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The REDSTART

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The Brooks Bird Club, Inc.

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1989 Foray Area Survey

Albert R. Buckelew Jr.

We held the 50th annual Foray of the Brooks Bird Club at Camp Pioneer east of Beverly in Randolph County, West Virginia, June 8-17, 1989. Randolph County is the largest county in West Virginia, consisting of 1046 square miles. It is drained by Shavers Fork of the Cheat River in the east and the Tygart Valley River in the west. Glady Fork, Laurel Fork, Dry Fork, and Gandy Creek, all tributaries of the Cheat, run to the north in the northeast of the county. In between these streams are north-south mountain ridges, Rich Mountain in the west, Cheat Mt., Shaver's Mt., Middle Mt., another Rich Mt., Little Middle Mt., and Allegheny Mt., which forms the eastern border of the county. Elevations exceed 4000 ft. on some knobs. Bickle Knob to the north of Beverly rises to 4000 ft., Cheat Mt. east of Beverly is 3800 ft., Yokum Knob above the Sinks of Gandy is at 4270 ft. The elevation at Beverly is 1946 ft., and elevations down the valley to the north are all under 2000 ft. Forest types range from mesic hardwoods in the valley to spruce, hemlock, and yellow birch at higher elevations. We were able to find a remarkable variety of birdlife and plants because of the diversity of habitats available in Randolph County. Indeed, on one steep mountainside, some of us were able to hear Winter Wrens and Kentucky Warblers singing at the same time, the wrens far above us and the warblers in the valley below. We found many low elevation birds (orioles, Kentucky and Cerulean Warblers) in the Tygart Valley, and birds such as Red Crossbills, Golden-crowned Kinglets, Red-breasted Nuthatches, Swainson's Thrushes, and Mourning Warblers at the higher reaches of Cheat Mt. and Shaver's Mt.

Much of Randolph County is in the Monongahela National Forest. Coal mining, timber industries, limestone quarries, livestock, fruit and tobacco farms are important to the county economy. We visited Kumbrabow State Forest, The Rich Mt. Civil War Battle Field, the High Falls of the Cheat River, Sinks of Gandy, and Gaudineer Knob. In spite of very wet weather, we covered 14 10-mile breeding bird survey routes and three singing male census plots. All agreed that Beverly was a fine place to have a foray, and we look forward to returning some year.

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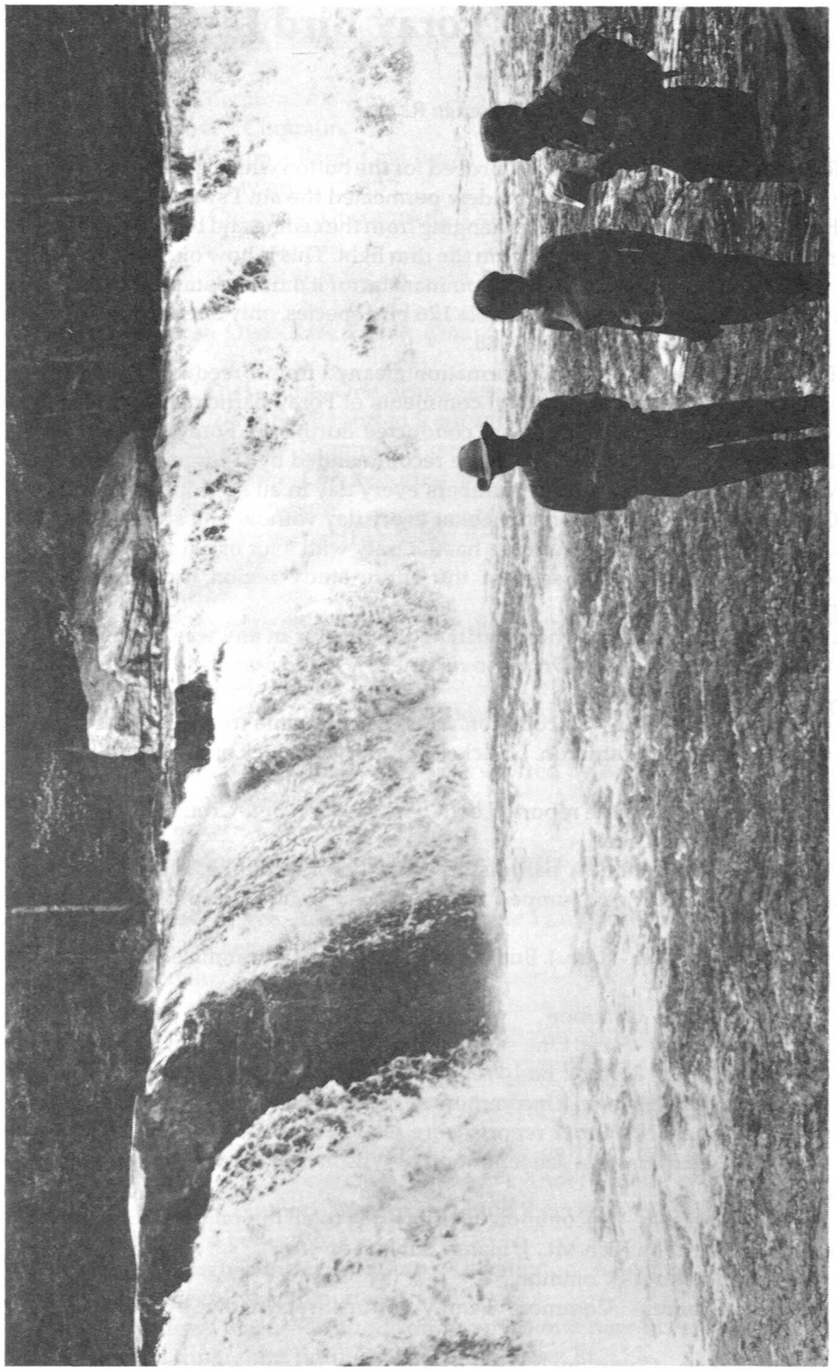


The High Falls of Cheat (All photographs by A. R. Buckelew Jr.)

The 1989 Foray Bird List

Thomas R. Fox

Rain! Rain! Rain! At 3:45 a.m. as I probed for the button which quiets the alarm on my watch, the pungent smell of mildew permeated the air. I switched on my pen light and the wet clothes and shoes hanging from the ceiling and bunks of the men's dorm had the appearance of ghosts in the dim light. This is how our days started at the 1989 Foray. Although rain was a dominant factor it did not dampen the spirits of participants who amassed a remarkable 126 bird species, only one short of the total attained at Camp Pocahontas in 1988.

This list was compiled from information gleaned from Breeding Bird Surveys, Singing Male Censuses and written comments of Foray participants. There were three censuses and fourteen surveys conducted during the Foray.

The abundance terms used are those recommended by George A. Hall:

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.

I would like to thank all who contributed to this list in any way.

1. **Great Blue Heron** - Rare. Only two reported. J. Wood saw one flying over camp and Dr. Bush reported one.
2. **Green-backed Heron** - Uncommon. Most reports came from the Dailey area.
3. **Canada Goose** - Uncommon. J. Buckelew reported a flock of seven adults on the Tygart Valley River.
4. **Wood Duck** - Rare. One reported by R. Phalzgraf on Bell-Crouch Road and one by A. Eddy at Scott Lake.
5. **Mallard** - Uncommon. A pair disturbed by an otter on the Tygart River near Dailey, M. Kiff and a pair jumped from a beaver pond on top of Cheat Mt., T. Fox et al.
6. **Hooded Merganser** - Rare. J. Buckelew reported a first year male on a farm pond NW of Beverly.
7. **Turkey Vulture** - Common.
8. **Northern Harrier** - Rare. One seen hunting on Barton's Knob, J. Ward et al.
9. **Cooper's Hawk** - Rare. A. Eddy reported one near Kumbrabow.
10. **Red-shouldered Hawk** - Uncommon. A. Pyle and R. Phalzgraf reported one for the week on Cheat Mt. Other reports were scattered.
11. **Broad-winged Hawk** - Uncommon. L. Wilson reported an adult with two young.
12. **Red-tailed Hawk** - Uncommon. Possibly due to all the rain, J. Buckelew. Nest with young found on Rich Mt., J. Slater, Elmo et al.
13. **American Kestrel** - Common.
14. **Ruffed Grouse** - Common. Family groups reportedly by several commentators.
15. **Wild Turkey** - Common. J. Wood reported two family groups on Cheat Mt.

16. **Killdeer** - Common.
17. **American Woodcock** - Rare. Only one reported by B. Thompson at his study area in the swamp.
18. **Rock Dove** - Common.
19. **Mourning Dove** - Common.
20. **Black-billed Cuckoo** - Rare. One by A. Pyle et al. on a BBS and one by B. Thompson on his study area.
21. **Yellow-billed Cuckoo** - Uncommon. Only five reported on fourteen BBS runs.
22. **Barn Owl** - Rare. Heard twice by DNR biologist Steve Brown near camp, J. Buckelew.
23. **Eastern Screech-Owl** - Rare. Family group found on B. Thompson's study area, M. Fox.
24. **Great Horned Owl** - Rare. One heard near camp by R. Gelis.
25. **Barred Owl** - Common. Reported from several areas.
26. **Common Nighthawk** - Common. Common in Elkins, E. Hutton.
27. **Whip-poor-will** - Rare. One reported near Camp Pioneer by E.E. Hutton.
28. **Chimney Swift** - Common.
29. **Ruby-throated Hummingbird** - Uncommon. Possibly affected by the rainy weather.
30. **Belted Kingfisher** - Common.
31. **Red-headed Woodpecker** - Rare. Only one seen by R. Bell's group near Mill Creek.
32. **Red-bellied Woodpecker** - Uncommon. Only four found on BBS.
33. **Downy Woodpecker** - Uncommon. Only four reported on fourteen BBS runs.
34. **Hairy Woodpecker** - Uncommon. Pairs reported by A. Eddy and R. Phalzgraf. Nest found by J. Buckelew and J. Fox.
35. **Northern Flicker** - Common.
36. **Pileated Woodpecker** - Uncommon. Only three reported on BBS runs, but reported on two of the three Census plots.
37. **Eastern Wood-Pewee** - Common. 49 reported on BBS runs.
38. **Acadian Flycatcher** - Common.
39. **Alder Flycatcher** - Uncommon. A. Eddy reported three on the State Wetland near Mill Creek and B. Thompson reported one on his study area.
40. **Willow Flycatcher.** Uncommon. But several were reported.
41. **Least Flycatcher** - Uncommon. Not very well distributed. Only four reported on BBS runs.
42. **Eastern Phoebe** - Common.
43. **Great Crested Flycatcher** - Common. Twenty-one reported on BBS runs.
44. **Horned Lark** - Rare. Found only at Barton's Knob, J. Ward et al.
45. **Tree Swallow** - Common. J. Buckelew found them around beaver ponds and in fields with bluebird boxes.
46. **Northern Rough-winged Swallow** - Uncommon. A few reported along the Tygart Valley River. None reported on BBS.
47. **Cliff Swallow** - Rare. B. Thompson reported one near his study area and A. Eddy reported three pairs north east of Elkins along Rt. 219.

48. **Barn Swallow** - Very Common.
49. **Blue Jay** - Common.
50. **American Crow** - Very Common.
51. **Common Raven** - Common. At the higher altitudes.
52. **Black-capped Chickadee** - Common.
53. **Tufted Titmouse** - Common.
54. **Red-breasted Nuthatch** - Uncommon. Present in the spruce forest at the higher altitudes.
55. **White-breasted Nuthatch** - Common.
56. **Brown Creeper** - Uncommon. In the spruce forest especially near beaver ponds, J. Buckelew.
57. **Carolina Wren** - Common.
58. **House Wren** - Common.
59. **Winter Wren** - Common. At the higher altitudes.
60. **Golden-crowned Kinglet** - Common. In the spruce forest.
61. **Blue-gray Gnatcatcher** - Common.
62. **Eastern Bluebird** - Common.
63. **Veery** - Common. In association with the spruce forest.
64. **Swainson's Thrush** - Uncommon. Heard on Cheat Mt. J. Wood.
65. **Hermit Thrush** - Common. In the spruce forest, L. Wilson.
66. **Wood Thrush** - Common.
67. **American Robin** - Very Common.
68. **Gray Catbird** - Common.
69. **Northern Mockingbird** - Rare. Only one reported on 14 BBS runs, Bell, Wilson et al.
70. **Brown Thrasher** - Uncommon. Pair with young at cemetery near camp, J. Wood.
71. **Cedar Waxwing** - Very Common.
72. **European Starling** - Very Common.
73. **White-eyed Vireo** - Uncommon. Only seven found on 14 BBS runs.
74. **Solitary Vireo** - Common. Readily found in their habitat.
75. **Yellow-throated Vireo** - Uncommon. Most commentators felt it was rare, however, nine were found on BBS runs.
76. **Warbling Vireo** - Rare. N. Laitsch found one along the Tygart Valley River. None were found on the BBS runs.
77. **Red-eyed Vireo** - Very Common. The most abundant bird on the BBS runs.
78. **Golden-winged Warbler** - Uncommon. M. Kiff found four during the Foray and four were found on BBS runs.
79. **Northern Parula** - Common.
80. **Yellow Warbler** - Common.
81. **Chestnut-sided Warbler** - Common.
82. **Magnolia Warbler** - Common.
83. **Black-throated Blue Warbler** - Common.
84. **Yellow-rumped Warbler** - Rare. Gaudineer Knob, E. Hutton et al. and Cheat Mt. on BBS run by A. Pyle et al.
85. **Black-throated Green Warbler** - Common.
86. **Blackburnian Warbler** - Common. In the spruce forest.

87. **Yellow-throated Warbler** - Rare. Only two found, one by Pyle, Phalzgraf on a BBS run on Bell-Crouch Road and the other by Laitsch, Eddy, Hurley and Hall at intersection of Rt. 6 and Rt. 9.
88. **Prairie Warbler** - Rare. One found on BBS run and two by A. Eddy and N. Laitsch.
89. **Cerulean Warbler** - Uncommon.
90. **Black-and-White Warbler** - Common.
91. **American Redstart** - Common.
92. **Worm-eating Warbler** - Rare. None found on BBS runs.
93. **Ovenbird** - Common.
94. **Northern Waterthrush** - Uncommon. Found at higher elevations near beaver ponds, J. Buckelew.
95. **Louisiana Waterthrush** - Uncommon. Only 13 found on the BBS runs.
96. **Kentucky Warbler** - Uncommon. One on Rich Mt., one near camp and one by Bell et al. on a BBS run.
97. **Mourning Warbler** - Uncommon. But could be found in its appropriate habitat.
98. **Common Yellowthroat** - Common.
99. **Hooded Warbler** - Common.
100. **Canada Warbler** - Common. At higher elevations, J. Buckelew.
101. **Yellow-breasted Chat** - Rare. Only two found on BBS runs and no others reported.
102. **Summer Tanager** - Rare. A pair was seen at Helvetia by A. Pyle, R. Phalzgraf et al.
103. **Scarlet Tanager** - Common.
104. **Northern Cardinal** - Common.
105. **Rose-breasted Grosbeak** - Uncommon. But could be found in its appropriate habitat, K. Bush.
106. **Indigo Bunting** - Very Common.
107. **Rufous-sided Towhee** - Very Common. One of the most widely distributed species.
108. **Chipping Sparrow** - Very Common.
109. **Field Sparrow** - Common.
110. **Vesper Sparrow** - Uncommon. Found on reclaimed surface mines at higher elevations, Barton's Knob and Rich Mt., J. Buckelew.
111. **Savannah Sparrow** - Uncommon. Several found in the fields near Beverly, A. Eddy.
112. **Song Sparrow** - Very Common. One of the most widely distributed species.
113. **Swamp Sparrow** - Rare. One found at the Valley Bend Wetland, G. Hurley, A. Eddy and R. Garn and one behind the Reidboard Shirt Factory, E.E. Hutton.
114. **Dark-eyed Junco** - Common.
115. **Bobolink** - Uncommon. With the abundance of habitat, I would have expected more.
116. **Red-winged Blackbird** - Very common.
117. **Eastern Meadowlark** - Very Common.
118. **Common Grackle** - Very Common.

119. **Brown-headed Cowbird** - Common.
120. **Orchard Oriole** - Uncommon. Only three found on BBS runs.
121. **Northern Oriole** - Uncommon. Only seven found on BBS runs.
122. **Purple Finch** - Common. In the spruce forest, J. Buckelew.
123. **House Finch** - Common.
124. **Red Crossbill** - Rare. Found on top of Cheat Mt. by J. Ward et al.
125. **American Goldfinch** - Common.
126. **House Sparrow** - Common.

Rt. 1 Box 420
Millstone, WV 25261

The 1989 Foray Singing Male Census

Virginia Johnson

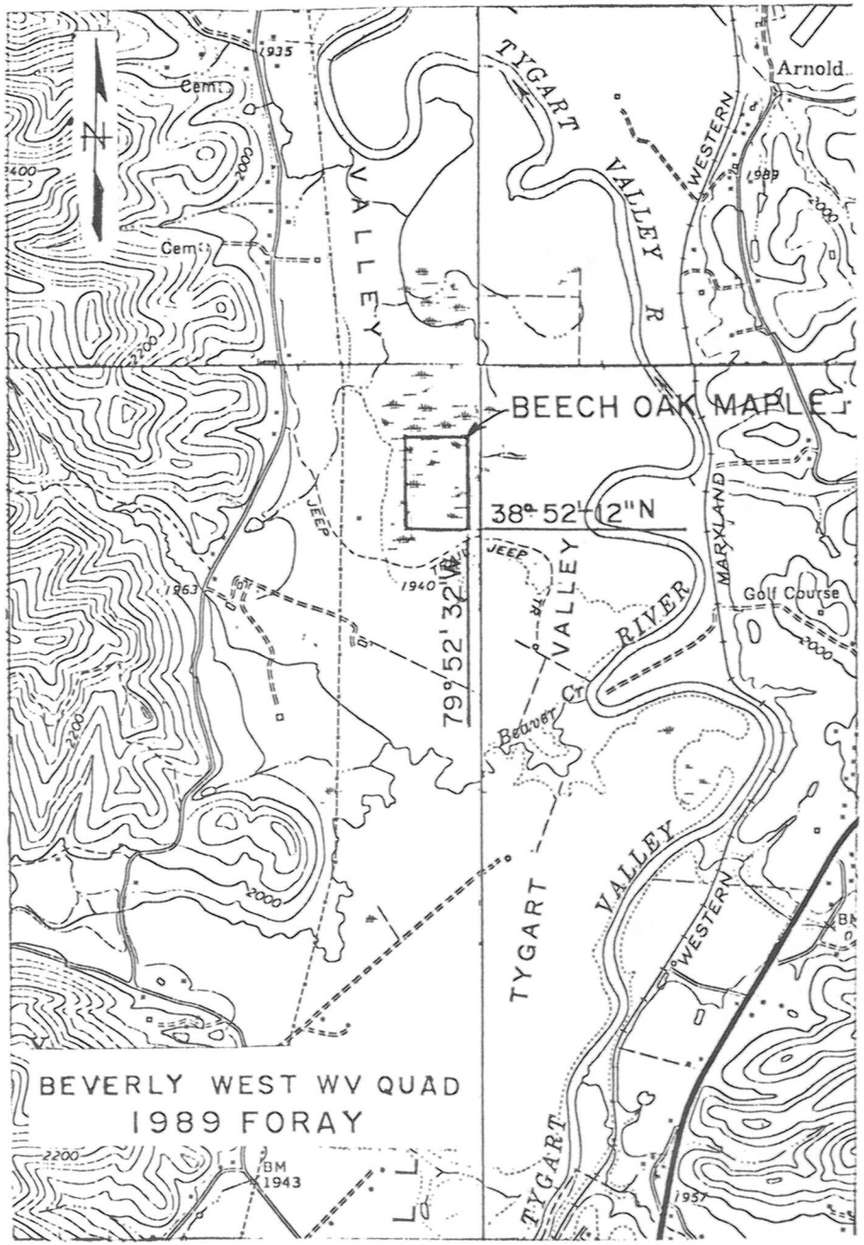
BEECH-OAK-MAPLE SWAMP — Location: West Virginia, Randolph Co.; 2 miles N of Beverly on the property of Harry H. (Bud) Cupp III. Southeast corner begins at 38° 52′ 12″N, 79° 11′ 52″W; Beverly West Quadrangle, USGS, east side extends north. Continuity: New. Size: 6′07 ha = 15.0 acres (660 x 990 ft. rectangle). Description of Plot: A very marshy woodlot; water depth 0.5″-2.5 ft. The dominant canopy trees are American Beech *(Faqus grandifola)*, Oak *(Quercus sp.)*, and Maple *(Acer sp.)*. Most prominent in the understory are Arrowwood *(Viburnum sp.)*, and seedlings of the canopy trees. The ground cover is primarily Skunk Cabbage *(Symplocarpus foetidus)*, Dewberries *(Rubus sp.)*, and ferns, reeds, rushes, and grass. A quantitative survey of the vegetation gave these results: Trees 3-inches diameter and over, based on four 0.1 acre samples: 175/acre; total basal area 95.5 sq. ft./acre. Species comprising 90% of the total number of trees: American Beech, 60, 34, 28, 75; Swamp White Oak *(Q. bicolor)*, 15, 10, 15, 50; Red Oak *(Q. rubra)* 5, 3, 2, 25; Red Maple *(A. rubrum)*, 35, 20, 15, 75; Black Gum *(Nyassa sylvatica)*, 18, 10, 10, 75; Serviceberry *(Amelanchier sp.)*, 15, 9, 2, 75; Dead trees, 13, 7, 24, 50. Figures that follow each species denote number of trees per acre, relative density %, relative dominance %, and relative frequency. Trees by diameter size class: A (3-6 in.) 83, 47, 8, 9; B (6-9 in.) 28, 16, 8, 9; C (9-15 in.) 50, 29, 40, 42; D (15-21 in.) 10, 6, 18, 19; E (21-27 in.) 3, 1, 8, 8; F (27-33 in.) 3, 1, 12, 13. Figures following each class show number of trees per acre, relative density, basal area per acre for that class, and relative dominance. Shrub stems per acre, 1850; ground cover 83%; canopy cover 52%; average canopy height 52 ft. (range 20-68). Edge: Like forest on one end and side; other side and end have alder and other marsh plants reverting to forest after unsuccessful attempts to drain and farm. Topography: Level swamp at elevation of 1920 ft. Weather: Mostly calm, cool to warm, partly cloudy to overcast, drizzle several days during actual census, some heavier rainfall, but not during census. Coverage: June 6-14, 1989. All trips between dawn and 0810 hours, or 1930 and 2040 hours EDT. Total party hours: 17.5. Census: White-breasted Nuthatch, 5.5 (91, 37); Northern Cardinal, 4 (66, 27); Blue-gray Gnatcatcher, 3.5 (58, 23); Red-eyed Vireo, 3 (49, 20); Gray Catbird, 2.5; Common Yellowthroat, 2.5; Red-bellied Woodpecker, 2; White-

Beech-Oak-Maple Swamp Singing Male Census Plot

eyed Vireo, 2; Indigo Bunting, 2; Downy Woodpecker, 1.5; Tufted Titmouse, 1.5; House Wren, 1.5; Wood Thrush, 1.5; Rufous-sided Towhee, 1.5; Song Sparrow, 1.5; Carolina Wren, 1; Brown-headed Cowbird, 1; Mourning Dove, +; Eastern Screech Owl, +; Northern Flicker, +; Hairy Woodpecker, +; Pileated Woodpecker, +; Great Crested Flycatcher, +; Eastern Wood Pewee, +; Blue Jay, +; American Crow, +; Black-capped Chickadee, +; American Robin, +; Cedar Waxwing, +; Golden-winged Warbler, +; Yellow-breasted Chat, +; Field Sparrow, +; Common Grackle, +; American Goldfinch, +. Total: 34 species; 38 territorial males (626/sq. km., 253/100 acres). Visitors: Killdeer, American Woodcock, Turkey Vulture, Red-tailed Hawk, Black-billed Cuckoo, Ruby-throated Hummingbird, Red-headed Woodpecker, Alder Flycatcher, Willow Flycatcher, Cliff Swallow, Barn Swallow, Common Raven, Eastern Bluebird, Brown Thrasher, Black-and-white Warbler, Yellow Warbler, Hooded Warbler. Comments: A Common Yellowthroat nest with 3 eggs, a Hairy Woodpecker nest, and a Screech Owl family (1 adult, 2 fledglings, all red phase) were found on the plot. Poison Sumac (*Rhus vernix*) was also located in several areas on the plot. Many thanks to A. R. Buckelew, Jr., Tom Fox and Bill Smith for their help. Participants: Lynn Barnhart, A. R. Buckelew, Jr., Julie Dolensky, Janice Emrick, Scott Emrick, Jay Fox, Matt Fox, Tom Fox, Rudy Gelis, Bryan Hogan, Eugene Hutton, Andrew Jacobs, Carol McCullough, Fred McCullough, Bob Rine, Juanita Slater, Bill Smith, Andy Thompson, Bill Thompson (compiler), Gordon Vujevic, Judy Ward, Amy Witsberger.

OAK-TULIPTREE-CHERRY — Location: West Virginia; Randolph Co.; 4.5 miles E of Beverly; SE corner at 38° 50′ 25″N; 79° 47′, Beverly East Quadrangle, USGS with sides extending N & W. Continuity: New. Size: 12.14 ha = 30 acres. Description of Plot: Mature deciduous forest. The dominant canopy trees are Oak *(Quercis sp.)*, Tuliptree *(Liriodendron tulipifera)*, and Black Cherry *(Prunus serotina)*. Most prominent in the understory are Witch Hazel *(Hamamelis virginiana)*, Striped Maple *(Acer pensylvanicum)*, and seedlings of the canopy trees. The ground cover is primarily Greenbriar *(Smilax sp.)*, ferns and *Lycopodium*. A quantitative vegetation survey gave the following results: Trees 3-inches diameter and over, based on four 0.1 acre circular samples: 233/acre; total basal area 216 sq. ft./acre. Species comprising 90% of the total number of trees: White Oak *(Q. alba)*, 15, 6, 49, 75; Red Oak *(Q. rubra)*, 10, 4, 19, 75; Tuliptree, 20, 9, 34, 100; Black Cherry, 16, 6, 22, 75; Shagbark Hickory *(Carya ovata)*, 25, 11, 17, 50; Red Maple *(Acer rubrum)*, 17, 8, 12, 75; Sugar Maple *(A. saccharum)*, 15, 6, 7, 25; Cherry Birch *(Betula lenta)*, 15, 6, 3, 75; American Hornbeam *(Carpinus caroliniana)*; 13, 5, 1, 75; Serviceberry *(Amelanchier sp.)*, 8, 3, 1, 25; Dead trees, 55, 24, 35, 100. Figures following each species denote number of trees per acre, relative density %, relative dominance %, and relative frequency. Trees by diameter size class; A (3-6 in.) 85, 37, 9, 4; B (6-9 in.) 50, 22, 15, 7; C (9-15 in.) 43, 18, 34, 16; D (15-21 in.) 35, 15, 63, 29; E (21-27 in.) 35, 15, 23, 11; F (27-33 in.) 8, 3, 37, 17; G (33-40 in.) 5, 2, 36, 16. Figures following each class show number of trees per acre, relative density, basal area per acre for that class, and relative dominance. Shrub stems per acre, 1650; ground cover 38%; canopy cover 83%; average canopy height 92 ft. (range 76-102). Edge: similar on all sides. Topography: sloping hillside. Elevation: 2520 to 2720 ft. Weather: cool, damp. Coverage: June 10-14, 1989. All trips between dawn and 0645 hours EDT. Total party-hours: 9.5. Census: Red-eyed Vireo, 8.5 (71, 28); Ovenbird, 4.5 (38, 15); Eastern Wood Pewee, 3 (25, 10); Magnolia Warbler, 3 (25, 10); Veery, 2.5; Wood Thrush, 2; Acadian Flycatcher, 1.5; Black-capped Chickadee, 1; Tufted Titmouse, 1; White-breasted Nuthatch, 1; Black-throated Blue Warbler, 1; Black-throated Green

Oak-Tuliptree-Cherry Singing Male Census Plot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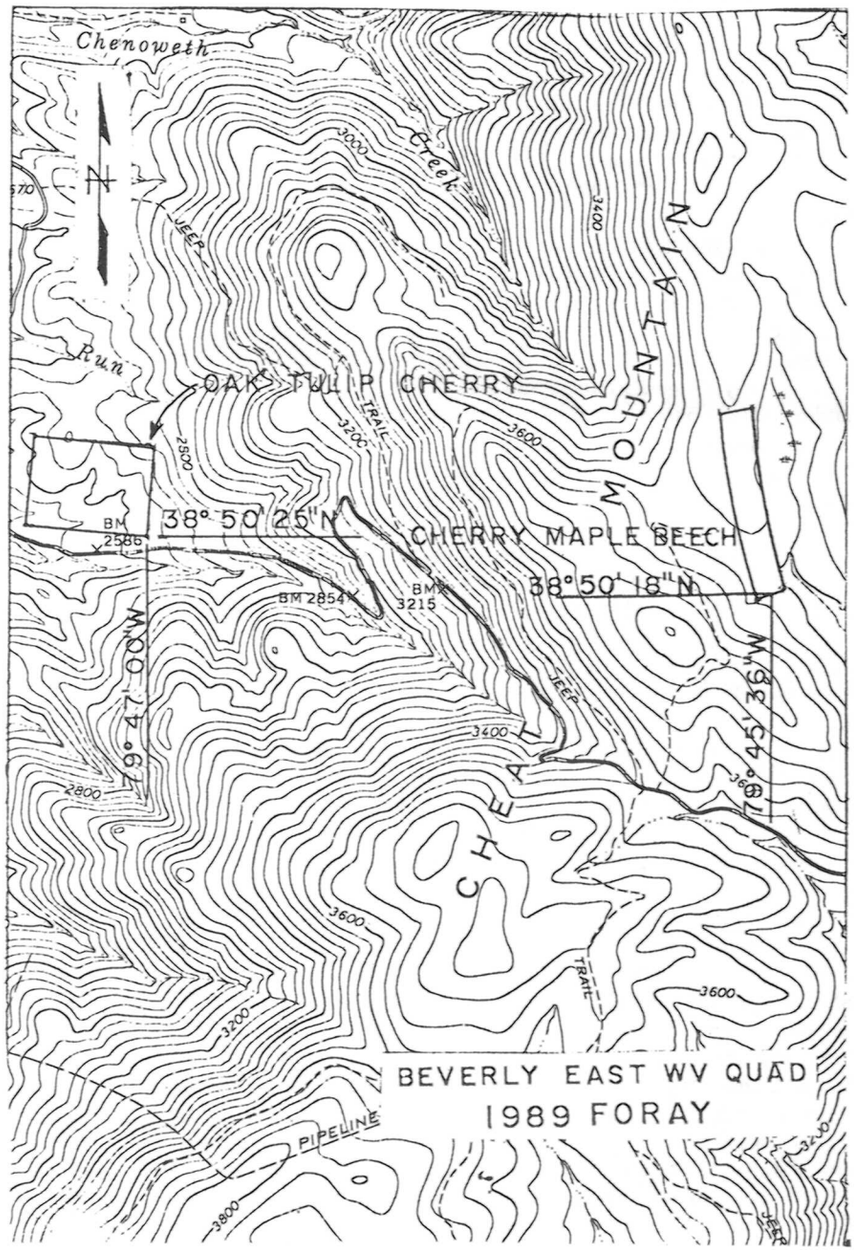
TYGART VALLEY R
WESTERN
1989
VALLEY
BEECH OAK MAPLE
38° 52' 12"N
JEEP
JEEP
1940
1963
79°52' 32"W
MARYLAND
Golf Course
VALLEY RIVER
Beaver Cr.
TYGART VALLEY
WESTERN
TYGART
BEVERLY WEST WV QUAD
1989 FORAY
BM
1943
1937


Chenoweth
Creek
Run
JEEP
OAK TULIP CHERRY
TRAIL
38° 50' 25"N
BM
2586
BM 2854
BM
3215
CHERRY MAPLE BEECH
38° 50' 18"N
79° 47' 00"W
79° 45' 36"W
MONONGAHELA
CHEAT
JEEP
TRAIL
PIPELINE
BEVERLY EAST WV QUAD
1989 FORAY

Warbler, 1; Scarlet Tanager, 1; Indigo Bunting, 1; Barred Owl, +; Pileated Woodpecker, +; Great Crested Flycatcher +. Total: 17 species; 32 territorial males (320/sq. km., 106/100 acres). Visitors: American Crow, Common Raven, Brown-headed Cowbird. Comments: During our morning surveys the woods were very wet, even though it wasn't raining, and there are no edges in this 30 acre plot; both of these factors combined to make fewer species than I would have expected. There was, however, a felled tree and the Indigo Bunting took advantage of this small clearing. I want to thank Emily Grafton, Virginia Johnson, Judy Ward and Gordon Vujevic for helping on this study plot with me. Census participants: Robert Dew, Anne Eddy (compiler), Janice and Scott Emrick, Russell Garn, Emily Grafton, Brian Hogan, George Hurley, Virginia Johnson, David Offutt, Roberta Quattlebaum, Elsa Thompson, Judy Ward, Rebecca Wilson, Gordon Vujevic.

BEECH-CHERRY-MAPLE — Location: West Virginia; Randolph Co.; 6 miles E of Beverly; center line begins at 38° 50′ 18″N; 79° 45″ 36″W, Beverly Quadrangle, USGS and extends N. Continuity: New. Size: 6.07 ha = 15.0 acres (110 x 660 yards). Description of Plot: A mature, slightly mixed, mountain-top forest cut over approximately 30 years ago. The three dominant canopy trees are American Beech *(Fagus grandifolia)*, Black Cherry *(Prunus serotina)*, and Red Maple *(Acer rubrum)*. Most prominent in the understory are Serviceberry *(Amelanchier sp.)* and Dogwood *(Cornus sp.)* The ground cover is primarily ferns and mosses. A quantitative survey of the vegetation gave the following results: Trees 3-inches diameter and over, based on six 0.1 acre circular samples, 334/acre; total basal area 128 sq. ft./acre. Species comprising 90% of the total number of trees: American Beech, 72, 22, 15, 66; Black Cherry, 36, 11, 15, 66; Red Maple, 33, 11, 15, 66; Yellow Birch *(Betula alleghaniensis)*, 32, 10, 8, 83; Sugar Maple *(Acer saccharum)*, 27, 9, 4, 50; Black Birch *(Betula lenta)*, 18, 6, 3, 83; Eastern Hemlock *(Tsuga canadensis)* 15, 5, 3, 17; Mountain Magnolia *(Magnolia fraseri)*, 13, 4, 5, 50; Red Spruce *(Picea rubens)*, 8, 3, 10, 17; Dead, 47, 14, 13, 100. Figures that follow each species denote number of trees per acre, relative density %, relative dominance %, and relative frequency. Trees by diameter size class: A (3-6 in.) 153, 47, 15, 12; B (6-9 in.) 78, 24, 23, 18; C (9-15 in.) 75, 23, 60, 47; D (15-21 in.) 13, 4, 24, 19; E (21-27 in.) 2, 1, 5, 4. Figures following each class show number of trees per acre, relative density, basal area per acre for that class, and relative dominance. Shrub stems/acre 1000; ground cover 48%; canopy cover 93%; average canopy height 71 ft. (range 58-89). Edge: Same on all sides except bordered by a swamp on the northern half of the eastern side. Topography: The center line follows a gated fairly level access road with the plot sloping up on the SW corner and down on the SE corner. Elevation: 3620-3640 ft. Weather: Cool and cloudy with intermittent showers; windy several mornings. Coverage: June 10-14, 1989. All trips between dawn and 0750 hours or 2015 and 2110 hours EDT. Total party hours: 12.5. Census: Red-eyed Vireo, 3.5 (58, 23); Veery 3 (49, 20); Golden-crowned Kinglet, 2.5; Black-capped Chickadee, 2; Hermit Thrush, 2; Magnolia Warbler, 2; Canada Warbler, 2; Dark-eyed Junco, 2; Rose-breasted Grosbeak, 1.5; Red-breasted Nuthatch, 1; White-breasted Nuthatch, 1; Brown Creeper, 1, Solitary Vireo, 1; Black-throated Blue Warbler, 1; Blackburnian Warbler, 1; Ovenbird, 1; Mourning Warbler, 1; Rufous-sided Towhee, 1; Wood Thrush, .5; Ruffed Grouse, +; Hairy Woodpecker, +; Blue Jay, +; Winter Wren, +; American Robin, +; Chestnut-sided Warbler, +; Northern Waterthrush, +; Purple Finch, +. Total: 27 species; 30 territorial males (494/sq. km., 200/100 acres). Visitors: Mallard, Barred Owl, Common Raven, Cedar Waxwing, Black-throated Green Warbler, Scarlet Tanager. Comments: The first three stations, starting at southern end, were in a mostly coniferous forest. Census Participants: Janice and Scott Emrick, Dawn and Tom

Beech-Cherry-Maple Singing Male Census Plot

Fox, Russell Garn, Emily Grafton, Virginia Johnson, Cindy and Juanita Slater, Bill Smith, Gordon Vujevic, Judy Ward (compiler), Roy Ward, Amy Witsberger. Vegetation Surveyors: John and Julie Dolensky, Janice and Scott Emerick, Dawn, Matt and Tom Fox, Virginia Johnson, Carol and Fred McCullough, Cindy Slater, Bill Smith, Bill Thompson, Judy Ward.

25 Robinson St.
Uniontown, PA 15401

The 1989 Foray Breeding Bird Surveys

Ralph K. Bell

A total of 3521 individual birds of 101 species were counted on the surveys during the 1989 Foray in Randolph County, W.Va. Three teams participated in 14 separate 10-mile routes within the Foray territory. Each team takes a new route each day and stops every half mile for 3 minutes to record all birds seen or heard and then moves on to the next stop. We tried to start each route approximately a half hour before sun-rise.

TABLE 1
NUMBERS OF BIRDS BY SPECIES
(and number of stops where found)

Species	Number	Stops Present
Green-backed Heron	4	4
Canada Goose	7	1
Mallard	3	2
Turkey Vulture	2	2
Sharp-shinned Hawk	1	1
Red-shouldered Hawk	1	1
Broad-winged Hawk	1	1
American Kestrel	2	2
Wild Turkey	2	2
Killdeer	10	7
Rock Dove	4	2
Mourning Dove	38	32
Black-billed Cuckoo	1	1
Yellow-billed Cuckoo	5	5
Chimney Swift	21	14
Ruby-throated Hummingbird	2	2
Belted Kingfisher	3	3
Red-bellied Woodpecker	4	4
Downy Woodpecker	4	4
Hairy Woodpecker	2	1
Pileated Woodpecker	3	3
Yellow-shafted Flicker	13	13
Eastern Wood Pewee	49	43
Acadian Flycatcher	20	17

Species	Number	Stops Present
Alder Flycatcher	1	1
Willow Flycatcher	12	9
Least Flycatcher	4	4
Great Crested Flycatcher	21	21
Eastern Phoebe	45	40
Eastern Kingbird	5	5
Tree Swallow	4	2
Barn Swallow	37	23
Blue Jay	32	23
American Crow	196	113
Common Raven	8	6
Black-capped Chickadee	50	42
Tufted Titmouse	56	53
Red-breasted Nuthatch	1	1
White-breasted Nuthatch	16	12
Brown Creeper	1	1
Carolina Wren	26	23
House Wren	54	40
Winter Wren	7	5
Golden-crowned Kinglet	5	5
Blue-gray Gnatcatcher	21	16
Eastern Bluebird	21	14
Veery	59	47
Hermit Thrush	15	14
Wood Thrush	152	100
American Robin	295	140
Gray Catbird	69	52
Northern Mockingbird	1	1
Brown Thrasher	10	9
Cedar Waxwing	37	21
European Starling	63	21
White-eyed Vireo	7	6
Solitary Vireo	17	15
Yellow-throated Vireo	9	8
Red-eyed Vireo	373	184
Golden-winged Warbler	4	3
Northern Parula Warbler	12	11
Yellow Warbler	49	43
Chestnut-sided Warbler	31	25
Magnolia Warbler	15	13
Black-throated Blue Warbler	17	15
Yellow-rumped Warbler	1	1
Black-throated Green Warbler	38	33
Blackburnian Warbler	3	3
Yellow-throated Warbler	1	1
Prairie Warbler	1	1

Species	Number	Stops Present
Cerulean Warbler	6	6
Black-and-white Warbler	17	16
Kentucky Warbler	1	1
Hooded Warbler	38	27
Canada Warbler	24	16
American Redstart	15	11
Ovenbird	30	24
Louisiana Waterthrush	13	13
Mourning Warbler	3	2
Common Yellowthroat	54	50
Yellow-breasted Chat	2	2
Scarlet Tanager	45	42
Northern Cardinal	59	50
Rose-breasted Grosbeak	40	34
Indigo Bunting	212	148
Rufous-sided Towhee	103	84
Chipping Sparrow	111	83
Field Sparrow	49	41
Savannah Sparrow	4	4
Song Sparrow	113	88
Dark-eyed Junco	47	37
Bobolink	1	1
Red-winged Blackbird	155	60
Eastern Meadowlark	51	39
Common Grackle	74	23
Brown-headed Cowbird	37	27
Orchard Oriole	3	3
(Northern) Oriole	7	5
House Finch	15	7
American Goldfinch	45	26
House Sparrow	47	20

TABLE 2
MOST WIDELY DISTRIBUTED SPECIES

Species	Stops Present	% of Stops
Red-eyed Vireo	184	65.7
Indigo Bunting	148	52.8
American Robin	140	50:0
American Crow	113	40.3
Wood Thrush	100	35.7
Song Sparrow	88	31.4
Rufous-sided Towhee	84	30.0
Chipping Sparrow	83	29.6
Red-winged Blackbird	60	21.4
Tufted Titmouse	56	18.9

Table 3 lists the 25 most abundant species found on the Breeding Bird Surveys. Some Birders were concerned that the extremely dry summer of 1988 and the continuous rainy weather during May 1989 might have a negative effect on some bird species. Therefore, I have compared the abundance percentages of the top 25 species encountered this year with those same species at the nearby 1988 Foray. The Foray centers were approximately 20 miles apart causing the territories to overlap somewhat.

As can be noted by the abundance percentages, the unusual weather conditions of 1988 and 1989 were not disasterous to any of the following species. The Scarlet Tanager showed the greatest decline but they should soon recover (actual numbers were 93 individuals in 1988 down to 45 this year). Percentages even suggest that 16 of the following species actually increased in numbers, but this could be caused by a difference of habitats within the Foray areas.

TABLE 3
MOST ABUNDANT SPECIES

Species	Number	%of Total 1989	%of Total 1988
Red-eyed Vireo	373	10.6	10.7
American Robin	295	8.4	8.1
Indigo Bunting	212	6.0	4.8
American Crow	196	5.6	5.1
Red-winged Blackbird	155	4.4	3.3
Wood Thrush	152	4.3	3.4
Song Sparrow	113	3.2	2.3
Chipping Sparrow	111	3.1	2.8
Rufous-sided Towhee	103	3.0	2.2
Common GracklU	74	2.1	3.0
Gray Catbird	69	1.9	1.6
European Starling	63	1.8	1.8
Northern Cardinal	59	1.7	0.5
Veery	59	1.7	3.2
Tufted Titmouse	56	1.6	1.4
House Wren	54	1.5	1.6
Common Yellowthroat	54	1.5	1.6
Eastern Meadowlark	51	1.4	2.1
Black-capped Chickadee	50	1.4	2.2
Eastern Wood Pewee	49	1.4	0.9
Yellow Warbler	49	1.4	0.9
Field Sparrow	49	1.4	1.0
Dark-eyed Junco	47	1.3	2.4
House Sparrow	47	1.3	0.6
Scarlet Tanager	45	1.3	2.7

Last year (1988) 108 species were recorded on the 13 routes (260 stops) at the nearby Camp Pocahontas Foray. The species per route ranged from 35-55, averag-

ing 43.1 species per route. This year (1989) 101 species were found on the 14 routes (280 stops). The species per route ranged from 31-56, averaging 45.2 species per route.

Interest in the Breeding Bird Surveys was higher than ever during the 1989 Foray and the followin people participated in one or more of the surveys: Ken Anderson, C. David Bell, Beth Bullard, Jim Bullard, Kyle Bush, Ginnie Cronenberger, Dennis Dawson, Dan Dellatorre, Robert Dew, John Dolensky, Janice Emrick, Scott Emrick, Dawn Fox, Jay Fox, Matt Fox, Tom Fox, Russ Garn, Rudy Gelis, Emily Grafton, Bryan Hogan, Gene Hutton, Ed Ilgenfritz, Andy Jacobs, Judy Knorr, Nevada Laitsch, Carol McCullough, Fred McCullough, Loretta Mullens, David Offutt, Grant Pattison, Reba Pfalzgraf, Ann Pyle, Roberta Quattlebaum, Cindy Slater, Judy Ward, Carolyn Wilson, Rebecca Wilson, Leon Wilson, Jo Wood. Special thanks go to Ann Pyle for her help in collecting a lot of the data.

RD 1, Box 229
Clarksville, Pa, 15322

Breeding Bird Records for the 1989 Foray

Judy Ward

In spite of all the rain at Camp Pioneer, our enthusiastic nest finders came up with 78 nests of 26 species with the American Robin being the most common. A surprising second place went to the Cedar Waxwing with ten nests reported. Our top nest finder for this year was Rudy Gelis, a first year scholarship student. Second honors went to Polly Matthey and third to Jo Wood. Following is a condensed version of the breeding records. These are active nests. Sightings of fledged young are not included.

Species	Obs.	Content	Hbt.	Site	Ele.	Location
Red-tailed Hawk	TRF	A	02	07	3000	NW of Beverly
Am. Kestrel	ADE	1Y	05	08	2600	Valley Bend
Killdeer	RAG	3E	8	01	1920	Kerens
Rock Dove	PBM	2Y	8	barn	2020	Beverly
Mourning Dove	PBM	A	8	09	2020	Beverly
Least Flycatcher	ADE	B	edge	07	2300	Kerens
Eastern Phoebe	RWG	4E		bridge	1982	Valley Bend
Eastern Phoebe	AKB	F	4	bldg.	2000	Elkins
Tree Swallow	RAG	4E	4	11	2020	Camp Pioneer
Tree Swallow	RWG	F	4	11	2000	Beverly
Tree Swallow	PBM	F	8	11	2020	Beverly
Barn Swallow	VLG	A	4	house	2300	E of Beverly
Barn Swallow	RAG	3E	4	barn	2020	Beverly
Barn Swallow	PBM	A	8	barn	2020	Beverly
Barn Swallow	PBM	A	8	barn	2020	Beverly
Barn Swallow	PBM	A	8	barn	2020	Beverly
Black-capped Chickadee	JKE	F	05	post	2400	Helvetia
Black-capped Chickadee	JEW	F	edge	post	2500	Alpena
Carolina Wren	RWG	A	8	house plant	2000	Beverly
Carolina Wren	AKB	F	4	bldg.	2000	Elkins

Species	Obs.	Content	Hbt.	Site	Ele.	Location
House Wren	JEW	F	8	11	1967	Camp Pioneer
Eastern Bluebird	RAG	3E	8	11	2020	Beverly
Eastern Bluebird	LJM	4Y	4	post	2500	Alpena
Eastern Bluebird	JEW	A	8	11	2000	Beverly
Wood Thrush	RWG	3Y	02	07	2200	Beverly
Wood Thrush	LJM	A	03	07	3000	Laurel Fork
Am. Robin	CVC	B	8	07	2000	Elkins
Am. Robin	DEC	B	8	sat dis	2000	Elkins
Am. Robin	SAE	3E	4	05	2250	Huttonsville
Am. Robin	RWG	A	8	07	2000	Kerns
Am. Robin	RAG	2E	8	07	2020	Beverly
Am. Robin	RAG	B	8	07	2020	Beverly
Am. Robin	RAG	A	8	07	2020	Beverly
Am. Robin	RAG	3E	8	09	2020	Beverly
Am. Robin	RAG	4Y	9	07	1920	Kerens
Am. Robin	RAG	A	9	07	1920	Kerens
Am. Robin	RAG	4E	9	barn	1920	Kerens
Am. Robin	RAG	3Y	8	box	2020	Beverly
Am. Robin	GFH	A	8	07	2500	Kerens
Am. Robin	PBM	Y	9	09	1960	Beverly
Am. Robin	PBM	A	8	barn	2020	Beverly
Am. Robin	JEW	B	8	07	2400	Bowden
Am. Robin	JEW	B	08	07		Kelly Mt.
Am. Robin	JEW	A	8	07	2500	Rt. 25
Gray Catbird	RAG	A	4	05	2020	Beverly
Brown Thrasher	LPW	A	08	05	2500	Alpena
Cedar Waxwing	EDC	Y	03	07	2070	Elkins
Cedar Waxwing	RAG	B	8	07	1920	Kerens
Cedar Waxwing	RAG	A	8	09	2020	Camp Pioneer
Cedar Waxwing	PBM	A	8	07	2020	Beverly
Cedar Waxwing	PBM	A	8	07	2020	Beverly
Cedar Waxwing	PBM	B	8	07	2020	Beverly
Cedar Waxwing	DSO	1E	04	07	2200	Beverly
Cedar Waxwing	LPW	B	8	07	2700	Bemis
Cedar Waxwing	JEW	B	8	07	2400	Bowden
Cedar Waxwing	JEW	B	8	07	2200	Beverly
European Starling	PBM	Y	8	house	2000	Elkins
European Starling	PBM	Y	8	08	2000	Elkins
Red-eyed Vireo	RAG	4E	8	07	2020	Camp Pioneer
Chipping Sparrow	RAG	2Y	8	09	2020	Beverly
Chipping Sparrow	PBM	A	8	09	2020	Beverly
Chipping Sparrow	JEW	A	08	09	1967	Camp Pioneer
Chipping Sparrow	JRW	A	04	07	1967	Beverly
Song Sparrow	LPW	5E	5	05	2500	Alpena
Red-winged Blackbird	PBM	2Y+	4	04	2020	Camp Pioneer
Red-winged Blackbird	DSO	4E	4	02	2020	Beverly
Northern Oriole	JKE	A	8	07	2400	Helvetia
House Finch	RAG	3Y	4	11	2020	Beverly
House Finch	RAG	4E	8	05	2020	Beverly
House Sparrow	ERC	F	04	11	2140	Camp Pioneer
House Sparrow	RAG	2Y	8	barn	2020	Beverly
House Sparrow	PBM	F	8	barn	2020	Beverly
House Sparrow	PBM	F	8	house	2020	Camp Pioneer
House Sparrow	PBM	F	8	barn	2020	Camp Pioneer
House Sparrow	PBM	F	8	11	2020	Camp Pioneer
House Sparrow	PBM	Y	8	barn	2020	Camp Pioneer
House Sparrow	JLS	F	04	bldg.	2140	Camp Pioneer

OBSERVER: AKB Kyle Bush, EDC Libby Chandler, ERC Pete Chandler, CVC Carolyn Conrad, DEC Dorothy Conrad, VLC Ginnie Cronenberger, ADE Anne Eddy, JKE Janice Emrick, SAE Scott Emrick, TRF Tom Fox, RAG Rudy Gelis, RWG Russ Garn, GFH George Hurley, PBM Polly Matthey, LJM Loretta Mullens, DSO Dave Offutt, JLS JoLane Stern, LPW Leon Wilson, JEW Jo Wood, JRW Jean Worthley.
CONTENT: A- Adult on the nest. B- Nest being built. E- Eggs. F- Adults feeding young. Y- Young seen in the nest.
HABITAT: 02-deciduous woods, 03-mixed woods, 04-orchard, 05-cultivated, 08-hedgerow, 4-field, 5-grassland, 8-suburban.
NEST SITE: 01-bare ground, 02-on ground in vegetation, 04-in low vegatation, 05-in shrub, 07-deciduous tree branch, 08-deciduous tree cavity, 09-conifer branch, 11-nest box.
ELEVATION: In feet above sea level.
LOCATION: Nearest town or locale.
Thank you to all who participated.

RD 1, Box 1070
Ruffsdale, Pa. 15679

Amphibians and Reptiles of the 1989 Foray

Lynn Barnhart

Class Amphibia
Order Caudata-Salamanders
Family Salamandridae-Newts
Red-spotted Newt, Eft - *(Notophthalmus viridescens viridescens).*
Uncommon. One newt found by Nancy Eddy in camp ponds. Several efts were seen on Cheat Mt. and Gaudineer Knob by Jeremiah Hunter and Lynn Barnhart.
Family Plethodontidae-Lungless Salamanders
Mountain Dusky Salamander - *(Desmognathus ochrophaeus).*
Abundant. Individuals found: near lower Cheat Mt. study plot by N. Eddy, J. Hunter; in Files Creek by Dan Dellatorre; Gaudineer Knob by J. Hunter; Bear Heaven by D. Dellatorre, L. Barnhart, and Bryan Hogan.
Appalachian Seal Salamander - *(Desmognathus monticola monticola).*
Abundant. Individuals found: Near lower Cheat Mt. study plot by N. Eddy, J. Hunter; in Files Creek by D. Dellatorre, L. Barnhart, N. Eddy, and J. Hunter; Bear Heaven by J. Hunter and B. Hogan.
Red-backed Salamander - *(Plethodon cinereus).*
Common. Individuals found: on Cheat Mt. by J. Hunter; Bickle Knob by D. Dellatorre, L. Barnhart; Shavers Mt. by L. Barnhart, William H. Martin; Bear Heaven by L. Barnhart, B. Hogan, J. Hunter.
Slimy Salamander - *(Plethodon glutinosus glutinosus).*

Common. Individuals found: Back Rd. by J. Hunter; Bickle Knob by D. Dellatorre, J. Hunter; Shavers Mt. by D. Dellatorre, L. Barnhart; Bear Heaven by L. Barnhart, B. Hogan, J. Hunter.
Wehrle's Salamander - *(Plethodon wehrlei).*
Common. Individuals found: in Bear Heaven by D. Dellatorre, L. Barnhart, B. Hogan, J. Hunter.
Four-toed Salamander - *(Hemidactylium scutatum).*
Rare. One individual found by J. Hunter near Bowden Cave.
Northern Spring Salamander - *(Gyrinophilus porphyriticus porphyriticus).*
Rare. One individual found in Files Creek by D. Dellatorre.
Northern Red Salamander - *(Pseudotriton ruber ruber).*
Rare. Two individuals found: near lower Cheat Mt. study plot by Michael Berdine; in Files Creek by L. Barnhart.
Northern Two-lined Salamander - *(Eurycea bislineata bislineata).*
Rare. One individual found in stream by camp by D. Dellatorre.
Long-tailed Salamander - *(Eurycea longicauda longicauda).*
Rare. One individual found along Tygart Valley River by J. Hunter.
Order Salientia-Toads & Frogs
Family Bufonidae-Toads
Eastern American Toad - *(Bufo americanus americanus).*
Uncommon. Individuals found: on Rich Mt. by L. Barnhart, D. Dellatorre; Back Rd. b J. Hunter, N. Eddy.
Family Hylidae-Treefrogs
Northern Spring Peeper 2- *(Hyla crucifer crucifer).*
Abundant. Heard and seen throughout the study area. L. Barnhart.
Grey Treefrog - *(Hyla versicolor-Hyla chrysoscelis).*
Common. Heard and seen throughout study area. L. Barnhart.
Family Ranidae-True Frogs
Bullfrog - *(Rana catesbeiana).*
Common, Individuals found: around camp ponds by J. Hunter, L. Barnhart; Swamp study plot by L. Barnhart; and other locations throughout study area. L. Barnhart.
Green Frog - *(Rana clamitans melanota).*
Common. Individuals found: around camp ponds by J. Hunter, L. Barnhart; Swamp study plot by L. Barnhart; and other locations throughout the study area. L. Barnhart.
Wood Frog - *(Rana sylvatica).*
Rare. Two individuals found: one, newly transformed, at swamp study plot by Steve Pike; one found Shavers Mt. by L. Barnhart.
Class Reptilia
Order Testudines-Turtles
Family Chelydridae-Snapping Turtles
Common Snapping Turtle - *(Chelydra serpentina serpentina).*
Rare. One individual found in camp stream by J. Hunter.
Family Emydidae
Eastern Box Turtle - *(Terrapene carolina carolina).*
Rare. One individual found DOR in Beverly by L. Barnhart.

Midland Painted Turtle - *(Chrysemys picta marginata).*
Uncommon. Two individuals found: one in camp pond by N. Eddy; one on Back Rd. by L. Barnhart, J. Hunter.
Order Squamata-Lizards & Snakes
Sub-order Serpentes-Snakes
Northern Water Snake - *(Nerodia sipedon sipedon).*
Abundant. Individuals found: Tygart Valley River by J. Hunter, L. Barnhart; camp stream and pond by J. Hunter; in Files Creek by J. Hunter, D. Dellatorre; Glady Fork of Cheat River by L. Barnhart, W. H. Martin.
Northern Brown Snake - *(Storeria dekayi dekayi).*
Common. Individuals found: by camp stream by D. Dellatorre; Bickle Knob by D. Dellatorre, L. Barnhart; DOR by camp by Robert Hogan.
Northern Red-bellied Snake - *(Storeria occipitomaculata occipitomaculata).*
Rare. Two individuals found: one DOR near lower Cheat Mt. study plot by Maxine Thacker and Ken Anderson; one at Cranberry Flats by R. Hogan.
Eastern Garter Snake - *(Thamnophis sirtalis sirtalis).*
Common. Individuals found: near camp DOR by M. Thacker; Bickle Knob by L. Barnhart, J. Hunter; Cheat Mt. DOR by Libby Chandler and Nevada Laitsch; Files Creek Rd by D. Dellatorre; Bowden Cave by J. Hunter, Matt Fox; Church near camp by D. Dellatorre; Shavers Mt. Glady Fork River by L. Barnhart.
Northern Ringneck Snake - *(Diadophis punctatus punctatus).*
Abundant. Individuals found: road to Bickle Knob by L. Barnhart; Bickle Knob by L. Barnhart, D. Dellatorre, J. Hunter; Files creek Rd by L. Barnhart, D. Dellatorre, J. Hunter.
Eastern Smooth Green Snake - *(Opheodrys vernalis vernalis).*
Rare. One individual found near Harmon by L. Barnhart.
Black Rat Snake - *(Elaphe obsoleta obsoleta).*
Rare. Two individuals found: one DOR Country Club Dr. by L. Barnhart, D. Dellatorre; one on the swamp study plot by Bob Richardson.
Eastern Milk Snake - *(Lampropeltis triangulum triangulum).*
Rare. One individual found along Files Creek by L. Barnhart.
Family Viperidae-Pit Vipers
Timber Rattlesnake - *(Crotalus horridus).*
Rare. None were found during the Foray in the study area, but we had reports of sightings, dens, etc. L. Barnhart and W. H. Martin did find two small individuals on Allegheny Mt. in Pendleton Co. They were marked and released.
We would also like to thank Mary, Laura, Michelle, Matthew and Daniel Dellatorre and Roy Ward for their patience and assistance.

Bird Watcher's Digest
P.O. Box 110
Marietta, OH 45750

Jeremiah Hunter and Howard Jones release a Black Bear from a trap on Cheat Mountain

Mammals of the 1989 Foray

Lynn Barnhart

Least Shrew - *Crypototis parva*
Eastern Pipistrelle - *Pipistrellus subflavus*
Eastern Cottontail - *Sylvilagus floridanus*
Eastern Chipmunk - *Tamias striatus*
Woodchuck - *Marmota monax*
Eastern Grey Squirrel - *Scurus carolinensis*
Fox Squirrel - *Sciurus niger*
Red Squirrel - *Tamiasciurus hudsonicus*
Flying Squirrel - *Glaucomys sp.*
White footed/Deer Mouse - *Peromyscus sp.*
Muskrat - *Ondatra zibethicus*
Grey Fox - *Urocyon cinereoargenteus*
Domestic Dog - *Canis familiaris*
Black Bear - *Ursus americanus*
Raccoon - *Procyon lotor*
Striped Skunk - *Mephitis mephitis*
River Otter - *Lutra canadensis*
Domestic Cat - *Felis catus*
White-tailed Deer - *Odocoileus virginianus*

Bird Watcher's Digest
P.O. Box 110
Marietta, OH 45750

Noteworthy Plants of the 1989 Foray

E. E. Hutton Jr.

The following interesting plants were observed by Foray participants in Randolph County.

Meadow Spikemoss	*Selaginella apoda*
Goldie's Shield Fern	*Dryopteris glodiana*
Marginal Shield Fern	*Dryopteris marginalis*
Southern Lady Fern	*Athyrium asplenioides*
Reed Canary Grass	*Phalaris arundinacea*
Fraser's Sedge	*Carex Fraseri*

Poison Sumac in the Beech-Oak-Maple Swamp near Elkins

Sedge	*C. lurida*
Sedge	*C. intumescens*
Sedge	*C. lupulina*
Sedge	*C. folliculata*
Rush	*Juncus filiformis*
False asphodel	*Tofieldia glutinosa*
Ramp	*Allium tricoccum*
White Clintonia	*Clintonia umbellulata*
Yellow Stargrass	*Hypoxis hirsuta*
White Campion	*Lychnis alba*
Bladder Campion	*Silene cucubalus*
Red Baneberry	*Actaea rubra*
Skunk Current	*Ribes glandulosum*
Japanese Spiraea	*Spiraea japonica*
Burnet	*Sanguisorba canadensis*
Fire Cherry	*Prunus pensylvanica*
Running Buffalo Clover	*Trifolium stoloniferum*
Poison Sumac	*Rhus vernix*
Mountain Holly	*Ilex montana*
Winterberry	*Ilex verticillata*
Primrose-leaf Violet	*Viola primulifolia*
Northern Evening Primrose	*Oenothera parviflora*
Ginseng	*Panax quinquefolius*
Water hemlock	*Cicuta maculata*
Alternate-leaved Dogwood	*Cornus alternifolia*
Star Flower	*Trientalis borealis*
Butterfly Weed	*Asclepius tuberosa*
Poke Milkweed	*Asclepius exaltata*
Meehania	*Meehania cordata*
Foxglove Beardtongue	*Penstemon digitalis*
American Brookline	*Vernonica americana*
Cow-wheat	*Melampyrum lineare*
Cancerroot	*Conopholis americana*
Trumpet Honeysuckle	*Lonicera sempervirens*
Guelder-Rose	*Viburnum opulus*
Pineapple Weed	*Matricaria matricarioides*
Small's Ragwort	*Senecio smallii*

A New Site for Running Buffalo Clover *(Trifolium stoloniferum)* in West Virginia

Albert R. Buckelew Jr.

On Monday June 17, while hiking on Rich Mountain in Randolph County, I discovered a small colony of running buffalo clover *(Trifolium stoloniferum)*. I was accompanied on the hike by Robert Rine, Jim Bullard, Juanita Slater, and Tom Fox. The colony consisted of three plants. One had five or six blossoms and about 12 soloniferous offshoots. I recognized the plants from the large, smooth, light green leaves and the long runners that connected the upright stems. These are attractive plants, which produce erect flowering stems, three to six inches tall with two leaves per stem. The flowerhead is about 1.5 inches in diameter and is white, sometimes tinged with purple. There was no purple on ours.

Running buffalo clover was thought to be extinct before it was relocated in Fayette County in 1983 (Jacobs and Bartigis, 1989). The clover was once common from Kansas to West Virginia, but it became rare with the demise of the bison, upon which it apparently depended in some unknown way. It is now known from three sites in West Virginia: in Webster and Fayette Counties, and now in Randolph County. There are 15 small populations known in the world today. The plant is listed by the United States Fish and Wildlife Service as an endangered species.

We found our plants on an old road that appears to be traveled infrequently by off-road vehicles. This occasional disturbance and the resultant packing of the soil may provide the right niche for the clover, which was originally associated with bison and elk meadows and trails. In fact this old road was a buffalo trail in pre-settlement times (Smith, 1989). The mixed mesophytic woods surrounding the site consist of red maple *(Acer rubrum)*, hickory *(Carya sp.)*, black oak *(Quercus velutina)*, tulip poplar *(Liriodendron tulipifera)*, sassafras *(Sassafras albidum)*, dogwood *(Cornus florida)*, and black locust *(Robinia pseudoacacia)*. The running buffalo clover shared the road with a grass *(Panicum sp.)*. The canopy over the road was closed, but not complete.

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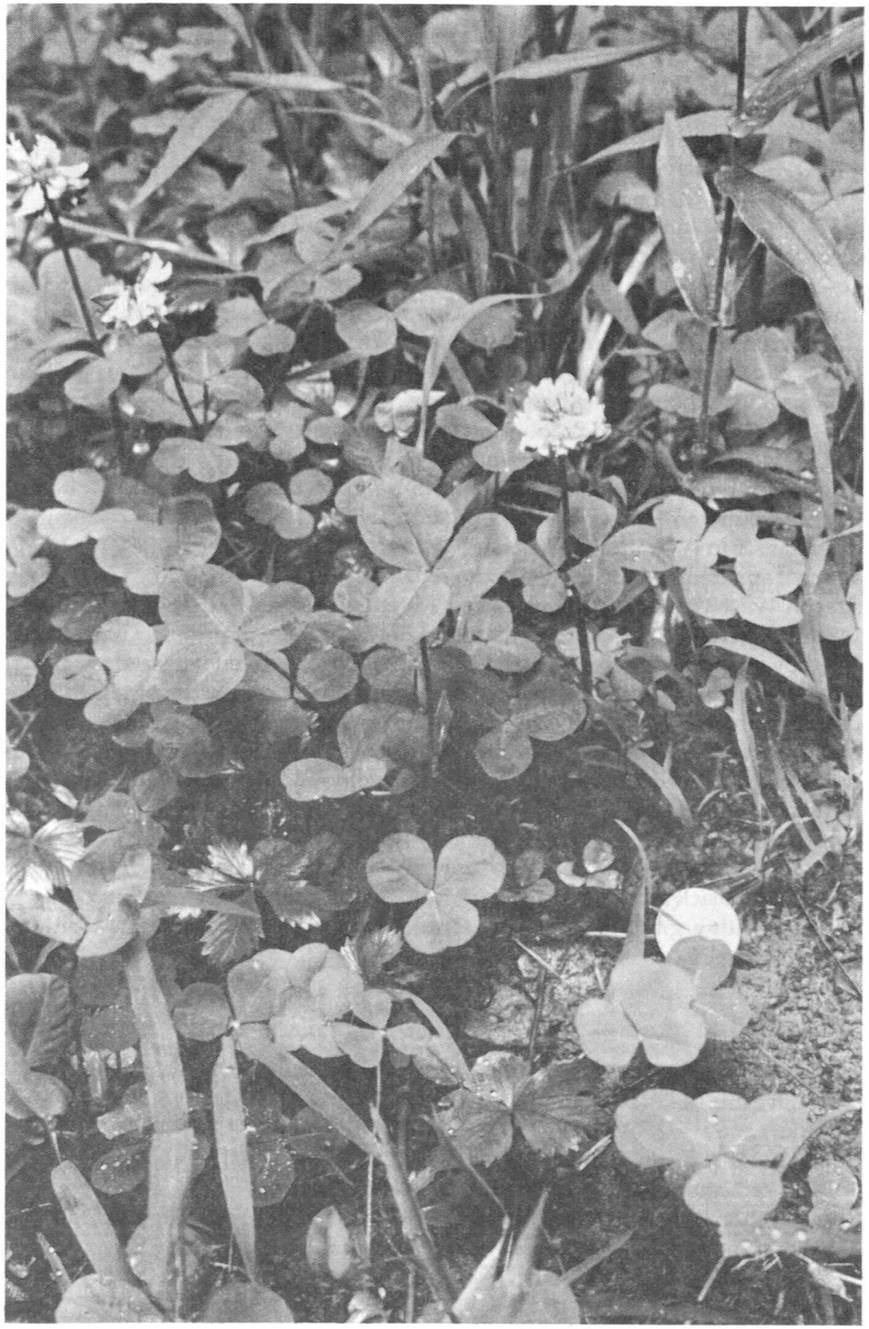
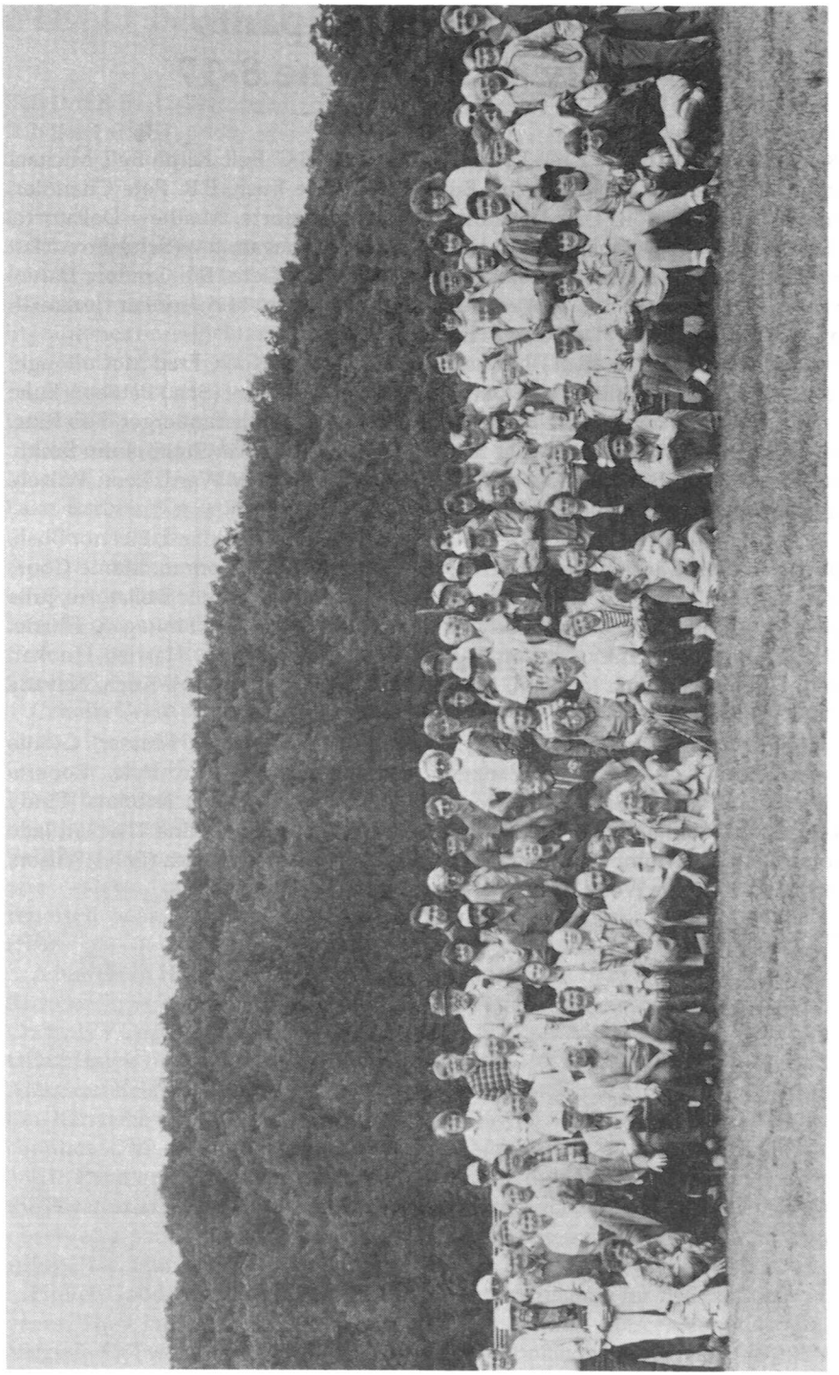


Running Buffalo Clover at Rich Mt. with a quarter for scale, June 17, 1989



Foray participants

1989 Foray Participants
Beverly, W.Va., June 8-17

Ken Anderson, Charlie Baer, Lynn Barnhart, David C. Bell, Ralph Bell, Michael Ashton Berdine, Jay Buckelew, Jim Bullard, Dr. Kyle Bush, E.R. Pete Chandler, Dennis (Sch.) Dawson, Dan Dellatorre, Daniel Dellatorre, Matthew Dellatorre, Robert Dew, John Dolensky, Scott Emrick, Mike Finnegan, Jay (Sch.) Fox, Matt (Sch.) Fox, Tom Fox, Russell (Sch.) Garn, Rudy (Sch.) Gelis, Bill Grafton, Daniel Grafton, George Hall, Bob Hogan, Bryan (Sch.) Hogan, Mel Hooker, Jeremiah Hunter, George Hurley, Doc Gene Hutton.

Ed Ilgenfritz, Andrew (Sch.) Jacobs, Ben Kiff, George Koch, Fred McCullough, Oran Matthey, David Offutt, Ephe Olliver, Don Pattison, Grant (Sch.) Pattison, Luke Pattison, Charles Pierce, Steve Pike, Bob Richardson, Joe Rieffenberger, Bob Rine, Stuart Robbins, Robbie Ryan, Chet Shaffer, Bill Smith, Edwin Smith, John Smith, Andy Thompson, Bill Thompson III, Gordon Vujevic, Roy Ward, Leon Wilson, Elmer Worthley, Bill Wylie.

Jane Anderson, Betty Stough Baer, Mary Lou Brown, Beth Bullard, Eleanor Bush, Libby Chandler, Carolyn Conrad, Dorothy Conrad, Helen Conrad, Linnie Coon, Ginnie Cronenberger, Laura Dellatorre, Mary Dellatorre, Michelle Dellatorre, Julie Dolensky, Anne Eddy, Nancy Eddy, Janice Emrick, Kathleen Finnegan, Harriet Gilbert, Dawn Fox, Emily Grafton, Kelly Hogan, Patty Hogan, Harriett Hooker, Lillian Hughes, Virginia Johnson, Maxine Kiff, Judy Knorr, Laura Koch, Nevada Laitsch.

Carol McCullough, Polly Matthey, Loretta Mullens, Janice Musser, Ginnie Olliver, Joan Pattison, Reba Pfalzgraf, Ivarean Pierce, Ann Pyle, Roberta Quattlebaum, Wilma Richardson, Mary M. Reiffenberger, Joan Robbins, Cindy (Sch,) Slater, Juanita Slater, Jo Lane Stern, Ruth Strosnider, Maxine Thacker, Jade Thompson, Elsa Thompson, Judy Ward, Caroline Wilson, Rebecca (Sch.) Wilson, Amy Witsberger, Jo Wood, Jean Worthley.

Sch. = Scholarship

FIELD NOTES

SUMMER SEASON
JUNE-AUGUST, 1989

Jim Phillips, Editor
900 Reynolds Ave.
Princeton, WV 24740

Most observers reported a wet, cool season. The low temperatures early in the season seemed to effect some of the swallows, flycatchers and **Eastern Bluebirds.** While some recovered somewhat, others experienced a dramatic decline. Interesting summer finds include a **Double-crested Cormorant** in Barbour Co. (DM), **Great Blue Heron** rookery on an island in the Ohio River (JB), **Northern Goshawk** nest in Pocahontas County and **Red Crossbills** somewhere other than where Rt. 33 crosses the state line. A **Bachman's Sparrow** was located in Monongalia County.

Grebes through shorebirds — **Pied-billed Grebes** nested near Apple Grove, Mason Co. during June (TI). A **Double-crested Cormorant** was present on Teeter Lake, Barbour Co. from June 21 to June 25 (DM). Single cormorants were seen on the Ohio River from August 21 (MBC) to August 29 (TI). **Great Blue Herons** were reported from several locations during most of the period. Colonies were discovered on Grape and Fish Islands (soon to be a wildlife refuge) in the Ohio River and the colony in Bethany, Brooke Co. contained eleven nests (JB). **Green-backed Herons** seemed to be fairly common. A **Black-crowned Night-Heron** was at Sand Creek Marsh, Wood Co. on August 9 (MBC).

Canada Geese continue to be abundant. Likewise, **Wood Ducks** seemed to do well during the season. Four **Blue-winged Teal** were at Apple Grove on July 8 (TI). A first year male **Hooded Merganser** was on a pond near Beverly, Randolph Co. in June (JB). A pair of **Ospreys** nested in the eastern panhandle (HG). One was seen near the Cabell/Wayne County line along the Ohio River on July 9 (TI). An adult **Bald Eagle** was seen along the Ohio River near Wood Co. on June 10 (MBC), and one was found near the Mason/Cabell County line on June 27 (TI). A **Bald Eagle** was reported near Sandstone Falls, Summers/Raleigh County line in late August (RA).

A **Northern Harrier** was seen in a field along the South Fork of the Shenandoah River on June 24 (RBC). A **Northern Goshawk** nest was confirmed in Pocahontas Co. by WV Dept. of Natural Resources and US Fish and Wildlife biologists (JB). **Red-tailed Hawk** numbers seemed to be up in the northern section of our area (RB). **American Kestrels** nested on one of the Union Carbide buildings in South Charleston, Kanawha Co. (HG). **Peregrine Falcons** were hacked in Fayette and Pendleton counties (DM). An adult falcon appeared on North Fork Mt., Grant Co. in late May and in Pendleton Co. in late June and July. A sub-adult (with leg bands) was seen at the Fayette Co. hacksite from July 23 to the end of August (DM). Wendell Argabrite observed a pair of **Peregrine Falcons** hunting among the buildings of Huntington Alloys, Inc. Huntington, Cabell Co. on August 23.

Hullet Good reported **Northern Bobwhites** in his area for the first time in 13 years. They are nearly non-existant in Summers and Mercer counties (JP). A **Virginia Rail** was seen along Brush Creek near Princeton, Mercer Co. (BM). **Semi-**

palmated Plovers and **Dowitchers** were found in Wood Co. (MBC). **Upland Sandpipers** were present near Broadway, Va. (RBC).

Cuckoos through Warblers — **Yellow-billed Cuckoos** were found feeding on tent caterpillars in Summers and Monroe Counties (JP), but neither species was reported by other observers. Ralph Bell suggests they may be concentrating in the east where the gypsy moth is found. The only comment about owls was "E. Screech Owls still scarce" (VH). Many contributors commented on seeing more **Common Nighthawks** during the summer. A few of these birds could be seen heading south by late August. George Breiding and others considered **Chimney Swift** numbers up during the season. Perhaps the wet season was good for flying insects and thus these two bird species did well. For the second year in a row a **Chuck-will's-widow** was found near Laurel Creek, Wood Co. (MBC).

Ruby-throated Hummingbirds were considered scarce by most observers. Perhaps this was caused by the cold weather and snow in May. **Willow Flycatchers** were reported from more areas than usual. **Least Flycatchers** were found in Upshur (VH) and Wood (MBC) counties. Most contributors felt that the swallows suffered from the cold, wet spring season. Wendell Argabrite noted **Bank** and **Cliff Swallow** nesting down by as much as 50% in his area. Three new **Loggerhead Shrike** nesting sites were discovered in Virginia to bring that state's study area total to 17 (RBC).

Mitchell reported both **Blue-winged** and **Golden-winged Warblers** in Barbour, Harrison and Randolph Counties. A male **Brewster's Warbler** was found singing at the Germany Valley overlook in Pendleton Co. (RBC). A **Black-throated Blue Warbler** was in the Bluestone Canyon in Pipestem State Park, Summers Co. all summer (JP). Donna Mitchell reported **Yellow-rumped Warblers** in June and July in Pocahontas County. **Cerulean Warblers** were found in Pipestem State Park after an absence of a few years (JP). George Breiding found **Prothonotary Warblers** in lower numbers in Wood County. This species was found on Blennerhassett Island (MBC) and near Frame (HG). Breiding reported two singing **Swainson's Warblers** on the Nicholas/Fayette County lines.

Sparrows and finches — George Breiding located a singing male **Bachman's Sparrow** on June 24 on Range Run near Wadestown, Monongalia County. **Chipping Sparrows** were abundant in the southern part of the state. Several people considered the **Vesper Sparrows** to be in higher numbers. Nesting **Savannah Sparrows** were found near Union, Monroe Co. (JP). Ralph Bell found a **Henslow's Sparrow** on his Pennsylvania farm for the first time. There were June and July records of **Swamp Sparrows** in Pocahontas Co. (DM).

House Finches seem abundant over a good portion of the state. A flock of **Red Crossbills** was present on Cheat Mt. between Beverly and Bemis, Randolph County in June and a flock including juvenile birds was seen in July at the Little Spruce overlook on the Scenic Highway, Pocahontas Co. (JP).

Contributors — Richard Altare (RA), Wendell Argabrite (WA), Ralph Bell (RB), George Breiding (GB), Jay Buckelew (JB), Hullet Good (HG), Virginia Bly Hoover (VH), Tom Igou (TI), Ben Markell (BM), Donna Mitchell (DM), Mountwood Bird Club (MBC) and Rockingham Bird Club (RBC).

Book Reviews

Salamanders of Ohio Ed. by Ralpha A. Pfingsten and Floyd L. Downs, 1989. Published by College of Biological Sciences, The Ohio State University. Bulletin of the Ohio Biological Survey (New Series), Vol. 7, No. 2. Columbus, OH 43210. No price given, paperback.

Roger Conant wrote a book on the **Reptiles of Ohio** in 1938 with a revision in 1951, and Charles F. Walker wrote a book on **Amphibians of Ohio** published in 1946. this latter book, however, only included toads and frogs. This current book on salamanders completes the published treatment of Ohio herpetofauna. Dr. Walker was a renowned herpetologist who made many contributions in printed works and numbers of students he trained. One of his students was the late Dr. N. B. Green, coauthor of **Amphibians and Reptiles in West Virginia. Salamanders of Ohio** is dedicated to Dr. Walker.

This book has 15 contributors (authors), instead of one or two authors like most state books. Although one might expect different writing styles to be a problem with such a book, I did not find this to be the case. The editors did a superb job in assuring that the writing was consistent and the species accounts complete.

The makeup of the book is similar to most state books with chapters on herpetological history, geologic and physiographic characteristics, illustrated keys, species accounts, and species that could occur in the state. Reasons for studying salamanders, education and conservation, and larval salamanders are three chapters that usually do not appear in state books. I found each of these chapters refreshing, especially the one on larval salamanders.

The species accounts are brimming with information. A major contribution state books should make is personal observations and unpublished data, this book does just that. In addition, each account refers to the major literature. The maps are detailed and well done.

The plates in the back are superb. I particularly appreciate the pictures of larval forms. Treatment of the larval forms in this book is an excellent contribution to students and professional biologists.

My criticisms are minor. The size of the book makes it awkward to carry in the field. The chapter on physiographic sections was informative but did not include moisture and temperature regimes, two factors I believe to be of significant importance in determining salamander distributions.

I highly recommend this book. It will be a useful addition to anyone's library who is interested in amphibians. I have already used it on several occasions and will continue to refer to it in the future.

Thomas K. Pauley

The Wild Side by Scott Shalaway. 1990. Saddle Ridge Press, P.O. Box 21, Cameron, WV 26033, 139 pp., illus. Price $7.95 paperback.

Scott Shalaway is a syndicated nature columnist with the Pittsburgh Press and other newspapers. He is a member of the BBC. **The Wild Side** is a selection of 48 of his columns, each two to three pages long. The book is illustrated with line drawings

by Mike Watson. Scott introduces topics in ecology, emphasizing birds and conservation, written for a general audience. I enjoyed them all, but I especially appreciated his discussion of salmonellosis, a disease birds get from eating contaminated seed at feeders (Keep you feeders clean.), and his authoratative discussion of bat ecology and rabies. According to Scott, bats pose little risk to human health. "Never touch or handle a bat, and your risk of contracting rabies from a bat is virtually zero." He also tells how to construct bat houses to put bats to work for you. Scott is an expert on cavity nesting birds, and his columns on bird boxes, snags, woodpeckers, bluebirds, and other cavity users are especially interesting.

On the Wing: The Life of Birds: from Feathers to Flight by Bruce Brooks. 1989. Charles Scribner's Sons, New York. 192 pp., illus., Price $40.00.

On the Wing, a companion to the PBS series "Nature," is an attractive, lavishly illustrated introduction to birds. Chapters emphasize structure and function of feathers, flight, beaks and feet, song and calls, the reproductive cycle, and birds and man. This book presents much interesting information in a nontechnical fashion; however I grew tired of Brooks' breezy style and occasional anthropomorphisms. When writing of swallow flight, for example, "... no one can convince us they're not jazzing it up for kicks," of of the raven's roll in flight, "It seems simply to be playful. The Raven up there feels good and shows it in a joyous maneuver." Maybe I've been reading scientific literature too long. This kind of thing will probably appeal to many people even if it isn't terribly scientific. This book might serve well as an introduction to birds for a complete novice.

The Hummingbird Book. The Complete Guide to Attracting, Identifying and Enjoying Hummingbirds by Donald and Lillian Stokes. 1989. Little, Brown, and Co., Boston. 96 pp., illus. Price $9.95 paperback.

The title describes the contents of this book well. Add to that a section on attracting orioles, 70 fine color photographs, eight range maps, and you have a good idea of what to expect. The species descriptions are good, although the females of several species are not shown. It is not surprising that Donald and Lillian Stokes, who are well known for their guides to bird behavior, emphasize hummingbird behavior in this book. There is also a lot of valuable information on feeders, use of flowers and gardening to attract hummingbirds, and many interesting facts about hummingbird biology. Anyone who enjoys watching these jewels of nature will want this book.

The Birds of Ohio by Bruce G. Peterjohn, 1989. Indiana University Press, Bloomington. 237 pp., illus., Price $57.50.

This book is the first comprehensive survey of Ohio birds since 1903. Bruce G. Peterjohn presents a detailed analysis of 390 species known to have occurred in Ohio. The introduction deals with topological features, physiography, vegetative communities, and climatology. Species accounts cover abundance, distribution, migration patterns, photographic and specimen records of rare species, detailed historical data, present status, habitat requirements, and discussion of ecological factors involved in decline of rare species. There are only two maps, one showing

counties, major streams, and cities, and one dividing the state into eight biogeographical regions. We will have to wait for the forthcoming atlas of Ohio birds, which Peterjohn is also working on, for species range maps.

The 50 color plates by William Zimmerman are a treat. They are full page (9 x 12 in.) and beautiful. Forty-nine are advertised on the dust jacket as being "especially prepared for the volume," so it seems strange that the same plates are to be found in H. David Bohlen's **The Birds of Illinois,** reviewed below. The same claim is made for these plates in both books. I suppose it doesn't make much difference as most people will buy only one or the other.

The **Birds of Ohio** will be a standard reference for many years. Peterjohn has drawn together data from 526 sources and contributed his vast experience with Ohio birds to make this book as complete and comprehensive a record as one could hope for. Anyone interested in birds of this region will have to have it.

The Birds of Illinois by H. David Bohlen, 1989. Indiana University Press, Bloomington. 221 pp., illus., Price $57.50.

Superficially this book looks like **The Birds of Ohio** reviewed above. The beautiful color plates by William Zimmerman are the same and are in the same arrangement and 9 x 12 in. format; however, the books are different in style and content. **The Birds of Illinois** species accounts include information on conservation, migration patterns, winter range, nesting habitat, appearance of eggs, description of song and call, and notes on behavior of 439 species. Bohler also includes notes on identification, and he deals with subspecies that occur in the state. Bohlen's treatments of historical data, distribution, and dates of occurrence are generally more condensed. There are no range maps. The introduction deals with geography, vegetation, climate, and conservation problems. His writing style is lucid and interesting. This book is an important addition to the literature on North American birds.

A.R. Buckelew Jr., Editor

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Prepared by Cyndi Cecchini

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1990 Calendar of Events
The Brooks Bird Club, Inc.

Date	Activity	Place
January 1-31	BBC Membership Month - Mail to H.Q.	Wheeling, WV
February 1-28	Write article or observation for The Redstart or Mail Bag	Mail to editors
February 23-25	Mid-Winter Meeting - Jackson's Mill	Weston, WV
March 18	Seneca Lake Waterfowl Trip	Senecaville, OH
April 27-29	Old Hemlock Weekend - Preston Co. 4-H Camp	Brandonville, WV
May 5-13	Century Day Counts	All local groups
May 18 -20	Ottawa Wildlife Refuge Warbler Trip	Oak Harbor, OH
June 1-8	BBC FORAY - Cedar Lakes.	Ripley, WV
June 13-17	Sortie - Seneca St. Forest	Pocahontas County, WV
July 5-8	Terra Alta Weekend	Terra Alta, WV
July 18-Aug. 1	Pacific Northwest Trip	Seattle, Washington
Aug. 15-Oct. 7	Operation Bird Banding - Dolly Sods	Red Creek, WV
Aug. 30-Sept. 3	Annual Labor Day Outing - Greenbrier Youth Camp	Anthony, WV
September 14-16	Hawk Counts	West Virginia mountains
October 12-14	Annual Meeting - Cedar Lakes	Ripley, WV
November 3	BBC Board of Directors Meeting	H.Q. Wheeling, WV
November 8-11	Eastern Shore Waterfowl Trip - contact Carl Slater	Eastern Shore
Dec. 15-Jan. 2	Christmas Bird Counts - mail to Leon Wilson	All local groups

BBC FORAYS

1990 — June 1 - 8 Cedar Lakes, Ripley, WV
1991 — June 13 - 22 Camp Kidd, Parsons, WV

SEASONAL FIELD AND BANDING NOTES DUE

March 15 June 15 September 15 December 15

MAIL: Field Notes to: James D. Phillips, 900 Reynolds Ave., Princeton, WV 24740
Banding Notes to: Ralph K. Bell, R.D. 1, Box 229, Clarksville, Pa. 15322

The dates for the 1990 BBC program were selected as most appropriate for our scheduled activity and place. Sometimes changes beyond our control might be necessary. When such is the case, notification will be made as soon as possible in the MAIL BAG.