ann H. Pyle.

The plants listed are in phylogenetic order as listed in the *Flora of West Virginia* by Strausbaugh and Core, second edition.

GRAMINEAE

Dactylis glomerata

GRASS FAMILY

Orchard Grass

ARACEAE

Arisaema triphyllum

ARUM FAMILY

Jack-in-the-Pulpit

COMMELINACEAE

Tradescantia virginiana

SPIDERWORT FAMILY

Spiderwort

LILIAEAE

*Allium vineale**

*Clintonia umbellulata**

Smilacina racemosa

Medeola virginiana

Polygonatum pubescens

*Polygonatum biflorum**

Polygonatum canaliculatum

*Trillium erectum**

Trillium grandiflorum

LILY FAMILY

Wild Garlic

White Clintonia

Plumelily

Indian Cucumber-Root

Downy Solomon's Seal

Common Solomon's Seal

Great Solomon's Seal

Ill-scented Trillium

Large Flowered Trillium

AMARYLLIDACEAE

Hypoxis hirsuta

AMARYLLIS FAMILY

Yellow Stargrass

IRIDACEAE

Sisyrinchium angustifolium

IRIS FAMILY

Blue-eyed Grass

Iris pseudacorus

Iris cristata

Yellow Iris

Crested Dwarf Iris

ORCHIDACEAE

Cypripedium pubescens

*Habenaria viridis**

*Habenaria clavellata**

*Habenaria orbiculata**

Goodyera pubescens

*Listera smallii**

*Corallorhiza maculata**

Aplectrum hyemale

Liparis lilifolia

ORCHID FAMILY

Large Yellow Lady's Slipper

Long-bracted Green Orchid

Small Green Wood Orchid

Large Round-leaved Orchid

Downy Rattlesnake Plantain

Kidney-leaved Twayblade

Coralroot

Puttyroot

Large Twayblade

URTICACEAE

*Urtica dioica**

NETTLE FAMILY

Stinging Nettle

ARISTOLOCHIACEAE

*Asarum canadense**

Asarum virginicum

Aristolochia macrophylla

BIRTHWORT FAMILY

Wild Ginger

Virginia Wild Ginger

Pipevine

POLYGONACEAE

Polygonum scandens

Polygonum cuspidatum

BUCKWHEAT FAMILY

Climbing False Buckwheat

Japanese Knotweed

PHYTOLACCACEAE

Phytolacca americana

POKEWEED FAMILY

Pokeweed

CARYOPHYLLACEAE

Stellaria graminea

Silene virginica

*Dianthus armeria**

PINK FAMILY

Star Chickweed

Fire Pink

Deptford Pink

RANUNCULACEAE

*Anemonella thalictroides**

*Ranunculus repens**

Hepatica acutiloba

*Anemone virginica**

Aquilegia canadensis

Cimicifuga racemosa

CROWFOOT FAMILY

Rue Anemone

Creeping Buttercup

Sharplobe Hepatica

Thimbleweed

Columbine

Black Cohosh

BERBERIDACEAE

Podophyllum peltatum
Caulophyllum thalictroides

PAPAVERACEAE

Sanguinaria canadensis
Papaver dubium

CRUCIFERAE

*Barbarea vulgaris**
*Dentaria laciniata**
Cardamine rotundifolia

CRASSULACEAE

Sedum ternatum

SAXIFRAGACEAE

*Penthorum sedoides**
Saxifraga micranthidifolia
Tiarella cordifolia
Heuchera americana
*Heuchera longiflora**
Mitella diphylla

ROSACEAE

Aruncus dioicus
Potentilla recta
*Potentilla simplex**

LEGUMINOSAE

Trifolium pratense
Trifolium repens
Trifolium agrarium
Lathyrus latifolius

OXALIDACEAE

Oxalis violacea
Oxalis grandis

GERANIACEAE

Geranium maculatum

BARBERRY FAMILY

Mayapple
 Blue Cohosh

POPPY FAMILY

Bloodroot
 Poppy

MUSTARD FAMILY

Winter Cress
 Cutleaf Toothwort
 Mountain Watercress

ORPINE FAMILY

Wild Stonecrop

SAXIFRAGE FAMILY

Ditch Stonecrop
 Lettuce Saxifrage
 Foamflower
 Alumroot
 Long-flowered Alumroot
 Bishop's Cap

ROSE FAMILY

Goatsbeard
 Upright Cinquefoil
 Common Cinquefoil

PULSE FAMILY

Red Clover
 White Clover
 Yellow Hop Clover
 Sweet Pea

WOOD SORREL FAMILY

Violet Woodsorrel
 Great Yellow Wood Sorrel

GERANIUM FAMILY

Wild Geranium

Geranium columbinum

BALSAMINACEAE

Impatiens pallida

VIOLACEAE

*Viola papilionacea**
Viola hastata
Viola candensis

UMBELLIFERAE

*Osmorhiza longistylis**
Conium maculatum
Zizia aptera
Thaspium trifoliatum
*Thaspium barbinode**

PYROLACEAE

Chimaphila maculata
*Pyrola rotundifolia**

DIAPENSIACEAE

Galax aphylla

PRIMULACEAE

Lysimachia nummularia

ASCLEPIADACEAE

Asclepias quadrifolia
*Asclepias exaltata**

POLEMONIACEAE

*Polemonium reptans**
*Phlox stolonifera**

HYDROPHYLLACEAE

*Hydrophyllum virginianum**
Phacelia bipinnatifida

BORAGINACEAE

Cynoglossum virginianum

Long-stalked Crane's-bill

JEWELWEED FAMILY

Yellow Jewelweed

VIOLET FAMILY

Common Blue Violet
 Halberd-leaf Yellow Violet
 Canada Violet

CARROT FAMILY

Smooth Sweet Cicely
 Poison Hemlock
 Golden Alexanders
 Woodland Meadow-Parsnip
 Hairy-jointed Meadow-Parsnip

WINTERGREEN FAMILY

Spotted Wintergreen
 Round-leaved Wintergreen

DIAPENSIA FAMILY

Galax

PRIMROSE FAMILY

Moneywort

MILKWEED FAMILY

Four-leaved Milkweed
 Poke Milkweed

POLEMONIUM FAMILY

Greek Valerian
 Creeping Phlox

WATERLEAF FAMILY

Virginia Waterleaf
 Fern-Leaf Phacelia

BORAGE FAMILY

Wild Comfrey

<i>Lithospermum latifolium</i> *	American Gromwell
LABIATAE	MINT FAMILY
<i>Meehania cordata</i>	Meehania
<i>Glechoma hederacea</i>	Ground Ivy
<i>Monarda clinopodia</i>	Basil Balm
SCROPHULARIACEAE	FIGWORT FAMILY
<i>Verbascum thapsus</i>	Great Mullein
<i>Penstemon laevigatus</i> *	Smooth Penstemon
<i>Penstemon canescens</i>	Grey Beardtongue
<i>Pedicularis canadensis</i>	Wood Betony
OROBANCHACEAE	BROOMRAPE FAMILY
<i>Conopholis americana</i> *	Cancerroot
PLANTAGINACEAE	PLAINTAIN FAMILY
<i>Plantago lanceolata</i>	English Plantain
<i>Plantago virginica</i>	Dwarf Plantain
RUBIACEAE	MADDER FAMILY
<i>Galium aparine</i>	Cleavers
<i>Galium mollugo</i> *	White Bedstraw
<i>Mitchella repens</i>	Partridge Berry
<i>Houstonia caerulea</i> *	Bluets
<i>Houstonia tenuifolia</i>	Slender-leaved Summer Bluets
CAPRIFOLIACEAE	HONEYSUCKLE FAMILY
<i>Triosteum aurantiacum</i>	Horsegentian
VALERIANACEAE	VALERIAN FAMILY
<i>Valerianella chenopodifolia</i>	Goose-foot Corn Salad
DIPSACACEAE	TEASEL FAMILY
<i>Dipsacus sylvestris</i>	Common Teasel
CUCURBITACEAE	GOURD FAMILY
<i>Echinocystis lobata</i> *	Wild Cucumber
CAMPANULACEAE	BLUEBELL FAMILY
<i>Specularia perfoliata</i>	Venus' Looking Glass

COMPOSITAE

Vernonia noveboracensis
Eupatorium fistulosum
Erigeron philadelphicus
*Antennaria neglecta**
Ambrosia artemisiifolia
Verbesina alternifolia
*Verbesina occidentalis**
Achillea millefolium
Chrysanthemum leucanthemum
Tussilago farfara
Senecio smallii
Taraxacum officinale
Sonchus arvensis
Lactuca canadensis
Prenanthes trifoliata
Hieracium pratense
Hieracium venosum

COMPOSITE FAMILY

New York Ironweed
 Common Joe-Pye Weed
 Philadelphia Fleabane
 Field Pussytoes
 Common Ragwort
 Wing-stem
 Yellow Wing-stem
 Yarrow
 Ox-eye Daisy
 Coltsfoot
 Small's Ragwort
 Common Dandelion
 Field Sow Thistle
 Horse-weed
 Lion's Foot
 Field Hawkweed
 Rattlesnake-weed

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1997 Sortie Tree and Shrub List

William H. Smith

Listed are the trees and shrubs seen in Panther State Forest during the 1997 Sortie. Those helping in compiling this list include A. R. Buckelew Jr., Thomas R. Fox, Reba Hutton, Nevada Laitsch, and Steven D. Mace.

The trees and shrubs listed are in phylogenetic order as listed in the *Flora of West Virginia* by Strausbaugh and Core, second edition.

PINACEAE

Tsuga canadensis
Pinus virginiana

PINE FAMILY

Hemlock
Virginia Pine

SALICACEAE

Salix nigra

WILLOW FAMILY

Black Willow

JUGLANDACEAE

Juglans cinerea
Juglans nigra
Carya glabra
Carya tomentosa

WALNUT FAMILY

Butternut
Black Walnut
Pignut Hickory
Mockernut Hickory

CORYLACEAE

Ostrya virginiana
Betula lenta
Betula alleghaniensis

HAZEL FAMILY

Hop Hornbeam
Black Birch
Yellow Birch

FAGACEAE

Fagus grandifolia
Castanea dentata
Quercus alba
Quercus rubra
Quercus velutina
Quercus coccinia
Quercus prinus

BEECH FAMILY

American Beech
American Chestnut
White Oak
Red Oak
Black Oak
Scarlet Oak
Chestnut Oak

ULMACEAE

Ulmus americana
Ulmus rubra

ELM FAMILY

American Elm
Slippery Elm

SANTALACEAE

Pyrularia pubera

MAGNOLIACEAE

Liriodendron tulipifera
Magnolia fraseri
Magnolia tripetala

LAURACEAE

Sassafras albidum
Lindera benzoin

HAMAMELIDACEAE

Hamamelis virginiana

PLATANACEAE

Platanus occidentalis

ROSACEAE

Spiraea alba

LEGUMINOSAE

Cercis canadensis
Robinia pseudo-acacia

SIMAROUBACEAE

Ailanthus altissima

ANACARDIACEAE

Toxicodendron radicans

STAPHYLEACEAE

Staphylea trifolia

CELASTRACEAE

Euonymus americanus

ACERACEAE

Acer pensylvanicum
Acer saccharum
Acer rubrum

SANDALWOOD FAMILY

Buffalnut

MAGNOLIA FAMILY

Yellow Poplar
Mountain Magnolia
Umbrella Tree

LAUREL FAMILY

Sassafras
Spicebush

WITCH HAZEL FAMILY

Witch Hazel

PLANETREE FAMILY

Sycamore

ROSE FAMILY

Meadowsweet

PULSE FAMILY

Redbud
Black Locust

TREE-OF-HEAVEN FAMILY

Ailanthus

CASHEW FAMILY

Poison Ivy

BLADDERNUT FAMILY

Bladdernut

STAFF TREE FAMILY

Strawberry Bush

MAPLE FAMILY

Striped Maple
Sugar Maple
Red Maple

<i>Acer negundo</i>	Boxelder
<i>Acer saccharinum</i>	Silver Maple
HIPPOCASTANACEAE	HORSECHESTNUT FAMILY
<i>Aesculus octandra</i>	Yellow Buckeye
VITACEAE	VINE FAMILY
<i>Vitis</i> sp.	Wild Grape
TILIACEAE	LINDEN FAMILY
<i>Tilia heterophylla</i>	White Basswood
THYMELAEACEAE	MEZERUM FAMILY
<i>Elaeagnus umbellata</i>	Autumn Olive
NYSSACEAE	SOURGUM FAMILY
<i>Nyssa sylvatica</i>	Black Gum
ARALIACEAE	GINSENG FAMILY
<i>Aralia spinosa</i>	Hercules Club
CORNACEAE	DOGWOOD FAMILY
<i>Cornus florida</i>	Flowering Dogwood
ERICACEAE	HEATH FAMILY
<i>Rhododendron maximum</i>	Rhododendron
<i>Rhododendron calendulaceum</i>	Flame Azalea
<i>Kalmia latifolia</i>	Mountain Laurel
OLEACEAE	OLIVE FAMILY
<i>Fraxinus americana</i>	White Ash
BIGNONIACEAE	BIGNONIA FAMILY
<i>Bignonia capreolata</i>	Crossvine
CAPRIFOLIACEAE	HONEYSUCKLE FAMILY
<i>Lonicera japonica</i>	Japanese Honeysuckle

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Field Notes Winter Season

December, 1997-February, 1998

James D. Phillips, Editor

It was an unusual season. Most of the region experienced a very mild winter in regards to temperature and precipitation. The area from Wyoming, Mercer, and Summers counties northward to Nicholas, Webster, and Pocahontas counties, on the other hand, experienced relatively mild temperatures but several heavy snows. Nearly three feet of snow fell a few days after Christmas and a like amount again a month later. Canaan Valley, Tucker County, also experienced these snows. Tree damage compared with that encountered during the ice storms of 1993. Several contributors considered this a very poor bird winter. Northern birds were absent from most areas but abundant in other areas. The most unusual sighting was that of a **Little Gull** along the Ohio River(MBC).

A grounded **Common Loon** in Tucker County was returned to open water after passage of a storm front on February 1(JN). **Pied-billed Grebes** were present in most areas at the beginning and end of the season. A **Horned Grebe** was found in Tucker County on February 7(JN). Wendell Argabrite began the new year with a **Red-necked Grebe** near the Robert C. Byrd Locks and Dam, Mason County. **Double-crested Cormorants** were reported by February in Wood(MBC) and Summers(JP) counties. **Great Blue Herons** could be found across the region all season. Unusual was a **Great Egret** on Crab Creek, Mason County, from January 10 to the end of the period(WA).

An immature, unbanded **Trumpeter Swan** could be found at Greenbottom WMA, Cabell County, from January 24 to the end of the period(WA). A few **Snow Geese** appeared during the first half of January in Mason(WA) and Wood(MBC) counties. **Canada Geese** continue to be abundant. **Wood Ducks** were beginning to appear in the southern part of the area by the end of the period(JP). **Green-winged Teal** were reported from Summers(JP), Greenbrier(CH), Monongalia(GB), and Wood(MBC) counties. **American Black Ducks** were found along the New(JP) and Ohio(MBC) rivers. **Northern Pintails** were seen in Wood County(MBC) and Summers(JP) County. **Blue-winged Teal** were seen on Bluestone Lake, Summers County, in December and a few **Gadwall** wintered there again this year(JP). **American Wigeon** were beginning to appear by the end of the period. **Canvasbacks** were reported from Kanawha(HG), Cabell(WA), Ohio(PT), and Wood(MBC) counties. The only report of **Redheads** came from Wood County(MBC). **Ring-necked Ducks** were found in Tucker(JN) and Wood(MBC) counties. A few **Lesser Scaup** were appearing by the end of the period. A **Surf Scoter** was seen on the Ohio River at Huntington, Cabell County, on January 4(WA). **Common Goldeneyes** and **Buffleheads** seemed in low

numbers. **Hooded Mergansers** were reported from across the region. **Common Mergansers** appeared during February in Pleasants(WA) and Wood(MBC) counties.

Good size groups of **Black Vultures** were reported from Greenbrier(CH), Mercer, and Summers(JP) counties during the season. A group of 20 could be found in the Blackwater Canyon, Tucker County, during January(JN). **Turkey Vultures** were seen in their usual haunts and had returned to the western portion of the area by the second week of February(HG, MBC). **Bald Eagle** sightings and the minimum number seen were as follows: Summers County(2)(JP, AM), Tucker County(1)(JN, EH), Hardy County(2)(JN), Randolph County(4)(DE), Pleasants County(1)(WA), and Wood County(1)(MBC). **Sharp-shinned** and **Cooper's hawks** were visiting the usual feeders. Several contributors noted **Red-shouldered Hawk** nesting activity by the end of the period. **Red-tailed Hawks** seemed in pretty good numbers. Canaan Valley was the place for **Rough-legged Hawks**. At least five wintered in the area(JN). **American Kestrels** seemed to winter well across the region. A **Merlin** was seen in Canaan Valley State Park, Tucker County(JN), on December 13.

A few **Ruffed Grouse** were seen, and **Wild Turkeys** continue to thrive. **Northern Bobwhites** were reported from Wood(MBC) and Jackson(DG) counties. **American Coots** seemed to winter well in the region. **Common Snipes** were reported from Wood(MBC) and Greenbrier(CH) counties. **Ring-billed** and a few **Herring gulls** could be found along the New(JP) and Ohio(MBC) rivers during the period. Bill Thompson, Phoebe Thompson, and Julie Zickefoose observed a **Little Gull** on the French Creek Wildlife area near St. Marys, Pleasants County, on February 7(MBC). If accepted by the West Virginia Bird Records Committee this will be a state record. **Eastern Screech**, **Great Horned**, and **Barred owls** were found across the region.

Red-headed Woodpeckers were found only in Wood County(MBC). **Yellow-bellied Sapsuckers** were coming to feeders across the region. **Eastern Phoebe**s wintered in Wood(MBC) and Summers(JP) counties. Unusual was an **Eastern Kingbird** in Wood County on February 8(MBC). The only report for **Horned Larks** came from Tucker County(JN). **Blue Jays** were very scarce during the winter. **Red-breasted Nuthatches** were found in Wood(MBC), Kanawha(HG), Upshur(VH), Ritchie(VC), Cabell(WA), and Brooke(JB) counties. Most of these stayed only a short time, but there seemed to be a major concentration in Cabell County(WA). **Brown Creepers** and **Winter Wrens** seemed to winter in pretty good numbers. **Golden-crowned Kinglets** wintered well and a few **Ruby-crowned Kinglets** could be found. A **Gray Catbird** was seen in Mercer County on December 13(AM) and one in Wood County on December 27(MBC). A **Loggerhead Shrike** was seen January 1 near Sinks Grove, Monroe County(JP). Twenty **European Starlings** were observed feeding on a skunk carcass in Tucker County(JN). **Yellow-rumped Warblers** were found in Summers(JP), Greenbrier(CH), and Wood(MBC) counties.

A few **American Tree Sparrows** were spotted in Cabell(WA), Wood(MBC), Brooke(JB), Preston(JJ), and Mercer(IL) counties. **Savannah Sparrows** were found in Mason(WA) and Wood(MBC) counties. **Fox Sparrows** were seen in Summers(JP), Kanawha(HG), Wood(MBC), Mercer(IL), and Monroe(KS) counties. The only report of **Lincoln's Sparrow** came from Cabell County(WA). **Swamp Sparrows** wintered in Summers(JP), Wood(MBC), and Greenbrier(CH) counties. **White-throated Sparrows** were numerous in some places and scarce in others. There were a few scattered reports of **White-crowned Sparrows**, and **Dark-eyed Juncos** seemed plentiful. **Purple Finches** were found across the region but seemed concentrated in the areas with heavy snow. **House Finch** numbers seem to be low. There were reports of **White-winged Crossbills** in Tucker County(JN). **Common Redpolls** made single appearances in Mercer(AM) and Wetzel(WJ) counties. **Pine Siskins** and **Evening Grosbeaks** seemed concentrated in the areas that received heavy snow. Over 100 **Pine Siskins** were visiting feeders in Summers(JP) and Tucker(JN) counties. The bulk of the **Evening Grosbeaks** seemed to be in Canaan Valley(JN).

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Erratum

On page 47 of “Field Notes” for the January, 1998 issue of *The Redstart* (Volume 65, Number 1), delete Golden-winged Warbler for Ritchie County and add Brewster’s Warbler for Ritchie County (VC).