The 1977 Foray
Area Survey - 1977 Foray
- Albert R. Buckelew, Jr. ........................................ 2

The 1977 Foray Bird List
- Ralph K. Bell .................................................. 2

1977 Foray Singing Male Census Studies
- Glen F. Phillips .............................................. 12

Ferns and Fern Allies of Hardy County West Virginia
- John T. Laitsch and Michael A. Breiding ....................... 21

Herbaceous Flowering Plants - 1977 Foray
- William N. Grafton et al. ..................................... 23

Trees, Shrubs and Woody Vines - 1977 Foray
- William N. Grafton et al. ..................................... 39

Breeding Bird Records for the 1977 Foray
- Norris Gluck .................................................... 44

Herptiles of Hardy County
- Jean Worthley and A. R. Buckelew, Jr. ......................... 44

Mammals of Hardy County
- Maxine Thacker ................................................ 54

Weather Record for the 1977 Foray
- Leon Wilson, Russel Hogg, H.-Bleaklea and Ken Wood ....... 55

Field Notes
- Glen F. Phillips ................................................ 56

Banding News
- Ralph K. Bell .................................................. 60

Erratum .................................................................. 62

Index for Volume 44 .................................................. 63

Our new cover illustration is by Carol Rudy
The 1977 Foray Bird List

Ralph K. Bell

At the first Foray in 1940, 93 bird species were identified in Hardy County. Seventy of these species were found in the Lost River Park area. The next year, 1941, seven additional species were recorded, including the Black Vulture, Wild Turkey, Am. Woodcock, Great Horned Owl, Red-headed Woodpecker, Pine Warbler and Dark-eyed Junco. At the 1955 Foray, centered at Baker, sixteen species were added to the Hardy County List.

<table>
<thead>
<tr>
<th>Common Loon</th>
<th>*Little Blue Heron</th>
<th>*Canada Goose</th>
<th>Mallard</th>
<th>Black Duck</th>
<th>*Ring-necked Pheasant</th>
<th>Screech Owl</th>
<th>Willow Flycatcher</th>
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<tr>
<td>*Tree Swallow</td>
<td>+ Nashville Warbler</td>
<td>Yellow-throated Warbler</td>
<td>+ Blackpoll Warbler</td>
<td>Kentucky Warbler</td>
<td>Blue Grosbeak</td>
<td>Savannah Sparrow</td>
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</table>
Species recorded at earlier Forays in Hardy County but not in 1977.

Great Blue Heron  Blue Swallow
Black-crowned Night Heron  Blue-winged Warbler
Bald Eagle  Magnolia Warbler
Osprey  Black-throated Blue Warbler
Spotted Sandpiper  Black-throated Green Warbler
Solitary Sandpiper  Canada Warbler

Species that have apparently increased in numbers since 1955.

Mallard  Blue Jay
Black Vulture  Common Crow
Ruffed Grouse  Robin
Mourning Dove  Starling
Red-headed Woodpecker  Solitary Vireo
Acadian Flycatcher  Yellow Warbler
Willow Flycatcher  Willow Flycatcher

Species that have evidently decreased since 1955 (no doubt some of this decrease is due to a change in habitat, but the sharp decline of the Whip-poor-will, Black-and-White Warbler, Ovenbird and Hooded Warbler is evidently due to other causes).

Spotted Sandpiper  Black-throated Green Warbler
Whip-poor-will  Blackburnian Warbler
Chinney Swift  Pine Warbler
Cliff Swallow  Prairie Warbler
Brown Thrasher  Ovenbird
Yellow-throated Vireo  Yellow-breasted Chat
Black-and-White Warbler  Hooded Warbler
N. Parula Warbler  Grasshopper Sparrow

There were 6 Breeding Bird Survey routes run the first week with 50 stops on each. These routes often give a good estimate of the common birds in the Foray area. The species list for the 1977 Foray follows. For the more common species, I have tried to apply the abundance terms used by George Hall in "W. Va. Birds" (explained in the Jan. 1976 Redstart, Vol. 43, #1, p. 12-13).

1. **Common Loon** - Many campers saw a female of this species on Warden's Lake both weeks. S. Brooks reported it was swimming, diving and flapping its wings on June 13, but concluded it was injured and unable to fly.

2. **Green Heron** - Several reports both weeks. A. Shreve listed 4. The Eddys also listed 4, all south of Moorefield. E. Hutton noted 3 in different areas, and S. Brooks reported a partly eaten, dead bird along Upper Cove Run southeast of Mathias.

3. **Little Blue Heron** - One reported by M. Ward near Lost City along Rt. 259.

4. **Canada Goose** - An adult and 7 young reported June 14 near Fisher by S. Brooks.

5. **Mallard** - C. Conrad saw two pairs on a pond near Lost City on June 4. S. Brooks listed 3 at two other locations.

6. **Black Duck** - M. Reiffenberger and E. Hutton reported an adult with at least 8 young on the South Fork near Millam. G. Eddy commented on one in the middle of the road just off Jinkins Chapel Road which later flew to a nearby creek. E. Reichelderfer noted one in flight along Rt. 259 three miles north of Mathias. S. Brooks also listed one while driving between Baker and Moorefield.

7. **Wood Duck** - A female with 6 young was noted on June 8 south of Fisher by C. Lanham, R. Diener, C. Phillips and R. Bell. S. Brooks listed an adult with 4 young on a trip to Trout Pond.
23. Mourning Dove - Fairly common in some areas. The Eddys commented that they seemed well distributed. D. Nemanich reported hearing “several” in the farm areas north and west of the park. Twenty-one were listed at 17 stops on the BBS routes.

24. Yellow-billed Cuckoo - Many comments on the Foray cards with most observers reporting hearing this species, considering it more common than the Black-billed. Eight were recorded at 8 stops on 5 of the BBS routes. S. Brooks listed 7 on his detailed chart.


26. Screech Owl - G. Phillips listed one. S. Brooks used a tape recorder at midnight on Kimsrey Run Road and heard 7 of this species within about 5 miles.

27. Great Horned Owl - Not reported the first week. One was heard on June 16 along the Kimsrey Run Road by M. Ward, D. Ward and S. Brooks.

28. Barred Owl - One reported around the campground by E. Chandler, C. Conrad, K. Finnegan and M. Kiff. S. Brooks reported a pair talking to each other near Warden Lake.

29. Whip-poor-will - Most campers reported hearing this species in the park. The Eddys listed 3 or 4 in the park and another near their study area. V. Johnson found a dead female along River Road.

30. Common Nighthawk - Not recorded the first week. M. Ward listed one in the second week.

31. Chimney Swift - Uncommon, but most reporters listed a few. S. Robbins noted them at the new high school in Mathias. Eleven were counted at 7 stops on 3 of the BBS routes.

32. Ruby-throated Hummingbird - Not many reports. E. Reichelderfer noted the most - 3 in the first week, all in one day, and 2 in the second week. One nest was reported to N. Gluck.

33. Belted Kingfisher - Most reporters listed one or two. D. Nemanich noted a total of 5 the first week. A. Eddy reported 4. E. Hutton and G. Phillips both reported seeing 2 in the second week.

34. Common Flicker - Fairly common and well distributed over the county. There were 9 nesting records reported to N. Gluck. On the BBS routes, 35 were counted at 31 stops.

35. Pileated Woodpecker - C. Conrad and G. Phillips considered them fairly common. There were 20 listed on 5 of the BBS routes.

36. Red-bellied Woodpecker - Apparently not as common as the preceding species. D. Nemanich noted 3 in one tree along the Crab Run Road on June 9. Eleven were recorded at 11 stops on 5 of the BBS routes. S. Brooks listed 5 on his detailed chart.

37. Red-headed Woodpecker - Reported in 3 different areas. Two nests found. A pair was noted at the Caldwell Farm on Crab Run by D. Conrad, the Kochs and A. Llewellyn. The farm owner said the Woodpeckers could be found there most year. One was seen 1½ miles northwest of Old Fields by D. Conrad, G. & L. Koch, N. Laitsch and A. Llewellyn. A nest was found at the Oak Grove Methodist Church, west of Fisher, by R. Hostottle and E. McIntyre. It was seen by many campers. S. Brooks commented that there seemed to be a colony there as at least 5 were seen.

38. Hairy Woodpecker - Apparently not very common. G. Eddy reported the most - just 3 during the first week. The Chandlers and D. Nemanich noted this species in the park. One nest with young reported to N. Gluck.

39. Downy Woodpecker - Observers had diverse opinions as to how common this species was in the county. Reports varied from not many to very common. Sixteen were recorded on the 6 BBS routes.

40. E. Kingbird - Fairly common. A. Shreve listed 12 during the first week. There were 17 counted at 13 stops on 5 of the BBS routes.

41. Great Crested Flycatcher - Common, and well distributed according to the Chandlers. Fifty were recorded on 45 stops on the BBS routes.

42. E. Phoebe - Considered common by most observers. The Eddys commented that most farms and bridges had a pair. Thirty nests were reported to N. Gluck. Forty were counted at 35 stops on the 6 BBS routes.

43. Acadian Flycatcher - C. Conrad and E. Reichelderfer considered them common in most woods. On June 8, D. Nemanich counted 6 between cabin 18 and the park headquarters. Twenty-seven were recorded at 26 stops on the 6 BBS routes.

44. Willow Flycatcher - One seen at the bridge over Lost River along Rt. 259, about 5 miles from camp, by the Chandlers, G. Phillips and E. Reichelderfer. A. Shreve and S. Brooks each listed 3.

45. Least Flycatcher - There were several in the park, perhaps 5 pair. A few were found at other locations. Five were listed at 5 stops on 3 of the BBS routes.

46. Wood Pewee - Fairly common to common. Forty-six were recorded at 37 stops on the 6 BBS routes.

47. Horned Lark - Twelve were recorded at 4 stops on 4 of the BBS routes. Many observers commented on this species at the Lawrence Wilkins farm. The Chandlers noted a pair building a nest there. Four nest records were reported to N. Gluck in the first week - one building a nest, one with eggs and 2 out of nest. The second week, G. Phillips found this species at 5 different locations. Adults were noted feeding 2 young in a pasture along the Moorefield mountain road by R. Anderson, K. Duvaul, L. Dlugos and A. Wylie.

48. Tree Swallow - Not reported the first week. One listed by S. Brooks along county road 20 near Basore on June 11.

49. Bank Swallow - On June 8, C. Lanham, R. Diener, C. Phillips and R. Bell noted at least 5 on the electric wires, with Barn Swallows, at a farm 1½ miles northeast of Fisher.

50. Rough-winged Swallow - Reported by all observers. A. Eddy noted the most, 30 along Rt. 259. Sixteen were at a stone quarry. Four nesting records were reported to N. Gluck.

51. Barn Swallow - Common to very common. There were 140 counted at 53 stops on the 6 BBS routes.

52. Purple Martin - Found at the Henderson home in Wardensville by J. Anderson, E. McIntyre, S. Robbins and R. Bell. There were two occupied houses with perhaps 5 or more pairs.

53. Blue Jay - Fairly common throughout the county. Twenty-three were counted on the 6 BBS routes.

54. Common Crow - This species was second only to the Starling in abundance on the BBS routes with 211 counted.

55. Common Raven - Fairly common in the Berry Mt., Dove Hollow and Lost City areas. The Eddys counted 8 on the morning of June 6 along Rt. 11, and E. Reichelderfer noted the same number in the same area a couple of days later. Fifteen were listed at 10 stops on 3 of the BBS routes.

56. Black-capped Chickadee - Fairly common in wooded areas. A. Shreve reported hearing two that might have been Carolina Chickadees.

57. Tufted Titmouse - Common. Five nesting records were reported to N. Gluck. Ninety-three were counted at 83 stops on the 6 BBS routes.

THE REDSTART — JANUARY, 1978
58. White-breasted Nuthatch - D. Nemanich noted 3 in the park on June 8. A. Shreve listed a total of 6 in the first week, and G. Phillips reported seeing 8-10 in the second week. Seven were recorded at 7 stops on 2 of the BBS routes.

59. House Wren - Not very common. C. Conrad and G. Phillips reported hearing only 4 or 5 each day. Ten were recorded at 10 stops on 5 of the BBS routes.

60. Bewick's Wren - Most campers got to see the one found by G. Phillips at the Lawrence Wilkins' farm on Shenandoah Mountain. The Eddys and R. Hostottle found one singing near Kessel (west of Moorefield) on June 8, and A. Eddy listed another on Berry Mt. Road. R. Anderson noted a family of 5 along Rt. 12, 4 miles from camp on So. Branch Mt. G. Phillips reported them at 7 locations during the second week.

61. Carolina Wren - Not very common. All observers noted one or two each day. Seventeen were recorded at 13 stops on 4 of the BBS routes. S. Brook's detailed chart listed 9.

62. Mockingbird - Not very common in most open areas. Only 7 recorded at 5 stops on 4 of the BBS routes. E. Hutton considered them fairly common near Fisher.

63. Gray Catbird - Fairly common to common over much of the county in proper habitat. Sixty were counted at 52 stops on the 6 BBS routes.

64. Brown Thrasher - Considered fairly common by most observers. Twenty-two were at 21 stops on the 6 BBS routes.

65. American Robin - Common. It was the 6th most common bird on the 6 BBS routes with 151 counted at 94 stops. Fifty were noted on the Rio route.

66. Wood Thrush - Fairly common to common in many areas, but the Chandlers commented that this species was not very common in the park. Sixty-three were listed at 49 stops on the 6 BBS routes.

67. E. Bluebird - Common and well distributed. Twenty nesting records were reported to N. Gluck. Sixty-five were counted at 50 stops on the 6 BBS routes.

68. Blue-gray Gnatcatcher - Rather uncommon in most wooded areas. The Chandlers had 3 pairs on the Dove Hollow study area. Eighteen were listed at 16 stops on the 6 BBS routes.

69. Cedar Waxwing - Uncommon, but most observers reported seeing or hearing them each day. C. Conrad reported a nest in the park. Six were found at 4 stops on two of the BBS routes.

70. Loggerhead Shrike - This was one of the more interesting birds at the Foray, especially since it is on the Blue List of possibly declining species. It was found at 3 different places in the western part of the county. Two adults and 6 young were located along the Moorefield to Romney road, just 150 yards south of the Hampshire County border, by D. Conrad, L. Koch, G. Koch, N. Laitsch, A. Llewellyn and J. Wood. Three were found along Rt. 220/4 south of Moorefield by the Chandlers, Eddys and N. Laitsch. Another was found along Rt. 10/4 just northwest of Fisher by E. McIntyre and R. Hostottle.

71. Starling - Very common. This species was the most numerous bird found on the 6 BBS routes with 226 counted at 52 stops.

72. White-eyed Vireo - Rare. One was found each week. A. Eddy had one near Mathias along 259 north. A pair was seen and heard northeast of Mathias along Rt. 59/1, near the Harkness mail box, by K. Finnegan, H. Gilbert, V. Hoover and R. Strosnider.

73. Yellow-throated Vireo - Uncommon. A. Eddy listed one at camp and others at two other stations. G. Phillips listed 5 or 6 each week. Only 2 were heard at 2 stops on the BBS routes.

74. Solitary Vireo - Just a few reports. The Chandlers, C. Conrad and D. Nemanich all listed 3 or 4 for the Park. A. Eddy heard one near Helmich Rock. S. Brooks listed another near Trout Pond.

75. Red-eyed Vireo - Fairly common. Most observers remarked they were not as common as expected. Forty-three were listed at 41 stops on the BBS routes.

76. Warbling Vireo - There were only 2 reports the first week, one by A. Shreve and another by A. Eddy along Rt. 259 near Wardensville. There were more reports the second week, mostly along the river near Fisher, where Z. Stewart heard 4 and E. Reichelderfer listed 6.

77. Black-and-white Warbler - Scarce. One was seen on June 10 at the Lost River Sink by C. Abrahamson and R. Hostottle. A. Eddy reported 2 seen on her Loblolly Trial study area. C. Ruddie and G. Phillips heard another one near Helmich Rock on June 13.

78. Worm-eating Warbler - Not very common. A. Shreve reported the most, 16 for the first week. E. Reichelderfer listed 3 locations in the Park. Thirteen were heard at 13 stops on 5 BBS routes.

79. Golden-winged Warbler - Uncommon. D. Nemanich, E. Reichelderfer and S. Robbins reported one near Needmore. The Eddys listed one along the road to Moorefield. Another was seen along Rt. 59/1 near the Hardness mailbox by L. Harper, V. Johnson, C. Ruddie and G. Phillips. A. Shreve listed 5 the first week. E. Reichelderfer reported hearing 5 the second week.

80. Nashville Warbler - Rare. One was seen the first week by the Chandlers and D. Nemanich along the Big Ridge Trail.

81. Northern Parula Warbler - Uncommon. Reported from scattered locations over the county. Only 4 were recorded at 4 stops on 3 of the BBS routes. C. Conrad listed 3 in the Park and E. Cass saw a female with a fledgling near the Rec. Hall. S. Brooks listed 7 on his detailed chart.

82. Yellow Warbler - Considered fairly common by most reportors. Forty-one were recorded at 39 stops on the 6 BBS routes.

83. Cerulean Warbler - Uncommon. A. Eddy listed 5 in the Park. G. Phillips reported 3 at Thorny Bottom near Wardensville. There were a few other scattered reports. Two were recorded at 2 stops on the BBS routes.

84. Blackburnian Warbler - Rare. C. Conrad saw one about half way up to Big Ridge in the Park. E. Reichelderfer and E. Hutton saw one on June 11 along Copse Cove Trail.

85. Yellow-throated Warbler - Rare. Many campers reported seeing this species along Rt. 55 near Lost River Sink.

86. Blackpoll Warbler - A. Shreve reported a singing male, probably a late migrant in the first week.


88. Prairie Warbler - Uncommon. All reportors listed a few. Three were heard at 3 stops on 3 of the BBS routes. S. Brooks listed 6 in the Fisher area on June 16.

89. Black-throated Green Warbler - Uncommon. A. Eddy listed 5. Three of these were in the Park. Twelve were recorded at 12 stops on the 6 BBS routes. S. Brooks commented that this species seemed unusually quiet during the second week.

90. Louisiana Waterthrush - Fairly common in good habitat. Five nesting records were reported to N. Gluck. Nineteen were recorded at 17 stops on the 6 BBS routes.

91. Kentucky Warbler - Rare. Only a single report each week. One of these was a nest record reported to N. Gluck.

92. Common Yellow-throat - Uncommon. Found sparingly in scattered locations. G. Phillips reported the most, 3 at Thorny Bottom. There were 12 listed at 11 stops on 5 of the BBS routes.
Johnson and G. Phillips reported “many seen and heard” along the Thorny Hollow western part of the area. There were 118 counted at 32 stops on the BBS routes. 3 young in an oak tree along the road to Moorefield. Eight were counted at 8 stops on locations. The Eddys noted 3 near Jenkins Chapel. Two nesting records were reported BBS routes.

Little Cove BBS route. S. Robbins and R. Bell heard another on the Wardensville BBS route. According to the 1941 list, “this bird was quite common on Big Ridge on the way to Miller’s Rocks.”

Mention was made above that at least four species had made a sharp decline since 1955 (Whip-poor-will, Black-and White Warbler, Ovenbird and Hooded Warbler). The 1955 Foray report by Glen Phillips found the Whip-poor-will to be very common. The 1940 Foray report by Harold Olsen, finds the Whip-poor-will to be “abundant and very tame. Individuals sang persistently from the vantage point of window sills and from other perches within a very few feet of observers.” Automobiles may be a big factor in the decrease of this species. This year’s report includes a dead female Whip-poor-will found along a road by V. Johnson.

As usual, credit for this year’s report should go to many dedicated birders. Seal Brooks was head of the second week Foray Bird List, and he kept a detailed chart showing numbers of birds found in many different areas. Seal is an excellent leader and inspired birders and botanists alike to put forth their best effort in finding all the birds possible. He said the botanists brought back daily lists of birds found and commented, “they cover a lot of ground and are, of course, very good birders.” Seal said Mary Reiffenberger spent a lot of time on the bird lists. Jack Linehan, head of the Breeding Bird Surveys, and Norris Gluck, head of the nesting records, were both kind enough to send their totals to me. Anne Eddy kept a daily list the first week. Many others made comments and notes on the Foray file cards. I have tried to give a good evaluation of the status of each species in Hardy County for the summer of 1977.

1977 Foray Singing Male Census Studies

Glen F. Phillips

The West Virginia Soil and Water Needs Inventory lists Hardy County as having a total of 374,440 acres, of which about 70% is in woodland and about 20% in pasture. In order to provide a proportional coverage of habitat, we decided to study a pasture field, some representative woodland areas and two popular walking trails in Lost River State Park. Another objective was to add records to the natural history of the park. For the second time a total of seven bird census plots were studied during a foray.

The two trails in the Park (Loblolly and Light Horse Harry Lee) were selected on opposite-facing slopes paralleling the cabin line. A pasture study was arranged on a low ridge adjacent to Wetzel Hollow and four forest plots were laid out ranging in type from a relatively wet, low altitude Oak-Maple-Birch association to an Oak-Pine association on high, steep ground. Some conception of the diversity of these plots can be obtained when one realizes that a total of 53 species of birds were noted on the plots.

Despite the large number of species, the studies were notable for scarcity of resident birds. The average number of pairs per 100 acres was 107 compared to last year’s average of 234 in Braxton County. The difference is probably due to lack of moisture. The average annual rainfall in Hardy County is less than 40 inches compared to Braxton County’s 51 inches, so the results obtained this year are indicative of normal conditions.

The assistance of Superintendent David Jones and his staff in finding the plots and securing permission to study those outside the Park is gratefully acknowledged. In addition to the cooperation of Park personnel, the enthusiasm of Foray members contributed to the success of the studies. When 33 members (half the camp) assembles before daylight to undertake the studies, adequate coverage is pretty well assured. Your efforts are fully appreciated.
1. OAK - PINE FOREST

Location: West Virginia. Hardy County. Loblolly Trail in Lost River State Park: 38°52'57"N. 78°55'49"W. Lost River State Park Quadrangle, USGS.

Continuity: New

Size: 6.07 ha. = 15 acres (rectangular 110 x 660 yards, measured longitudinally and estimated laterally).

Description of Plot: The dominant canopy trees are Oak (Quercus sp.) and Pitch Pine (Pinus rigida). Most prominent in the understory are Blueberry (Vaccinium sp.) and Mountain Laurel (Kalmia latifolia). The ground cover is primarily seedlings of Blueberry and the canopy trees. A quantitative survey of the vegetation gave the following results: Chestnut Oak (Quercus prinus) 49%; Pitch Pine (Pinus rigida) 22%; Black Locust (Robinia Pseudo-acacia) 3.5%. Shrub stems/acre 24,000; ground cover 43%; canopy cover 83%; average canopy height 55 ft. (range 43-85). Plant names are from Flora of West Virginia by Strausbaugh and Core, 2nd. Ed.

Edge: Bordered on all sides by similar habitat.

Topography: Steep, west facing slope.

Elevation: 2300 ft. to 2450 ft.

Weather: Cool and dry with fog most mornings.

Coverage: June 4, 5, 6, 7. All trips between dawn and 800 or 1900 and 2100 hours. Total party hours: 7.

Census: Acadian Flycatcher. 2; Am. Robin. 2; Wood Thrush. 2; E. Wood Pewee. 1.5; Great Crested Flycatcher. 1; Carolina Chickadee. 1; Tufted Titmouse. 1; Gray Catbird. 1; Blue-gray Gnatcatcher. 1; Red-eyed Vireo. 1; Worm-eating Warbler. 1; Cerulean Warbler. 1; Am. Redstart. 1; Scarlet Tanager. 1; Rose-breasted Grosbeak. 1; Rufous-sided Towhee. 1; Black and White Warbler. 1; Whip-Poor-Will. +; Least Flycatcher. +; White-breasted Nuthatch. +; Ovenbird. +; Chipping Sparrow. +.
Totals: 23 species; 20 territorial males or females (330/km² 2, 133 per 100 acres). Visitors: Common Crow, Pileated Woodpecker, Brown-headed Cowbird (seen or heard on 13 of 16 trips). Remarks: One Wood Pewee nest was found. Chickadees, Nuthatches and Gnatcatchers were seen with young out of the nest. The number of breeding birds in this area was lower than I had expected. However, the woods were extremely dry. The two high concentrations of birds were in moist ravines. Census Takers: Bob Hostottle and Anne Eddy (compiler).

2. OAK-HICKORY-LOCUST FOREST
Location: West Virginia; Hardy County; Lost River State Park; latitude, 38°52'51"; longitude 78°55'59"; Lost River State Park Quadrangle, USGS.

Continuity: New.
Size: 6.1 ha = 15 acres (rectangular, 110 x 660 yards, measured longitudinally and estimated laterally).

Description of Plot: Hardwood forest cut prior to 1930. The dominant canopy trees are Red Oak (Quercus rubra) and Chestnut Oak (Quercus montana). Most prominent in the understory are Striped Maple (Acer pensylvanicum) and Dogwood (Cornus florida). The ground cover is primarily Black Cohosh (Cimicifuga racemosa) and Thoroughwort (Eupatorium sp.). A quantitative survey of the vegetation gave the following results: Red Oak 37%; Chestnut Oak 19%; Black Oak (Quercus velutina) 11%; Hickory (Carya sp.) 16%; Black Locust (Robinia pseudo-acacia) 9%; Shrub stems/acre 2608; ground cover 11%; canopy cover 87%; average canopy height 78 ft. (range 62-105). Plant names are from Flora of West Virginia, by Strausbaugh and Core.

Edge: Forest continues in all directions.

Topography: The center line is a Park Trail which follows the contour on the East slope of Shenandoah Mountain. Elevation: 2400 ft.

Weather: Cool and dry, there was a scattered frost one night.

Coverage: June 4 thru 8, 1977. All trips between dawn and 0745 hours or 1900 and 2100 hours. Total man-hours: 10.

Census: Cerulean Warbler, 4 (66, 27); American Redstart, 3.5, (58, 23); Acadian Flycatcher, 2.5; Great Crested Flycatcher 2; Eastern Wood Pewee, 2; Wood Thrush, 2; Blue-gray Gnatcatcher, 2; Scarlet Tanager, 2; White-breasted Nuthatch, 1.5; Rose-breasted Grosbeak; + Red-bellied Woodpecker +; Pileated Woodpecker, +; Brown-headed Cowbird, +. Total 12 species; 24 territorial males (395/km² 2, 160 per 100 acres). Two nests were located: a Wood Thrush and a Downy Woodpecker. Nest contents were not examined. Census Takers: Anne Pyle, Anne Llewellyn, Greg Eddy, Laura Koch, Juanita Delancey, Maxine Thacker, Ardeth Smith, Lew Smith, Iris Moeller, Maxine Kiff, Estes Rechelderfer, Bill Smith (compiler).

3. WOODED PASTURE
Location: West Virginia, Hardy County, 3.5 miles N of the administration building in Lost River State Park on ridge on the west side of Wetzel Hollow; 38°56'37"N, 78°55'21"W Lost River State Park Quadrangle USGS.

Continuity: New.
Size: 6.07 ha = 15.0 acres (rectangular, 110 x 660 yards, measured longitudinally and estimated laterally).

Description: 75% of the plot is treeless pasture of grasses, wild flowers and blackberries. In the wooded portion of the plot Black Locust (Robinia pseudo-acacia) is the dominant canopy tree. No understory is present and the groundcover is primarily grasses. A quantitative survey of the vegetation on the wooded portion of the plot gave the following results: Black Locust 93%; Black Oak (Quercus velutina) 6%; dead trees 2%. Shrubs stems/acre 1850 (not a true understory, blackberries only); ground cover 63%; canopy cover 51%; average canopy height 54 ft. (range 43 - 81). Plant names are from Flora of West Virginia by Strausbaugh and Core.

Edge: Bordering on all sides by similar habitat except that the slope becomes very steep on the east side where it is as much as 45°.

Topography: Essentially a ridge with slopes on both sides of approximately 10°.

Elevation: 2150 ft. to 2282 ft.

Weather: Warm, dry days and cool nights. A killing frost occurred in the region one night.

Coverage: June 4, 5, 6, 8. All trips between dawn and 0800 or 1900 and 2100 hours. Total party hours: 5.

Census: Indigo Bunting, 3 (49, 20); Chipping Sparrow, 3 (49, 20); Field Sparrow, 3 (49, 20); Yellow-breasted Chat, 1.5; Gray Catbird, 1; Brown Thrasher, 1; Am. Robin 1; Rufous-sided Towhee, 1; Song Sparrow, 1; Turkey Vulture, +; Am. Kestrel, +; Bobwhite, +; E. Phoebe, +; Great Crested Flycatcher, +; Barn Swallow, +; Common Cowon, +; E. Bluebird, +; Blue-gray Gnatcatcher, +; Cardinal, +. Totals: 19 species; 15.5 territorial males or females (255/km² 2, 103 per 100 acres). Visitors: Least Flycatcher, E. Wood Pewee, Carolina Chickadee, Starling, Common Grackle, Brown-headed Cowbird (1 male), Am. Goldfinch. Remarks: Two pairs of Chipping Sparrows and one pair of Field Sparrows were seen feeding young out of the nest. This area of West Virginia is very dry because it is in the rain shadow of the higher mountains to the west. This plot is an active pasture and cattle were seen on nearly every trip. For these reasons the ground cover is very short. No bird species common to tall grass, such as Meadowwarks, were seen. All the breeding birds were found in the wooded portion or the blackberry patches. Special thanks to Glenn Phillips and George Koch for locating the study area and to Anne Eddy and Bill Smith for their help with the quantitative habitat description. Census Takers: Greg Eddy (compiler).

4. OAK-PINE-FOREST
Location: West Virginia; Hardy County; 4.7 miles Northwest of Mathias; 38°54'37"N, 78°56'01"W Lost River State Park Quadrangle USGS.

Continuity: New.
Size: 6.07 ha = 15.0 acres (rectangular, 110 x 660 yards, measured longitudinally and estimated laterally).

Description of Plot: The dominant canopy trees are Oak (Quercus sp.) Pine (Pinus sp.) and Hickory (Carya sp.) Most prominent in the understory are Blueberry (Vaccinium sp.) and Dogwood (Cornus florida). The ground cover is primarily Grasses (Carex sp.). A quantitative survey of the vegetation gave the following results: Chestnut Oak (Quercus montana) 27%; White Oak (Q. alba) 23%; Black Oak (Q. velutina) 9%; Red Oak (Q. rubra) 6%; Virginia Pine (Pinus virginiana) 6%; White Pine (P. strobus) 3%; Pitch Pine (P. rigida) 2%; Table Mountain Pine (P. pungens) 1%; Pignut Hickory (Carya glabra) 7%; Mockernut Hickory (C. tomentosa) 2%; Dead Trees 9%. Shrub stems/acre 5558; ground cover 25%; Canopy cover 85%; Average canopy height 57 ft. (range 51-68). Plant names are from Flora of West Virginia by Strausbaugh and Core.

Edge: Similar habitat on all sides.


Weather: Cold and dry.

Coverage: 6/5/77 to 6/10/77. All trips between dawn and 0745 hours. Total party-hours: 13.

THE REDSTART — JANUARY, 1978 17
Census: E. Wood Pewee, 2.5; Red-eyed Vireo, 2.5; Woodthrush, 2; Great Crested Flycatcher, 1.0; Tufted Titmouse, 1.0; Blue-gray Gnatcatcher, 0.5; Worm-eating Warbler, 1.0; Scarlet Tanager, 1.0; White-breasted Nuthatch, 0.5; Rose-breasted Grosbeak, 0.5; Pileated Woodpecker, +; Red-bellied Woodpecker, +; Downy Woodpecker, +; Blue-Jay, +; Com. Crow, +; Brown-headed Cowbird, +. Total 16 species; 13 territorial males (214/km², 87 per 100 acres). Visitors: Com. Flicker, E. Phoebe, Acadian Flycatcher, Carolina Wren, Gray Catbird, Am. Robin, Pine Warbler, Indigo Bunting, Am. Goldfinch and Rufous-sided Towhee. Remarks: This plot lies in the "rain shadow" of the Appalachian Mountains and has an average annual precipitation of only 35-40". Even so, the census was taken when the rainfall was far below normal and growing corn was killed in the fields from cold weather. The lack of moisture was reflected by scarcity of ground cover in the woodlots, apparently adversely affecting the number of ground-nesting birds. The sample of woodland reported is, we feel, representative of much of the upland area of the county. Census participants: Jean Anderson, E.R. Chandler, Richard Diener, Howard Helmerding, Robert Hostottle, Edward Igenfritz, David Jones, Elizabeth McIntyre, Donald Nemanich, James Sirch, Louis Sturm, Josephine Wood and Glen Phillips (compiler).

5. OAK-PINE-HICKORY FOREST

Location: West Virginia; Hardy County; 5 miles NW from Mathias; starts at 38°55′35″N, 78°56′31″W, Lost River State Park Quadrangle, USGS; extends north to a hill.

Contiguity: New.

Size: 6.1 ha = 15 acres (rectangular, 110 x 660 yards, length measured, width estimated).

Description of Plot: A mixed forest undisturbed since 1940. The dominant canopy trees are Table Mountain Pine (Pinus pungens), Red Oak (Quercus rubra), and Chestnut Oak (Q. prinus). Prominent in the understory are Blueberry (Vaccinium sp.), Scrub Oak (Q. elliottii), and Black Locust (Robinia pseudo-acacia). The ground cover is mostly the smaller Blueberries with Goldenrod (Solidago erecta), Pussetoys (Antennaria virginica), and a few ferns and grasses. A quantitative vegetation survey of six 0.1 acre samples gives: Red Oak 25%; Chestnut Oak 25%; Table Mountain Pine 25%; Pitch Pine (P. rigida) 5%; Pignut Hickory (Carya glabra) 9%; Dead Trees 4%. Shrub stems/acre 9370; ground cover 31%; canopy cover 75%; average canopy height 48 feet (range 40-60).

Edge: The forest continues on all sides.

Topography: Centerline about level a few feet above the 2400 foot contour. Sidehill plot 60-200 feet below ridge, southwest exposure. (Fall 80 150 feet across plot). Weather: Clear and dry first day. Then cool, wet and windy.

Coverage: June 5-7, 9: 10 trips between dawn and 0800 and one trip in the evening. Total party-hours 8.

Census: Ovenbird, 2.5; Rufous-sided Towhee, 2; Pine Warbler, 1.5; Black-capped Chickadee, 1; Downy Woodpecker, 0.5; Great Crested Flycatcher, 0.5; Tufted Titmouse, 0.5; Rose-breasted Grosbeak, 0.5; Pileated Woodpecker, +; Hairy Woodpecker, +; E. Wood Pewee, +; Blue Jay, +; White-breasted Nuthatch, +; Wood Thrush, +; Brown-headed Cowbird, +; Scarlet Tanager, +. Totals: 16 species; 13 territorial males (214/km², 87 per 100 acres). Remarks: This area of shale soils and low moisture was reflected by scarcity of ground cover in the woodlots, apparently adversely affecting the number of ground-nesting birds. The sample of woodland reported is, we feel, representative of much of the upland area of the county. Census participants: Jean Anderson, E.R. Chandler, Richard Diener, Howard Helmerding, Robert Hostottle, Edward Igenfritz, David Jones, Elizabeth McIntyre, Donald Nemanich, James Sirch, Louis Sturm, Josephine Wood and Glen Phillips (compiler).

6. SECOND-GROWTH OAK-MAPLE FOREST

Location: West Virginia; Hardy County; in Dove Hollow beginning 3.6 miles from intersection with main park road, Lost River State Park, 38°56′00″N, 78°53′30″W, Lost River Park Quadrangle, USGS.

Contiguity: New.

Size: 6.07 ha. = 15 acres (rectangular, 110 x 660 yards, measured longitudinally and estimated laterally).

Description: A vegetation survey revealed the dominant trees as Oaks and Maples: Red Oak (Quercus rubra) 28%; White Oak (Q. alba) 23%; Red and Sugar Maple (Acer rubrum and A. saccharum) 14%; Other canopy trees included: Hickory (Carya sp.) 4%; Black Gum (Nyssa sylvatica) 4% and Dead Trees 4%. Most prominent in the understory are: Flowering Dogwood (Cornus florida) and Witch Hazel (Hamamelis virginiana) and saplings of the canopy trees. The sparse ground cover is composed of Golden Ragwort (Senecio aureus), White Snakeroot (Eupatorium urticae-follum), some scattered tufts of grass and ferns. Shrub stems/acre 1500; ground cover 4%; canopy cover 56%; average canopy height 64 ft.

Edge: The forest is similar in all directions.

Topography: A typical hollow with small stream extending NE by SW at an average elevation of 1800 ft. Weather: Warm and dry except a change to rain and cool during the latter part of the census period.

Coverage: June 4-8, 1977. All trips between dawn and 0740 hours with two mid-morning and two evening trips. Total party-hours 12.

Census: Acadian Flycatcher, 4 (66, 27); Blue-gray Gnatcatcher, 3 (49, 20); Red-eyed Vireo, 2.5; Tufted Titmouse, 2; Louisiana Waterthrush, 2; Wood Thrush, 1; Ovenbird, 1; Scarlet Tanager, 1; Worm-eating Warbler, 0.5; Cerulean Warbler, 0.5; Am. Redstart, 0.5; Yellow-billed Cuckoo, +; Pileated Woodpecker, +; Great Crested Flycatcher, +; E. Wood Pewee, +. Totals: 16 species; 13 territorial males (214/km², 87 per 100 acres). Visitors: Downy Woodpecker, Blue Jay, Com. Crow, Brown-headed Cowbird and Am. Goldfinch. Remarks: The centerline of the census plot was a hard surface road in Dove Hollow which follows a small stream, with closed canopy in a deciduous second-growth forest, and one small area where the hillside had been excavated for road fill. Blue-gray Gnatcatchers and Tufted Titmice were feeding young. The hot dry weather may have affected the activity of the birds. Special recognition to George Koch and Glen Phillips for assistance with the vegetation survey. Census Takers: E. R. and Elizabeth Chandler (compilers); Kyle Bush, Dorothy Conrad, Frank Murphy, Lou and Flo Sturm.

7. OAK-MAPLE-BIRCH FOREST

Location: West Virginia; Hardy County; 2.5 miles WSW from Mathias; starts at 38°51′50″N, 78°54′29″W, Berton Quadrangle, USGS; extends ESE.

Contiguity: New.

Size: 6.1 ha = 15 acres (rectangular, 110 x 660 yards, measured, width estimated).

Description of Plot: A Hardwood forest last cut over about 1940. The dominant canopy trees are Chestnut Oak (Quercus prinus) and Red Maple (Acer rubrum). Prominent in the understory are Witch Hazel (Hamamelis virginiana), Blueberry (Vaccinium sp.), and seedlings of the canopy species. The sparse ground cover is quite varied. Both Pipsissewas are present (Chimaphila umbellata and maculate), and some Teaberry (Gaultheria procumbens). Many of the blueberries are low enough to be considered ground cover. There are a number of Greenbriars (Silmias rotundifolia) and

THE REDSTART — JANUARY, 1978
a few ferns and grasses. A quantitative vegetation survey of six 0.1 acre samples gives: Chestnut Oak 26%; Red Oak (Q. rubra) 7%; White Oak (Q. alba) 5%; Red Maple 21%; Black Birch (Betula lenta) 14%; Hickory (Carya sp.) 6%; Tuliptree (Liriodendron tulipifera) 6%; Basswood (Tilia americana) 3%; Black Gum (Nyssa sylvatica) 5%; Dead trees 5%. Shrub stems/acre 4330; ground cover 22%; canopy cover 85%; average canopy height 74 feet (range 68-83).

Edge: The forest continues on all sides.

Topography: The centerline follows an intermittent stream, falling from elevation 1960 to 1840 feet. The sides average about 40 feet higher than the centerline.

Weather: Cool, occasional rain, some wind. The first break in an extremely dry and hot spring.

Coverage: June 5-8; 10 trips between dawn and 0730 and two in the evening. Total party-hours 8.

Census: Acadian Flycatcher, 3 (49, 20); Red-eyed Vireo, 3; E. Wood Pewee, 2.5; Tufted Titmouse, 1; Blue-gray Gnatcatcher, 1; Louisiana Waterthrush, 1; Red-billed Woodpecker, 0.5; Broad-winged Hawk, +; Screech Owl, +; Pileated Woodpecker, +; Great Crested Flycatcher, +; C. Crow, +; Black-capped Chickadee, +; White-breasted Nuthatch, +; Brown-headed Cowbird, +. Totals: 15 species; 13 territorial males (214/km², 87/100 acres). Visitors: Yellow-billed Cuckoo, Black-billed Cuckoo, Wood Thrush, Am. Goldfinch, Rufous-sided Towhee. Remarks: A nest of the Acadian Flycatcher was found. The usual low population in a normally dry area may have been further reduced by the extremely dry spring. The rain during the census week was the first in two months. Special thanks to Glen Phillips, George Koch, Bill Smith and Greg Eddy for their work on plot layout and vegetation survey and for advice on evaluating the census.---Virginia Johnson (compiler), Jean Anderson, Ralph Bel1, Juanita Delancey, Anne Eddy, Kathleen Finnegan, George A. Hall, Lorraine Harper, Eugene Hutton, Nevada Laitsch, Charlotte Lanham, Libby McIntyre, Iris Moeller, Ann Pyle, Carolyn Ruddle, Zettle Stewart, Josephine Wood.

Bird Banding - 1977 Foray
Ephe M. Olliver, Joseph InBrogno and Jo Lane Stern

Have you seen a Whip-poor-will, real close? Close enough to touch it? And have you ever seen its mouth open? One of the most interesting birds netted at the Foray at Lost River State Park was a female Whip-poor-will. It was brought down to the dining hall so that all could see it and take pictures. Its bill is very short for the size of the bird, but its mouth is very wide. Ephe opened the bird’s mouth. It was like looking down the gullet of a Channel Cat. “Big Mouth” is a fitting name for this bird. The other interesting bird was a male Rose-breasted Grosbeak in full breeding plumage. He was beautiful.

Five different sites were tried for the banding nets. The two most productive sites were one in a ravine down over the road between Cabins 16 and 17, and one on the circular driveway at Cabin 19. The weather was cold at times and very windy; however, 47 birds (14 species) were banded.

Eastern Phoebe 7
Louisiana Waterthrush 4
Am. Robin 9
Chipping Sparrow 1
Acadian Flycatcher 5
Wood Thrush 5
Eastern Wood Pewee 2
14 species .... 47 birds

Ferns and Fern Allies of Hardy County, West Virginia
John T. Laitsch and Michael A. Breiding

Forty-one species and five varieties of ferns and fern allies were identified during the 1977 foray. Although most species were well distributed throughout the area covered, few large populations of any one species were found.

TRUE FERNS

Adiantum pedatum L. Maiden-hair Fern
Asplenium montanum Wild. Mountain Spleenwort
A. ruta-muraria L. Wall Rue
The following list includes all of the flowering plants found during the 1977 Foray which could be identified from the flowers, fruits or vegetative parts, except grasses, sedges, rushes, and the genus Rubus. Plants were collected and identified by many Brooks Bird Club members during the two weeks from June 4-18. Ann Pyle and Iris Fritillary Butterflies on Nodding Thistle, near Trout Pond.

Photo by A. R. Buckelew, Jr.
Moeller deserve special honors for excellent displays of wild flowers which helped BBC members identify the flora of Hardy County.

Interesting comparisons of foray surveys can be made since the BBC also held forays at Lost River State Park in 1940 and 1941. The following symbols are used in the list below:

- 0-plant identified in 1940 foray
- 1-plant identified in 1941 foray
- 7-plant identified in 1977 foray
- *-new Hardy County record
- **-new West Virginia record.

It should be noted that several plants are listed as new Hardy County records, even though they are listed from the 1940 and 1941 forays. This happens because Strausbaugh and Core's reference books do not recognize a new county record unless specimens are deposited in the West Virginia University Herbarium.

Based on these flora inventories there were four new state records and 119 new Hardy County records. A total of 509 species were identified which represented 293 genera and 74 families.

Especially unusual plants from the 1977 Foray are listed below:

1. *Sparganium androcladum* (Staminate Burreed)
2. *Potamogeton spirillus* (Small Pondweed)
3. *Auranthus reptans* (Creeping Spearwort)
4. *Lemna minor* (Least Duckweed)
5. *Lemna valdiviana* (Valdivia Duckweed)

The terminology and "new records" for this text is in accordance with Strausbaugh and Core's books: *Flora of West Virginia* (Second Edition).

**Checklist of Herbaceous Flowering Plants**

<table>
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<tr>
<th>Family</th>
<th>Species</th>
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<tr>
<td>TYPHACEAE</td>
<td><em>Typha latifolia</em> L.</td>
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<tr>
<td>SPARGANIACEAE</td>
<td><em>Sparganium eurycarpum</em> Engelm.</td>
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<tr>
<td></td>
<td><em>Sparganium androcladum</em> (Engelm.)</td>
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<tr>
<td></td>
<td><em>Morong.</em></td>
</tr>
<tr>
<td>ZOSTERACEAE</td>
<td><em>Potamogeton pusillus</em> L.</td>
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<tr>
<td></td>
<td><em>Potamogeton diversifolius</em> Raf.</td>
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<tr>
<td></td>
<td><em>Potamogeton spirillus</em> Tuckerm.</td>
</tr>
<tr>
<td></td>
<td><em>Potamogeton amplifolius</em> Tuckerm.</td>
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<tr>
<td>NAIADACEAE</td>
<td><em>Najas flexilis</em> (Wild.) Rostk. &amp; Schmidt.</td>
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<tr>
<td>ALISMATACEAE</td>
<td><em>Sagittaria rigida</em> Pursh.</td>
</tr>
<tr>
<td>HYDROCHARITACEAE</td>
<td><em>Elodea canadensis</em> Michx.</td>
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<tr>
<td></td>
<td><em>Vallisneria americana</em> Michx.</td>
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<tr>
<td>ARACEAE</td>
<td><em>Arisaema triphyllum</em> L.</td>
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<td></td>
<td><em>Arisaema stewartsonii</em> Britton</td>
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<td></td>
<td><em>Arisaema dractonii</em> L.</td>
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<td></td>
<td><em>Symlocarpus foetidus</em> L.</td>
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<td><em>Orocutum aquaticum</em> L.</td>
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<td><em>Acorus calamus</em> L.</td>
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<tr>
<td>LEMNACEAE</td>
<td><em>Lemna valdiviana</em> Phil.</td>
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<tr>
<td></td>
<td><em>Lemna minor</em> L.</td>
</tr>
<tr>
<td></td>
<td><em>Lemna validiana</em> Phil.</td>
</tr>
</tbody>
</table>

**Flora of West Virginia** (Second Edition)
COMMELINACEAE
Tradescantia virginiana L.
Commelina virginica L.

LILIACEAE
Xerophyllum asphodeloides (L.) Nutt.
Chamaelirium luteum (L.) Gray
Amianthium muscaetoxicum (Walt.) Gray
Stenanthium grampzeum (Ker.) Morong
Veratratum viride Ait.

Uvularia perfoliata L.
Uvularia grandiflora J. E. Smith
Uvularia sessilifolia L.
Uvularia nudica (Walt.) Fernald
Allium canadense L.
Allium vineale L.
Allium canadense L.

Hemerocallis fulva L.

Tradescantia virginiana (L.) Gray

Chamaelirium luteum (L.) Gray

Erythronium americanum (L.) Willd.

Asparagus officinalis L.

Erythronium lobilimbicatlini L.

Uvularia pudica (L.) Gray

Uvularia grandiflora (L.) Willd.

Uvularia perfoliata (L.) Willd.

Streptopus roseus (L.) Michx.

Polygonatum biflorum (Walt.) Ell.

Disporum lanuginosum (Michx.) Nichols

Medeola virginiana L.

Polygonatum pubescens Willd.

Polygonum biformum (Walt.) Ell.

Polygonum canaliculatum (Michx.) Pursh

Aleuris farinosa L.

Trillium erectum L.

Trillium albidum L.

Ornithogalum umbellatum L.

Yucca filamentosa L.

Asparagus officinalis L.

Clintonia uniflora (Michx.) Morong

Smilacina racemosa (L.) Desf.

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Streptopus roseus Michx.

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Polygonatum pubescens Willd.

Polygonatum biflorum (Walt.) Ell.

Polygonum canaliculatum (Michx.) Pursh

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Trillium albidum L.

Ornithogalum umbellatum L.

Yucca filamentosa L.

Asparagus officinalis L.

Clintonia uniflora (Michx.) Morong

Smilacina racemosa (L.) Desf.

Disporum lanuginosum (Michx.) Nichols

Streptopus roseus Michx.

Medeola virginiana L.

Polygonatum pubescens Willd.

Polygonatum biflorum (Walt.) Ell.

Polygonum canaliculatum (Michx.) Pursh

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Smilacina racemosa (L.) Desf.

Disporum lanuginosum (Michx.) Nichols

Streptopus roseus Michx.

Medeola virginiana L.

Polygonatum pubescens Willd.

Polygonatum biflorum (Walt.) Ell.

Polygonum canaliculatum (Michx.) Pursh

Aleuris farinosa L.

Trillium erectum L.

Trillium albidum L.

Ornithogalum umbellatum L.
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<tr>
<th>Family</th>
<th>Common Name</th>
<th>Scientific Name</th>
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<tr>
<td>RANUNCULACEAE</td>
<td>Common Purslane</td>
<td>17</td>
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<tr>
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<td>Spring Beauty</td>
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<tr>
<td>PINK FAMILY</td>
<td>Knawel</td>
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<tr>
<td></td>
<td>Silvery Whitlowwort</td>
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<td></td>
<td>Smooth Forked-Chickweed</td>
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<td>Hairy Forked-Chickweed</td>
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<td>Thymeleaf Sandwort</td>
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<td>Rock Sandwort</td>
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<td>Common Mouse-ear Chickweed</td>
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<td>Night-Flowering Catchfly</td>
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<td>Bouncing Bet</td>
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<td>Deptford Pink</td>
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<td>Sweet William</td>
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<td>WATERLILY FAMILY</td>
<td>Cowlily</td>
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<td>Small White Water Lily</td>
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<td>CROWFOOT FAMILY</td>
<td>Creeping Spearwort</td>
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<td>Allegheny Crowfoot</td>
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<td>Kidneyew Campion</td>
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<td></td>
<td>Small-Flowered Crowfoot</td>
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<td>Hooked Crowfoot</td>
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<td>Rue Anemone</td>
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<td>Roundlobe Hepatica</td>
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<td>Sharplobe Hepatica</td>
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<td>Thimbleweed</td>
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<td>Mountain Anemone</td>
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<td>Windflower</td>
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<td>Virgin’s Power</td>
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</table>
Leguminosae

Crassulaceae

Saxifragaceae

Rosaceae

Arabis lyrata
- Soft Agrimony
- Garden Burnet
- Common Cinquefoil
- Upright Cinquefoil
- Rough Cinquefoil

Agrimonia pubescens
- Virginia Avens
- Red Clover
- Rabbitfoot Clover
- Crown Vetch

Agn'monia parvijlora
- Wild Vetch
- Groundnut
- American Hogpeanut

Arabis glabra
- Semi-desert Clover
- Yellow Hop Clover

Lupinus perennis
- Yellow Sweetclover

Dentaria laciniata
- Yellow Hop Clover

Dentaria bulbosa
- Low Hop Clover

Cardamine pensylvanica
- White Sweetclover

Arabis lyrata
- White Clover

Arabis glabra
- Red Clover

Arabis laevigata
- Crown Vetch

Arabis canadensis
- Yellow Sweetclover

Saxifraga pensylvanica
- Wild Vetch

Saxifraga virginiensis
- Groundnut

Heuchera americana
- American Hogpeanut

Heuchera alba
- Yellow Hop Clover

Heuchera pubescens
- Yellow Hop Clover

Mitella diphylla
- Yellow Hop Clover

Goatsbeard
- Yellow Hop Clover

Trifolium pratense
- Yellow Sweetclover

Trifolium repens
- White Sweetclover

Trifolium hybridum
- Yellow Hop Clover

30

31
### FALSE MERMAID FAMILY
- **Callitriche heterophylla**
- **Callitriche deflexa**
- **Callitriche intermedia**
- **Callitriche proserpina**

### MALVA FAMILY
- **Malva neglecta**
- **Althaea rosea**
- **Euphorbia corollata**

### ROCKROSE FAMILY
- **Lechea racemulosa**
- **Malva neglecta**
- **Sida spinosa**

### VIOLET FAMILY
- **Callitriche heterophylla**
- **Callitriche deflexa**
- **Epilobium angustifolium**
- **Hypericum perforatum**
- **Hibiscus trionum**

### CACTUS FAMILY
- **Opuntia calcicola**
- **Opuntia compressa**
- **Opuntia pseudomexicana**
- **Opuntia subulata**

### PASSIFLORACEAE
- **Passiflora incarnata**
- **Passiflora edulis**
- **Passiflora ligularis**

### VIOLACEAE
- **Viola pedata**
- **Viola cucullata**
- **Viola papilionacea**
- **Viola striata**

### TARWORT FAMILY
- **Viola pedata**
- **Viola cucullata**
- **Viola papilionacea**
- **Viola striata**

### GESNERIA FAMILY
- **Vincetoxicum hirundinaria**
- **Vincetoxicum officinale**
- **Vincetoxicum salicifolium**
- **Vincetoxicum weberi**

### GINSENG FAMILY
- **Panax ginseng**
- **Panax quinquefolius**
- **Panax pseudoginseng**

### CARROT FAMILY
- **Daucus carota**
- **Pastinaca sativa**
- **Pseudotaenidia montana**

### DIPLODAEACEAE
- **Falcaria soides**
- **Erigenia bulbosa**
- **Ligusticum canadense**
- **Angelica atropurpurea**
- **Angelica venenosa**

### CARROT FAMILY
- **Daucus carota**
- **Pastinaca sativa**
- **Pseudotaenidia montana**

### PRIMROSE FAMILY
- **Primula vulgaris**
- **Primula elatior**
- **Primula farinosa**
- **Primula auricula**

### WINTERGREEN FAMILY
- **Gaultheria shallon**
- **Gaultheria procumbens**
- **Gaultheria pyriformis**

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- **Falcaria soides**
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**THE REDSTART — JANUARY, 1978**

- **Euphorbia corollata**
- **Callitrichaceae**
- **Malvaceae**
- **Cistaceae**
- **Cactaceae**
- **Passifloraceae**
- **Violaceae**
- **Viola pedata**
- **Viola cucullata**
- **Viola papilionacea**
- **Viola striata**
- **Viola pedata**
- **Viola cucullata**
- **Viola papilionacea**
- **Viola striata**
- **Viola pedata**
- **Viola cucullata**
- **Viola papilionacea**
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- **Viola pedata**
- **Viola cucullata**
- **Viola papilionacea**
- **Viola striata**
- **Viola pedata**
- **Viola cucullata**
- **Viola papilionacea**
- **Viola striata**
- **Viola pedata**
- **Viola cucullata**
- **Viola papilionacea**
- **Viola striata**
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<tr>
<th>Family</th>
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<tr>
<td>Gentianaceae</td>
<td>Lysimachia ciliata</td>
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<td>Borage Family</td>
<td>Lysimachia lanceolata Walt.</td>
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<td>Gentian Family</td>
<td>Gentianaquinquefolia L.</td>
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<td>Gentiana saponaria L.</td>
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<tr>
<td>Gentiana villosa L.</td>
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<tr>
<td>Apocynaceae</td>
<td>Apocynum sibiricum</td>
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<td>Polemoniaceae</td>
<td>Asclepias viridiflora</td>
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<tr>
<td>Hydrophyllaceae</td>
<td>Hydrophyllum virginianum L.</td>
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<tr>
<td>Verbenaceae</td>
<td>Verbena utriculifolia</td>
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<td>Labiatae</td>
<td>Mentha spicata</td>
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<td>Ment Family</td>
<td>Mentha pipettifolia</td>
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<td>Figwort Family</td>
<td>Scrophulariaceae</td>
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**GENTIANACEAE**
- Lysimachia ciliata
- Lysimachia lanceolata Walt.
- Gentianaquinquefolia L.
- Gentiana saponaria L.
- Gentiana villosa L.

**APOCYNACEAE**
- Apocynum sibiricum

**POLEMONIACEAE**
- Asclepias viridiflora
- Asclepias exaltata L.
- Asclepias variegata L.
- Asclepias syriaca L.
- Asclepias iridescens J. E. Smith
- Asclepias verticillata L.
- Asclepias viridiflora Raf.
- Cynanchum laeve (Michx.) Pers.
- Matelea carolinensis (Jacq.) Woodson

**CONVOLVULACEAE**
- Ipomoea purpurea (L.) Jaqc.
- Ipomoea purpurea (L.) Roth
- Ipomoea purpurea (L.) G.F.W. Mey.
- Convolvulus thompsoniae L.
- Convolvulus purshianus Wherry
- Convolvulus sepium L.
- Convolvulus arvensis L.
- Cuscuta gronovii Willd.

**POLEMONIACEAE**
- Polemonium reptans L.
- Phlox rubella L.
- Phlox ovata L.
- Phlox maculata L.
- Phlox paniculata L.

**HYDROPHYLLACEAE**
- Hydrophyllum virginianum L.
- Hydrophyllum canadense L.

**BORAGINACEAE**
- Echium vulgare L.
- Onosmodium hispidissimum Mackenzie
- Lithospermum arvense L.
- Lithospermum latifolium Michx.
- Lithospermum canescens (Michx.) Lehm.

**THE REDSTART — JANUARY, 1978**

**Cynoglossum officinale L.**
- Hounds-tongue 07
- Wild Comfrey 17
- Forget-Me-Not 7

**Verbenaceae**
- Verbena urticifolia L.
- Verbena simplex Lehm.

**Hydrophyllaceae**
- L. lanceolata
- L. ciliata

**Asclepias verticillata**
- Butterfly Weed 17

**Milkweed Family**
- Asclepias exaltata L.
- Asclepias variegata L.
- Asclepias syriaca L.
- Asclepias purpurascens J. E. Smith
- Asclepias viridiflora Raf.
- Cynanchum laeve (Michx.) Pers.
- Matelea carolinensis (Jacq.) Woodson

**Morning-Glory Family**
- Ipomoea purpurea (L.) Jaqc.
- Ipomoea purpurea (L.) Roth
- Ipomoea purpurea (L.) G.F.W. Mey.
- Convolvulus thompsoniae L.
- Convolvulus purshianus Wherry
- Convolvulus sepium L.
- Convolvulus arvensis L.
- Cuscuta gronovii Willd.

**Polemoniaceae**
- Polemonium reptans L.
- Phlox rubella L.
- Phlox ovata L.
- Phlox maculata L.
- Phlox paniculata L.

**Hydrophyllaceae**
- Hydrophyllum virginianum L.
- Hydrophyllum canadense L.

**Boraginaceae**
- Echium vulgare L.
- Onosmodium hispidissimum Mackenzie
- Lithospermum arvense L.
- Lithospermum latifolium Michx.
- Lithospermum canescens (Michx.) Lehm.

**THE REDSTART — JANUARY, 1978**

**Solanaceae**
- Physalis heterophylla Nees.
- Nicandra physalodes (L.) Pers.
- Lycium halimifolium Mill.

**Scrophulariaceae**
- Verbascum thapsus L.
<table>
<thead>
<tr>
<th>Name</th>
<th>Common Name</th>
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<tr>
<td>Justicia americana</td>
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<td>Sherardia arvensis</td>
<td>Field madder</td>
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<td>Galium aparine</td>
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<td>Galium tincturium</td>
<td>Tinker's weed</td>
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<td>Galium concinnum</td>
<td>Batt. Venus looking glass</td>
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<td>Galium asperellum</td>
<td>A. D. C. Venus looking glass</td>
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<td>Galium pedemontanum</td>
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<td>Eupatorium fistulosum</td>
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<td>Eupatorium pubescens</td>
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<td>Eupatorium sessilifolium</td>
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<td>Eupatorium perfoliaum</td>
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<td>Eupatorium rugosum</td>
<td>Batt. Tall Goldenrod</td>
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<td>Solidago caesia</td>
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<td>Late Purple Aster</td>
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THE REDSTART — JANUARY, 1978
Erigeron strigosus
Aster linariifolius
Erigeron canadensis
Erigeron annuus
Erigeron pulchellus
Ambrosia artemisiifolia
Ambrosia trifida
Antennaria solitaria
Aster vimineus
Aster puniceus
Aster prenanthoides
Erigeron philadelphicus
Antemzaria parlinii
Aster novae-angliae
Aster oblongifolius Nutt.
Aster novae-anglalae L.
Aster prenanthoides Muhl.
Aster puniceus L.
Aster laevis L.
Aster vimineus Lam.
Aster linariifolius L.
Erigeron pulchellus Michx.
Erigeron philadelphicus L.
Erigeron annuus (L.) Pers.
Erigeron striigosus Muhl.
Erigeron canadensis L.
Sericocarpus asteroides (L.) BSP.
Antennaria virginica Stebbins
Antennaria parlinii Fernald
Antennaria plantaginifolia (L.) Richards
Antennaria solitaria Rydb.
Anaphalis margaritacea (L.) C.B. Clarke
Gnaphalium purpureum L.
Sedum spathulifolium L.
Sedum acre L.
Sedum anglicum L.
Sedum adpressum Bently
Sedum linare L.
Sedum purpureum L.
Sedum laevigatum L.
Sedum morganianum L.
Sedum acre L.
Sedum anglicum L.
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Sedum purpureum L.
Sedum laevigatum L.
Sedum morganianum L.
Sedum acre L.
Sedum anglicum L.
Sedum adpressum Bently
Sedum linare L.
Sedum purpureum L.
Sedum laevigatum L.
Sedum morganianum L.
Sedum acre L.
Sedum anglicum L.
Sedum adpressum Bently
Sedum linare L.
Sedum purpureum L.
Sedum laevigatum L.
Sedum morganianum L.
Sedum acre L.
Sedum anglicum L.
Sedum adpressum Bently
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Sedum purpureum L.
Sedum laevigatum L.
Sedum morganianum L.
Sedum acre L.
Sedum anglicum L.
Sedum adpressum Bently
Sedum linare L.
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Sedum morganianum L.
Sedum acre L.
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Sedum adpressum Bently
Sedum linare L.
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Sedum laevigatum L.
Sedum morganianum L.
Sedum acre L.
Sedum anglicum L.
Sedum adpressum Bently
Sedum linare L.
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Sedum laevigatum L.
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Sedum acre L.
Sedum anglicum L.
Sedum adpressum Bently
Sedum linare L.
Sedum purpureum L.
Sedum laevigatum L.
Sedum morganianum L.
Sedum acre L.
Sedum anglicum L.
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Sedum morganianum L.
Sedum acre L.
Sedum anglicum L.
Sedum adpressum Bently
Sedum linare L.
Sedum purpureum L.
Sedum laevigatum L.
Sedum morganianum L.
Sedum acre L.
Sedum anglicum L.
listed as one of our native trees.
Tree and shrub lists were available from BBC Forays held in Lost River State Park (1940) and Camp Pinnacle (1955). The following symbols are used in the listing below:
0 - identified in 1940 foray
5 - identified in 1955 foray
7 - identified in 1977 foray

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Breeding Bird Records For The 1977 Foray

Norris Gluck

It all began here at Lost River State Park 37 years ago, in the land of “Light Horse Harry” Lee - the first Brooks Bird Club Foray. This year we returned to Hardy County for the fourth time. We had been absent for 22 years, so I will not try to make a detailed comparison with the results of long ago. However, I will point out a few facts. Our 1977 nest list added 12 new breeding species to the previous records: Canada Goose, Black and Wood Ducks, Sparrow Hawk, Hairy Woodpecker, Horned Lark, Purple Martin, Bewick’s Wren, Kentucky Warbler, Yellowthroat, Orchard Oriole and Rose-breasted Grosbeak. We failed to record observations for the following 25 breeding species which had been listed previously for Hardy County: Green Heron, Spotted Sandpiper, Mourning Dove, Yellow-billed Cuckoo, Whip-poor-will, Chimney Swift, Pileated Woodpecker, Cliff Swallow, Blue Jay, White-breasted Nuthatch, Mockingbird, Yellow-throated and Red-eyed Vireos, Black and White, Golden-winged, Chestnut-sided, Pine, Prairie and Hooded Warblers, Ovenbird, Yellow-breasted Chat, American Redstart, Scarlet Tanager, Grasshopper and Vesper Sparrows. The earlier forays listed only one Red-winged Blackbird nest and one Northern Oriole nest, compared with our 12 and 17 breeding records for the respective species. We reported 20 bluebird breeding records in 1977, while the combined total for 1940-41 forays was one nest, and only one was reported in 1955.

A total of 255 breeding observations, covering 57 species, were recorded (197 nests plus 58 observations of young birds out of nest); 200 breeding observations were reported during the first week and 55 during the second week. Sixty-three people reported observations.

An annotated list of the breeding records follows. An asterisk (*) has been used to designate the breeding records prepared during the second week.

(See chart on page 45)

Herptiles of Hardy County

Jean Worthley and Albert R. Buchelew, Jr.

Of the 50 species of herptiles listed by Dr. N. Bayard Green as occurring in Hardy County, we found only 15 and added one new species (Natrix septemvittata). The low number may have been due to the cool, dry weather. Scientific names are from Conant’s A Field Guide to Reptiles and Amphibians.

Turtles

Family Chelydridae
Common Snapping Turtle - (Chelydra serpentina), 5.

Family Testudinidae
Wood Turtle - (Clemmys insculpta), 2.
Eastern Box Turtle - (Terrapene carolina), 5.

(Continued on page 54)
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THE REDSTART — JANUARY, 1978
### ANALYSIS OF BREEDING RECORDS

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<th>Eggs</th>
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### LEGEND

**OBSERVER (Obs):** Jeanie Anderson, JA; Richard Anderson, RA; Ralph Bell, RB; Harold Boccher, HB; Seal Brooks, SB; Eleanor Bush, EB; Kyle Bush, KB; Sherry Cass, SC; Elizabeth Chandler, EC; Pete Chandler, PC; Chuck Conrad, CC; Dorothy Conrad, DC; Clifford Cown, CEC; Linnie Cown, LC; Anne Eddy, AE; Gregg Eddy, GE; Betty Fisher, BF; Norris Gluck, NG; Edna Gregg, EG; George Hall, GH; Doris Henriques, DH; Huss Hogg, BH; Gene Hutton, GH; Ed Igenfritz, EI; Joe Imbrogno, Ji; Virginia Johnson, VJ; Maxine Kiff, MK; George Koch, GK; Nevada Laitsch, NL; Charlotte Lanham, CL; Jack Linehan, JL; Anna Llewellyn, AL; Elizabeth McIntyre, EM; Clark Miller, CM; Iris Moeller, DM; Frank Murphy, FM; Don Nemanich, DN; Ephe Olliver, EO; Virginia Oliver, VO; Paul Perkins, PP; Glen Phillips, GP; Esther Reichelderfer, ER; Orpha Richardson, OR; Mary Riefenberg, MR; Stewart Robbins, SR; Carolyn Ruddle, CR; S. C. Sherry, SCS; S. N. Srich, JNS; Bill Smith, BS; Heidi Smith, HTS; Lewis Smith, LS; Regina Smith, RGS; H. Stanley, HS; Jo Stern, JS; Zetta Stewart, ZS; Ruth Stivers, RS; Florence Sturm, FS; Leon Wilson, LW; Jo Woods, JW; Ass Worthy, AW; Jean Worthy, HW; WaWa Worthy, WW; Apoli Wylie, AFW. **CONTENT:** Y-Young birds in nest; B- Nest under construction; E- Eggs in nest; Out- Young birds out of nest; The number of birds or eggs is shown when available.

**HABITAT (Hbt):** 1-Woods; 2-01-Coniferous; 1-02-Deciduous; 1-03-Mixed; 1-04-Orchard; 2-Swamp; 3-Marsh; 4-Field; 4-05-Cultivates; 4-06-Fallow; 5-Grassland; 8-Suburban; 9-Urban; 0-0-Habitat; 0-9-0-Habitat. **SITE:** 02-On ground in vegetation; 04-Low vegetation; 05-Brush; 07-Deciduous tree branch; 08-Deciduous tree cavity; 09-Conifer branch; 11-Nest box; 12-Other structure; 13-Cliff or bank; 14-Other. **HEIGHT (Hgt):** Number of feet above ground. **ALTITUDE (Alt):** Altitude of locality, in feet above sea level. **COMMENTS:** Locality of nest.
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<td>Yellow-shifted Flicker</td>
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<td>Hairy Woodpecker</td>
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<td><strong>Total - 57 Species</strong></td>
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**Percent**

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1424 Kanawha Blvd. East, Charleston, W. Va. 25301
Snakes
Family Colubridae
Queen Snake - (Natrix septemvittata), 1.
Northern Ringneck Snake - (Diadophis punctatus), 1.
Black Racer - (Coluber constrictor), 1.
Smooth Green Snake - (Opheodrys vernalis), on Big Ridge Trail, 1.
Black Rat Snake - (Elaphe obsoleta), 2.
Family Viperidae
Timber Rattlesnake - (Crotalus horridus), 1.

Salamanders
Family Salamandridae
Red-spotted Newt - (Diemictylus viridescens), many.
Family Plethodontidae
Dusky Salamander - (Desmognathus fuscus).

Tree Frogs
Family Hylidae
Spring Peeper - (Hyla crucifer).
Gray Tree Frog - (Hyla versicolor).

True Frogs
Family Ranidae
Bull frog - (Rana catesbiana).
Green Frog - (Rana clamitans melanota).

Mammals of Hardy County
Maxine Thacker
A total of 19 species of mammals was reported during the two weeks of Foray. Hardy County has one of the largest deer populations in the state and many were seen. No trapping or other special efforts were made for mammal study, so these observations were incidental sightings made near camp or on field trips.

Opossum - (Didelphis marsupialis), 6 all DOR.
Least Shrew - (Cryptotis parva), Pete Chandler’s study area.
Short-tailed Shrew - (Blarinus brevicauda), Dove Hollow Rd.
Little Brown Bat - (Myotis lucifugus), in banding net.
Raccoon - (Procyon lotor), 10.
Mink - (Mustela vison), DOR on Rt. 55 near Lost River State Park sign.
Striped Skunk - (Mephitis mephitis), 4.
Red Fox - (Vulpes fulva), Trout Pond.
Gray Fox - (Urocyon cinereoargenteus), 2.
Groundhog - (Marmota monax), very common.
Eastern Chipmunk - (Tamias striatus), very common.
Eastern Gray Squirrel - (Sciurus carolinensis), 6.
The first part of June was cold and dry, but rainfall started about mid-June and, in most areas covered by this report, this could be classed as a "wet summer." Records of the Foray will not be emphasized since they will be reported later in The Redstart, but outstanding finds are noted. There were reports of dead young in some of the nests at Foray, possibly due to cold or insufficient food. There were few disturbances such as storms to disrupt the nesting season which started early and continued well into late summer. Several correspondents felt that broods of young were larger this year - possibly Nature's way of compensating for last winter's losses.

Due Reservoir, O. Aug. 6 (BB). Great Blue Heron and Green Heron populations varied from less (GB) to more (HG). Most reports were normal numbers. One nest was found there in breeding season.

Shenango Reservoir Aug. 25 (BB). Five Immature Black-crowned Night Herons were also seen on Ralph Bell’s farm at Clarksville, Pa. Again this year. Black Vultures were more plentiful at this year’s Foray, but that is to be expected because of the southeastern location. Sharp-shinned and Cooper’s Hawk populations appear normal with evidence of a nest of the latter on Ralph Bell’s farm at Clarksville, Pa.

Red-tailed Hawks appeared numerous as usual with several reports of successful nesting. There were also reports of Red-shouldered Hawks ranging from none in Coonskin Park, Charleston, W. Va. (NG) to four pairs fledging 14 young in the Youngstown, O. area (BB). The impression at Foray of many Broad-winged Hawks was reinforced by reports from other areas of increased numbers. Kestrels seemed to have a good nesting season with at least two reports of broods of five nestlings each (PM & RKB). In one eastern Ohio study, Pat Murphy found the linear distance between Kestrel nesting territories to be approximately one mile.

Galiformes and Shorebirds. Ruffed Grouse appear to be at a low point in the cycle with most reports from W. Va. showing a decline. Nevada Laitsch felt there were normal numbers in Ohio, but there seems little doubt that last winter's damage was greater the farther north the location. Two flocks of Turkeys were reported (JP). Bill Bartolo reported two adult Common Gallinules near Youngstown, O. July 26 and a Wilson’s Plover at Shenango Lake, Pa. Aug. 1. Killdeer populations varied. Pat Murphy estimated numbers down 50% and Nevada Laitsch felt the trend was exactly the opposite citing early nesting and young seen after the normal nesting period. Upland Sandpipers were reported near Kedville, Pa. (RKB). Spotted Sandpipers have been declining for the last few years but Laitsch felt that they were more plentiful this year. The only report of a Solitary Sandpiper was from Washington, Pa. Aug. 4 (SH). Four Dunlin were reported from Shenango Lake, Pa. Aug. 1 (BB). Hullet Good saw Common Tern on Sutton Lake, Braxton Co., W. Va. Aug. 2.

Doves, Cuckoos and Owls. Though now hunted as a game bird, Mourning Doves continue to increase. It may be that game management practices are responsible. Cuckoos were late in arriving. Early summer reports were much fewer than later records. Reports for Yellow-billed Cuckoos outnumbered those for Black-billed at least six to one. Screech Owls are still low in numbers. Only one correspondent lists them as heard (JP). There was only one report of Great Horned Owl that was from the Youngstown, O. area (BB). Barred Owl populations appear normal. Juvenile Saw-whet Owls, apparently waiting to be fed, were seen on three occasions starting July 19 in the Youngstown, O. area by Carl Chuey (NL).

Goatsuckers through Kingfishers. On June 1, George Koch heard a Chuckwill's-widow at 207 Sutherland Ave. in So. Charleston, W. Va. The bird sang for about 30 minutes before being frightened away by neighbor. Tzeptels and Whip-poor-wills were conspicuous in their scarcity. Night-hawks appeared to be in normal numbers, seven were counted at one time in Uniontown, Pa. (VJ) before the migratory season. First migrants were reported from Franklin, W. Va. (CR). Ralph Bell reports Chimney Swifts 50% higher in number on the Jefferson, Pa. BBS route. Other reports were normal populations. Reports of Ruby-throated Hummingbirds also varied from less (GB) to more (HG). Most reports were normal numbers. The nest was not found on the Foray. Belted Kingfisher was another species decimated by last winter’s foul weather, but a few reports of usual numbers were submitted.

Woodpeckers. Most species of woodpeckers were in normal numbers, and attention should be called again to the small numbers of Hairy and Red-headed Woodpeckers. Some observers remarked that they couldn’t find Red-heads in W. Va. Oliver Johnson found a Red-bellied Woodpecker in the Pipestem Park area, W. Va. The first he had found there in breeding season.

Flycatchers and Swallows. Eastern Kingbirds and Great Crest Flycatchers were reported normal. Eastern Phoebe estimates were mostly low numbers. Ralph Bell found only half as many nesting sites as in 1976. Acadian Flycatchers were less common in Cabell Co., W. Va. (LW). Due to its specialized habitat, the Willow Flycatcher is not plentiful in our region, but no decrease in numbers was noted. A brood of four young was hatched at Uniontown, Pa. (VJ). E. Wood Peewee seemed...
name a few places? Concern has been expressed nationally over the Yellow Warbler.
Pat Murphy found it at normal numbers in her area except in Noble Co., O. It was not present on George Breiding’s Farm, but Norris Gluck found it in Cooskin Park near Charleston, W. Va. Nevada Laitsch lists three locations for Black-throated Green Warblers near East Liverpool, O., one of them new. Cerulean Warblers showed lower numbers this year. Reports for Yellow-throated Warblers were widespread. Norris Gluck thinks it is the most common Warbler here. Bell found 72 Prairie Warblers on 2 BBS routes in Pennsylvania - an all-time high, while other correspondents found them less numerous as habitat changes. Bell had 28 Common Yellow-throats on the Jefferson BBS route which averages 18. Since the Yellow-breasted Chat is sensitive to habitat change, much change of location is expected. Only one or two were found by most campers at the Foray. Murphy tells of a virtual explosion in Noble and Meigs Counties, O. Gluck felt the population of Am. Redstarts in Cooskin Park near Charleston, W. Va. was lower than normal.

Blackbirds and Tanagers. Reports of Bobolinks were at times such that they could have been in migration. The colony in Canaan Valley appears stable and two locations were noted near East Liverpool, O. (NL). Reports of E. Meadowlarks were evenly divided, so they must be about normal. Habitat disturbance plays an important part in their choice of nesting place. Leon Wilson considered Red-winged Blackbirds normally plentiful in Cabell Co., W. Va., while across the Ohio river, Pat Murphy found them less plentiful in Noble and Meigs Counties, O. Both species of Orioles appeared to be normal in number. Murphy noted less Common Grackles in Noble and Meigs counties and wondered if they were affected by winter extermination efforts. Most other correspondents are spoken for by Virginia Johnson of Uniontown, Pa.: “produced more population than ever” and “overabundant” was “Highest population ever seen” by Norris Gluck’s comment on Brown-headed Cowbirds. Ralph Bell noted 100% increase in Scarlet Tanagers on the Jefferson, Pa. BBS route but most observers listed them as normal. Wilson felt that there were not as many Summer Tanagers as last year in the Cabell Co., W. Va. area.

Finches and Sparrows. The severe winter did not seem to affect the Cardinal population (RKB). The expansion of territory by the Blue Grosbeak is as interesting as that of House Finches. One Blue Grosbeak was found the second week of the Foray. One was reported in Grant Co., W. Va. June 30 (CR), another found nesting in Meigs Co., O. (PM) and a pair carrying food in Mason Co., W. Va. (VL). Last years population of Indigo Buntings was outstanding. There may have been a few less this year, but the numbers are still above normal. Art Dunnell banded a female Purple Finch with a brood patch June 7 near Wheeling. The outstanding story of Bird population at this date is, of course, the explosion of House Finches. Reports of nesting finches are now received from Steubenville, O. (CB), Barnesville, O. (ME), East Liverpool, O. (NL), Washington, Pa. (SH) and Uniontown, Pa. (VL). Nevada Laitsch predicts that they will soon be as common as House Sparrows. Since their habits are similar, they will certainly compete for food and nesting. It will be interesting to see the effect upon the House Sparrow population. Rufous-sided Towhees did not seem as numerous early in the season, but had good nesting success. Nevada Laitsch notes a pair feeding young in Monroe Co., W. Va. Sept. 15-25, a late breeding record. Savannah and Grasshopper Sparrows were noted in southwestern Pennsylvania all season (VJ & RKB) and near Terra Alta, W. Va. May 28-30 (NL). It is noteworthy that a 30 acre census plot near Canonsburg, Pa., studied by Roger and Margaret Higbee and others, contained seven nesting pairs in August. Pat Murphy comments that Vesper Sparrows in eastern Ohio where she studies are “almost rare.” Chipping Sparrows continue to be abundant. Field Sparrows appeared normal (NG). Swamp Sparrows were found in a bog on Backbone Mountain near

THE REDSTART — JANUARY, 1978
Davis, W. Va. and at Terra Alta May 29 and Aug. 9 (NL). One was found in the Youngstown area in late August (BB). Song Sparrows didn’t seem to suffer from the winter (JP). All observers agreed populations were normal or above.

Breiding (GB), Dolores Devaul (DD), Mabel Edgerton (ME), Chris Gillespie (CG), Hullet Good (HG), Norris Gluck (NG), Stan Hileman (SH), Oliver Johnson (OJ), Virginia Johnson (VJ), George Koch (GK), Nevada Laitsh (NL), Pat Murphy (PM), Jim Phillips (JP), Carolyn Ruddle (CR), Maxine Thacker (MT) and Leon Wilson (LW).

BANDING NEWS

Ralph K. Bell, Editor
R.D. 1 Box 229
Clarsville, Pa. 15322

Editor’s Note - Many of our Brooks Bird Club members have moved to far away places. But since their ties are strong with people and events back “home,” many have kept their membership in the BBC. As birds and conditions in their areas are often quite different from ours, they can help increase our knowledge about bird behavior.

BBC member Carol Rudy has written an account about Redpolls and Siskins during a severe winter in Wisconsin. Carol did the art work for the “Banding News.” Her drawings and paintings have appeared in many publications, and she is currently illustrating Bird Banding, a book for the Inland Banding News.

Chilton, Wisconsin - The Common Redpoll is a regular winter visitor in Wisconsin and is often seen in small flocks. In some winters it appears in enormous numbers. They usually feed on weed seeds on the roadsides and in fields and also like the seeds of Birch trees. When I lived at Summit Lake, which is in the northwoods, there was so much natural food, they seldom came to feeders and I never banded many, but when we lived at Sturgeon Bay, which is a vacation and tourist area, they were easy to trap.

Wisconsin birders are always reporting Hoary Redpolls, but in my years of observing hundreds of Redpolls at close range, I never saw one. I did band a Greater Redpoll subspecies which is a noticeably larger bird. Less than half of the birds are pink plumaged males. In some flocks only a few are pink. On two occasions I caught birds with golden caps instead of red.

As I mentioned, the Redpolls seldom came to my feeder at Summit Lake, but the terrible winter of 71-72 was a different story. The snow was deeper than usual; it buried our porch and reached the window sills and remained so until mid-April. Seed-eating birds could find no food and began to starve. Redpolls came to feeders in such large numbers they couldn’t get in, so we put out large pans of millet for them. At a store where auble usually used for trapping Purple Finches was cleared and spread with millet. We also dug out the porch and kept it spread with millet. There were so many Redpolls that they covered the feeding areas with their densely packed little bodies, then a second layer would come and walk on their backs trying to get at the food. I never banded any Redpolls that winter because they were under so much stress from starvation and cold. I couldn’t bring myself to add to their stress.

The Redpolls and Siskins were so hungry that when we carried out cans of millet, we could sit down for a moment, and soon the birds would land on our arms and begin to feed from containers of food we held. Sometimes we would find starving birds we could pick up, and I would take them inside and try to save them, but they usually died, for they were living skeletons and too far gone to recover.

Since I didn’t band, I don’t know how many Redpolls there were, but I could count 400 at a time feeding and there must have been many more in the trees. Summit Lake area is sparsely populated and not many people feed birds, so the mortality rate that winter among Redpolls must have been tremendous.

The behavior of Redpolls feeding under threat of starvation was unusual in some respects. They were never aggressive in any way to each other or to other species, whereas other finches can be very aggressive, especially Evening Grosbeaks and Siskins, but even these species didn’t chase Redpolls away when sharing feeders. The Redpolls loved sunflower seeds but couldn’t crack them, so they would sit beside a Purple Finch and take pieces of seed from the Finch’s mouth while it ate, and the Purple Finch would make no protest.

The strange behavior of feeding in layers and taking food from other bird’s bills was not unusual or isolated. Other northwoods birders said they saw the same thing that winter.

Carol Rudy

Youngstown, Ohio - Would you ever expect to catch and band a bird at a large supermarket? Well, I did! Bird banders have some strange experiences that result in a bird being banded. On November 21, 1977, Marion and I went grocery shopping at a large supermarket in Austintown. A movement above a display of fruit caught my eye, and I was amazed to see a Dark-eyed Junco. Fluorescent lamps were mounted on a false ceiling some nine feet above the fruit display. The bird did not fly wildly about rather moved at intervals and was not afraid of the people walking about below him. I talked to a clerk who told me that the bird had been in the store for about three days and that all attempts to catch it had failed. He said the bird had been eating by pecking small holes in some sacks containing bird seeds. The store was open 24 hours a day and was constantly subject to both lights and people. The store manager readily gave me permission to trap the bird. So, I went home and got a single cell trap and some chick grain. The trap was placed on a flat area above the lights. This was at 2 p.m. About five hours later, I received a phone call and a report that the Junco was in the trap. My wife and I went to the store. I stood on a step-ladder and soon had the bird in my hand. Quite a few people stopped shopping to watch the banding and to ask questions. Scarcely anyone knew what the bird was. Since it was now dark, we took the Junco home, gave it food and water and inserted a perch in the holding cage. The next morning, I released the bird and it flew to a nearby tree, seemingly none the worse for the experience.

Some years ago, we were looking for birds along the edge of a small lake. As we passed a tennis court, we saw an Am. Kestrel near the wire netting backstop. The bird was on the ground in an unusual position. From disarranged feathers and the helpless condition, it was evident that this bird had flown into the screen with some force and was stunned. After a few minutes, it revived; but not before I banded it. Away it flew at a good speed.

October 20, 1960 was a dark, rainy day in the Cleveland area. Shortly after I arrived at my place of employment, a fellow worker walked into my room with a good sized bird in his arms and asked, “What is it?” I knew at once that it was a Horned Grebe. The bird had made the mistake in thinking that the wet blacktop of the parking lot was water. Once down on the surface, it was unable to takeoff and so was easily captured.
On my lunch hour, I took the Grebe home, banded it and then released it at a park pond. The above incidents are just a few of the incidents that make bird banding exciting and unpredictable. Do you agree?

Merit Skaggs

ERRATUM

Book Review: Potomac - The Nation's River. Volume 44, no. 4, p. 122-123. The author of this review, whose name was omitted, is Kathy Roscoe, Bethany College, Bethany, W. Va. 26032.

THE REDSTART — JANUARY, 1978
Yellow-billed, 10, 43, 57, 72, 83, 109, 112
Dickcissel, 115
Dove, Mourning, 43, 57, 72, 87, 112, 116
Rock, 57, 87, 116
Dowitcher, Short-billed, 72
Duck, Black, 71, 117
Ring-necked, 72, 111, 116
Ruddy, 72, 112, 116
Wood, 43, 57, 72, 111, 116
Dunnell, Arthur R. 93
Eagle, Bald, 116
Golden, 87, 116
Eddy, Anne, 124
Editorial, 48, 54
Egret, Great, 111
Eye, Osbra L., 69
Field Notes, Fall Season, 71
Spring Season, 111
Summer Season, 42
Winter Season, 86
Finch, House, 46, 75, 90, 115, 116, 120
Purple, 63, 75, 90, 92, 100, 115, 116
Flicker, Common, 10, 11, 58, 73, 88, 109, 113, 116
Flycatcher, Acadian, 4, 6, 7, 8, 10, 11, 13, 31, 59, 73, 83, 99, 108, 109, 113
Great Crested, 4, 6, 7, 11, 13, 59, 73, 108, 109, 113
Least, 59, 73, 83, 99, 110, 113
Olive-sided, 73, 113
Willow, 44, 59, 73, 83, 113
Yellow-bellied, 44, 99
Foray, Area Survey - 1976, 2
Bird Banding, 35
Bird List, 55
Breeding Bird Records, 31
Climatic Record, 34
Ferns of Braxton County, 28
Fungi, 89
Herbaceous Flowering Plants, 14
Herptiles of Braxton County, West Virginia, 39
Mammals of Braxton County, 29
Singing Male Census, 3
Trees, Shrubs and Woody Vines, 36
Gadwall, 111, 116
Gluck, Orris, 31
Gnatcatcher, Blue-gray, 4, 6, 7, 8, 10, 11, 13, 32, 44, 60, 74, 83, 99, 108, 109
Goldeneye, Common, 72, 87, 111, 116
Goldfinch, American, 6, 7, 10, 11, 13, 46, 63, 75, 79, 83, 84, 92, 100, 108, 109, 110, 115, 116
European, 79
Goose, Canada, 86, 111, 116
Snow, 116
Grackle, Common, 7, 33, 46, 62, 74, 83, 90, 108, 114, 116
Grafton, William N., 14
Grebe, Horned 86, 111, 116

THE REDSTART — JANUARY, 1978
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Original papers in the field of natural history are published in the Redstart. Papers are judged on the basis of their contributions to original data, ideas, or interpretations. Scientific accuracy is most important and to this end an Advisory Board, selected by the Editorial Staff, will review submitted papers. Papers should be typewritten, double spaced and on one side of the paper only. Clarity and conciseness of presentation are very important.

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The Brooks Bird Club is a non-profit organization whose objective is to encourage the study and conservation of birds and other phases of natural history. Membership includes subscriptions to the REDSTART and MAILBAG and entitles one to all the privileges offered by the Club. Classes of membership are: Student, $3.00; Active, $9.00; Family $12.00; Sustaining, $15.00; Life, $200.00. Checks should be written payable to the Brooks Bird Club and mailed to 707 Warwood Avenue, Wheeling, West Virginia.

1978 Program

The Brooks Bird Club, Inc.

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-31</td>
<td>BBC Membership Month</td>
<td>Mail to HQ, Wheeling</td>
</tr>
<tr>
<td>24-26</td>
<td>BBC Mid-Winter Meeting</td>
<td>Oglebay Park, Wheeling</td>
</tr>
<tr>
<td>31-t0</td>
<td>Magee Marsh &amp; Killdeer Plains</td>
<td>Delaware, Ohio</td>
</tr>
<tr>
<td>1-2</td>
<td>Magee Marsh-Killdeer Plains</td>
<td>Delaware, Ohio</td>
</tr>
<tr>
<td>28-30</td>
<td>BBC Annual Foray</td>
<td>Camp Pocahtons</td>
</tr>
<tr>
<td>4-7</td>
<td>Annual W.O.S. Meeting</td>
<td>Jackson's Mill</td>
</tr>
<tr>
<td>7or14</td>
<td>Century Day Count</td>
<td>All local groups</td>
</tr>
<tr>
<td>19-21</td>
<td>Field Trip - Sutton Seekers</td>
<td>Harpers Ferry, W. Va.</td>
</tr>
<tr>
<td>1-30</td>
<td>25-Mile Breeding Bird Surveys</td>
<td>All local groups</td>
</tr>
<tr>
<td>3-17</td>
<td>BBC Annual Foray</td>
<td>Camp Pocahtons</td>
</tr>
<tr>
<td>27-30</td>
<td>Field Trip, Lake Terra Alta</td>
<td>Terra Alta, W. Va.</td>
</tr>
<tr>
<td>18-20</td>
<td>Field trip, Burt Lodge</td>
<td>Greenland Gap, W. Va.</td>
</tr>
<tr>
<td>31 to</td>
<td>Greenbrier Youth Camp Weekend</td>
<td>Anthony, W. Va.</td>
</tr>
<tr>
<td>1-4</td>
<td>Greenbrier Youth Camp Weekend</td>
<td>Anthony, W. Va.</td>
</tr>
<tr>
<td>3</td>
<td>BBC Annual Meeting</td>
<td>Anthony, W. Va.</td>
</tr>
<tr>
<td>1-30</td>
<td>Operation Bird Banding</td>
<td>Red Creek, W. Va.</td>
</tr>
<tr>
<td>15-17</td>
<td>Weekend Hawk Counts</td>
<td>W. Va. Mountains</td>
</tr>
<tr>
<td>26-30</td>
<td>BBC Swiss Foray</td>
<td>Switzerland</td>
</tr>
<tr>
<td>1-12</td>
<td>BBC Swiss Foray</td>
<td>Switzerland</td>
</tr>
<tr>
<td>18</td>
<td>BBC Annual Executive Com. Mtg.</td>
<td>Details later</td>
</tr>
<tr>
<td>26</td>
<td>Winter Bird Feeder Counts</td>
<td>Anyone who feeds birds</td>
</tr>
<tr>
<td>16-31</td>
<td>Christmas Bird Counts</td>
<td>All local groups</td>
</tr>
</tbody>
</table>

ACTIVITIES OF SPECIAL INTEREST

April 21-23 — DNR Hawk's Nest Weekend .......................... Ansted, W. Va.
April 28-30 — DNR Webster County Weekend ........................... Camp Caesar
May 11-14 — Annual Wildflower Pilgrimage ........................ Blackwater Falls, W. Va.
May 25-30 — Handian Chapter "SORTIE" ............................ Contract George Koch

SEASONAL FIELD AND BANDING NOTES DUE

March 15 June 15 September 15 December 15
Banding Notes to: Ralph K. Bell, R.D. 1, Box 229, Clarsville, Pa. 15322

The dates for the 1978 BBC program were selected as most appropriate for our scheduled activity and place. Some dates and places have not been confirmed at this early date so some changes beyond our control might be necessary. When such is the case, notification will be made as soon as possible in the MAIL BAG.