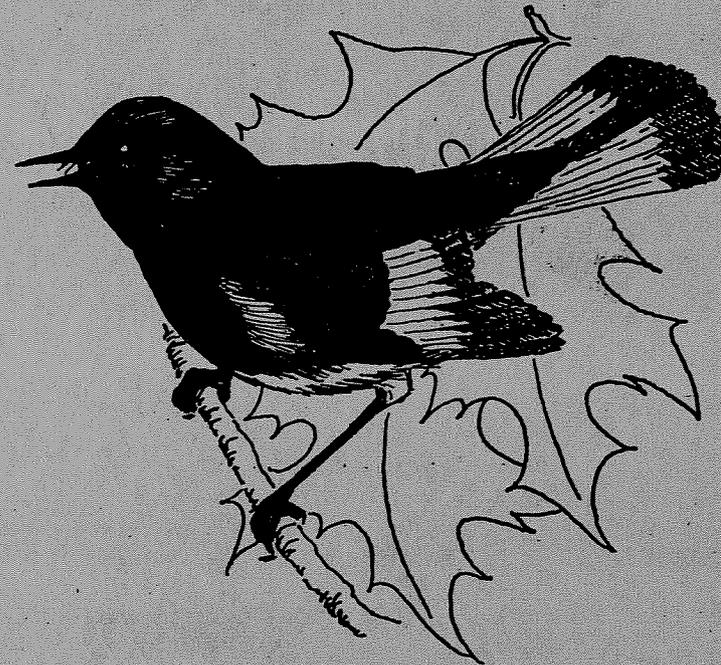


The **REDSTART**

VOLUME 42—NUMBER 2

APRIL, 1975



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The Brooks Bird Club, Inc.

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The Big Ugly Sortie

George Koch

The Sortie was held May 26-31, 1973 in the Big Ugly Public Hunting Area, an aggregate of timber tracts totaling some 6 or 8000 acres in the SE corner of Lincoln County that is leased by the State primarily for the benefit of the squirrel hunter. We camped on the well groomed play area of the upper picnic grounds (see pictures in *Wonderful West Virginia* May 1973, p. 22) which was headquarters for our six day study.

When Laura and I arrived on the evening of May 25, Maxine and Ben Kiff, Jane and Ken Anderson, and Janice Musser were already there. While Ben Kiff was building our only campfire of the Sortie George Hurley arrived. We arranged the two trailers as commissary and dormitories, the Kiffs pitched a tent and the Andersons unfolded their trailer and set up a dining canopy. After we fed ourselves we sat around the fire and fed the mosquitoes while watching the whip-poor-wills argue over the territory. Betty and Mark Gatewood got in at 10 and pitched a deluxe tent. Ginny Olsen and Glen Phillips arrived about midnight, we had our late, late snack and retired. Then the rains came. And did it ever rain? Nice for sleeping.

Sat. May 26—Surprise!! It was clear at 5 a.m. Eight of us rolled out and we started two study plots. Bill Smith came in for the day and we brushed out the path through the Mudlick plot so it could be worked in wet weather. Ginny, Ken, and Hurley took a rewarding six mile hike over the divide to the north. Grace Grant arrived for a days stay. It started raining about dusk. Fortunately it stayed comfortably warm all week.

Sun. May 27—Again the rain stopped and we worked all three plots. General birding until noon as we anticipated the arrival of 500 Harts High School students for their annual picnic. Well, what's a picnic without rain? True to form it rained hard all afternoon but stayed warm and the children seemed to enjoy plodding around in the rain. We must tell you that the valley soil was very, very sandy and never got soft, nor did the streams get muddy. After a shower we would wait until the water drained off or soaked in and the roads and paths were as solid as ever. There were a few soft clay spots on some of the hilltop trails.

Mon. May 28—Rain stopped and we worked all plots. Made out bird list in forenoon. Nevada and John Laitsch got in at noon and all the others but Laura and I left in the afternoon. It sprinkled during the evening.

Tue. May 29—Rained about 3 a.m. but cleared by 5 and Nevada and I finished the Mudlick plot, then drove to the top of the hill beyond the plot where Nevada found a Yellow-throated Warbler's nest. Connie Katholi arrived in afternoon and we birded between showers.

Wed. May 30—Connie and Laura ran a 25 mile survey, Nevada and I walked to the top of pond branch, and John slept. Paperwork in afternoon. Laura and Connie did theirs in the upper shelter and it rained—hard and horizontal. Maxine Kiff arrived and reported the ground covered with hail at Hamlin. She started banding later in the afternoon.

Thu. May 31—I helped Maxine with her nets. Nevada and John walked the length

of Sandy Gap Ridge. John reported a Pennatifid Spleenwort on Arch Rock and Nevada found Pine Warblers near Rocky Gap. Maxine and the Laitches left in the evening and the Sortie was over.

Fri. June 1—Laura and I "slept in" but got packed and left by noon.

We found 79 species of birds and 12 nests.

John Laitsch counted 27 species of ferns.

Maxine Kiff banded 19 birds of 12 species.

I wish to thank all who participated in the Sortie and especially to thank the women who cooked the meals and did most of the camp chores.

THE BIG UGLY BIRD LIST

We compiled the annotated list from general observations, the population studies, the survey, nesting, and banding. The results of the nesting and banding are noted on the list. We were pleased to find so few of the nuisance birds although there were several cowbirds. Lack of habitat might account for the scarcity of the Mimics but not the Robins. We could see no reason for the very few Wood Thrushes in the forest when several were heard on the survey. Otherwise, the results were much as expected. Acadian Flycatchers and Redstarts were abundant in the ravines. Red-eyed Vireos, Cerulean and Worm-eating Warblers, and Ovenbirds were common to abundant everywhere. We found Pine and Blackburnian Warblers in the high areas and a few Yellow-throated Warblers both high and low. Black-throated Green Warblers were relatively common on the slopes. This indicates that the records in Cabwaylingo in 1952 and Kanawha Forest in 1966 were not as unusual as was thought at the time.

1. Green Heron—Rare. One heard near Charley Trace study plot by M. & B. Gatewood.
2. Turkey Vulture—Uncommon. Two or three seen daily. A flock of 8 seen on Mud River divide.
3. Cooper's Hawk—Rare. M. Kiff saw one at top of hill beyond headquarters.
4. Red-tailed Hawk—Uncommon. Three seen occasionally.
5. Broad-winged Hawk—Rare. One seen at Sandy Gap and one on Big Creek.
6. Ruffed Grouse—Common.
7. Bobwhite—Common in habitat. Several coveys in open areas.
8. Turkey—Uncommon. Population increasing. Eleven young in two broods seen by road crews. Not seen by our group.
9. Killdeer—Rare. One heard by G. Phillips at mouth of Charlie Trace.
10. Yellow-billed Cuckoo—Common. More so than Black-billed.
11. Black-billed Cuckoo—Common.
12. Screech Owl—Rare. Heard at camp two evenings by G. & L. Koch.
13. Barred Owl—Rare. One heard on Charlie Trace by G. Phillips.
14. Whip-poor-will—Common in open areas.
15. Chimney Swift—Rare.
16. Ruby-throated Hummingbird—Fairly Common.
17. Belted Kigfisher—Uncommon. W. Smith saw one down Big Ugly. One on Big Creek on survey.
18. Common Flicker—Uncommon. Several on Sand Ridge.

19. Pileated Woodpecker—Rather Common. Seen and heard often.
20. Red-bellied Woodpecker—Uncommon. G. Hurley reported three.
21. Hairy Woodpecker—Uncommon to rare. Only four reported.
22. Downy Woodpecker—Uncommon. Considered rather scarce by all.
23. Great Crested Flycatcher—Uncommon.
24. Eastern Phoebe—Common in open area along streams. Two banded. One nest by N. Laitsch.
25. Acadian Flycatcher—Abundant. One banded. 26 on survey.
26. Wood Pewee—Uncommon. One banded.
27. Barn Swallow—Uncommon. A few found in open areas along larger streams.
28. Purple Martin—Rare. Two seen and heard on Sand Ridge by N. Laitsch.
29. Blue Jay—Rather uncommon. Not many seen or heard.
30. Common Crow—Not common.
31. Carolina Chickadee—Fairly Common.
32. Tufted Titmouse—Common.
33. White-breasted Nuthatch—Uncommon.
34. Carolina Wren—Rather common in brushy areas. One banded.
35. Gray Catbird—Uncommon. Limited habitat for both Catbird and Carolina Wren.
36. Brown Thrasher—Uncommon. A few along Big Ugly.
37. American Robin—Uncommon.
38. Wood Thrush—Not as common as one would expect. Three banded. No full birds on study plots but 22 were found on survey.
39. Swainson's Thrush—Rare. Four reported.
40. Eastern Bluebird—Rare in Hunting Area, uncommon on survey.
41. Blue-gray Gnatcatcher—Fairly Common. A pair feeding young at nest by N. Laitsch.
42. Starling—Rare. Several on Big Creek.
43. White-eyed Vireo—Common in habitat. One banded.
44. Yellow-throated Vireo—Fairly Common. Nest by V. Olsen.
45. Solitary Vireo—Rare. Three on Sandy Gap Ridge and one on Big Ugly by N. Laitsch.
46. Red-eyed Vireo—Abundant. One banded. Two nests by N. Laitsch and V. Olsen.
47. Warbling Vireo—Rare. One on Guyandotte River on survey.
48. Black-and-white Warbler—Common. One banded. One seen feeding a Cowbird.
49. Worm-eating Warbler—Common. Two banded.
50. Blue-winged Warbler—Uncommon. Limited habitat. Six reported.
51. Northern Parula—Fairly Common.
52. Yellow Warbler—Common. 27 on survey.
53. Black-throated Green Warbler—More common than expected. Found mostly on slopes rather than on ridges. One nest by G. Phillips.
54. Cerulean Warbler—Abundant.
55. Blackburnian Warbler—Rather rare but more common than expected. Nest by V. Olsen.
56. Yellow-throated Warbler—Uncommon. Five reported. Nest on ridge by N. Laitsch.

57. Pine Warbler—Rare and local. Three or four on ridge near Rocky Gap by N. Laitsch.
58. Prairie Warbler—Common along creeks.
59. Ovenbird—Common to abundant. One banded. Young in nest by N. Laitsch.
60. Louisiana Waterthrush—Common. Four banded. Young in nest by N. Laitsch.
61. Kentucky Warbler—Common.
62. Yellowthroat—Uncommon but found in most suitable habitat.
63. Yellow-breasted Chat—Uncommon.
64. Hooded Warbler—Common. One banded.
65. American Redstart—Common.
66. House Sparrow—Uncommon even in habitat.
67. Red-winged Blackbird—Uncommon.
68. Northern (Baltimore) Oriole—Rare. Two records.
69. Common Grackle—Rare. N. Laitsch reported one flying over Pond Branch.
70. Brown-headed Cowbird—Fairly Common.
71. Scarlet Tanager—Common. More so than Summer Tanager.
72. Summer Tanager—Fairly Common.
73. Cardinal—Fairly Common.
74. Indigo Bunting—Abundant. Nest by G. Phillips.
75. American Goldfinch—Uncommon. Not much habitat.
76. Rufous-sided Towhee—Rather uncommon.
77. Chipping Sparrow—Uncommon.
78. Field Sparrow—Uncommon. Limited habitat.
79. Song Sparrow—Uncommon.

THE ANIMAL LIST

Submitted by Mark Gatewood but added to by others of the group.

Mammals Seen:

Red Fox [*Vulpes fulva*].

E. Chipmunk [*Tamias striatus*].

E. Gray Squirrel [*Sciurus carolinensis*].

E. Cottontail Rabbit [*Sylvilagus floridanus*].

White-tailed Deer [*Odocoileus virginianus*].

Along some of the streams we found tracks of the Opossum [*Didelphis marsupialis*] and the Raccoon [*Procyon lotor*].

Herptiles

In an area notorious for the high population, the tremendous size, and the extreme ferocity of its Rattlesnakes and Copperheads we found only two snakes, both probably Black Rat Snakes. Hurley moved a 3 ft. one from the road during Sortie and we saw a 2 ft. one shedding its skin in July.

Snapping Turtle [*Chelydra serpentina*].

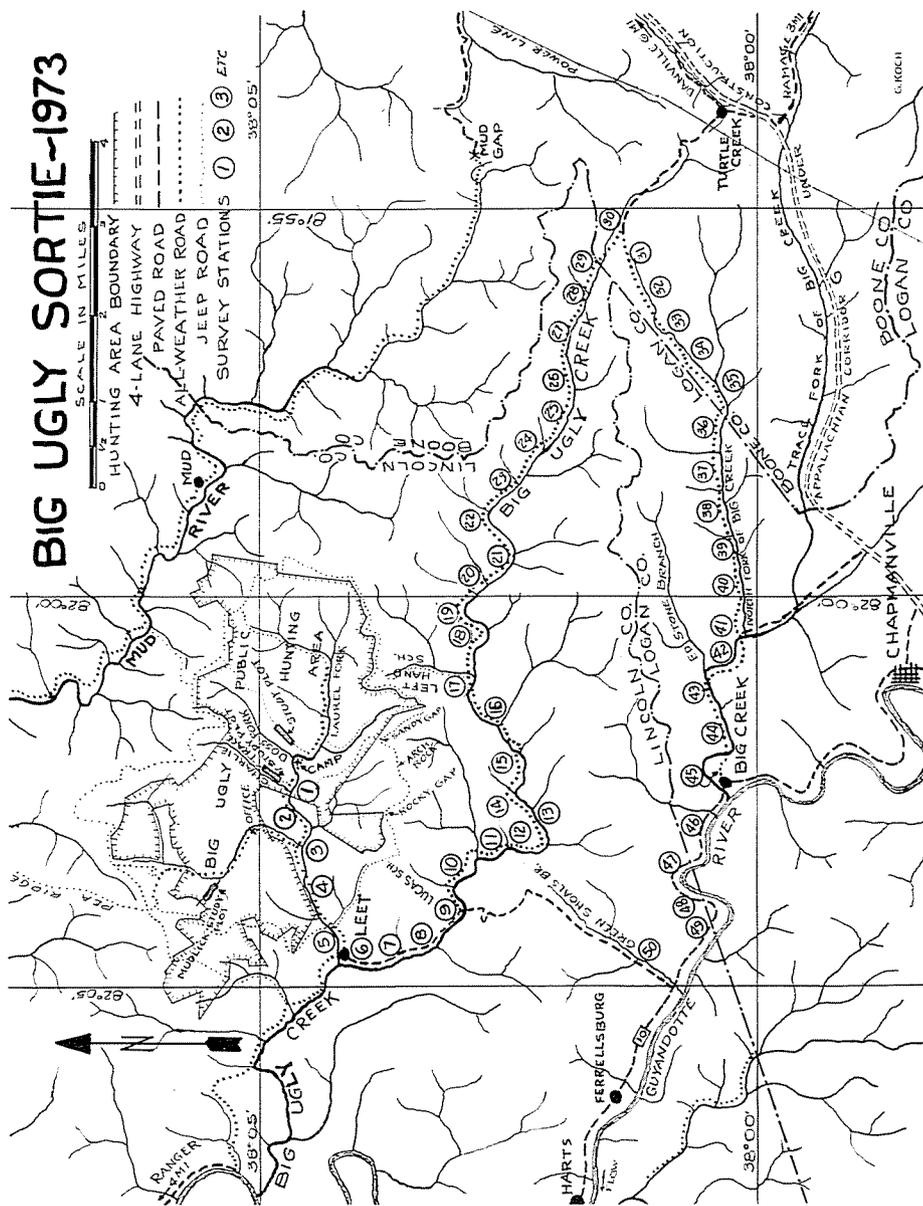
Eastern Box Turtle [*Terrapane c. carolina*].

Red Spotted Newt, Red Eft stage [*Desmistylus v. viridescens*].

Northern Dusky Salamander [*Desmognathus f. fuscus*]. Abundant in small shaded runs and pools.

Spring Peeper [*Hyla crucifer*].

BIG UGLY SORTIE-1973



AREA SURVEY

Our Area was that shown on the map. It includes all of the Big Ugly Creek watershed and south to Big Creek (the stream) and the Guyandotte River so that those making the 25 mile survey could wind up reasonably close to camp without doubling back along the same route. Only one hike was taken over the divide into the Mud River Drainage. We concentrated on the Hunting Area itself and took only a few trips out along Big Ugly. Those who commuted started or stopped counting at Turtle Creek or just above Ranger. The entire Big Creek Quadrangle shows about 95% forested and there is little change in the eight quadrangles that bound it.

The elevation varies from 600 feet at the mouth of Big Ugly to 1530 feet at a knoll on the divide north of Ed Stone Branch. The ridges are mostly between 1200 and 1300 feet. The hillsides are very steep. The hilltops are capped by the sandstones of the Conemaugh Series. The strata of the Allegheny Series outcrop on the hillsides. Along the lower streams the outcrops are of the Kanawha Group of the Pottsville Series. All these strata are of the Upper Carboniferous or Pennsylvanian Period and dip slightly to the WNW except for one small north and south wrinkle. The Ferrellsburg syncline centers about a mile west of Leet and the Branchland anticline is eight miles farther west. Gas wells are scattered over the whole area. Most of the Hunting Area is leased from the Columbia Gas Co. Coal strata are present but few are thick enough to warrant mining and stripping is not yet permitted in Lincoln County.

The Area was timbered about 1940 and since then industry on Big Ugly has been a grocery store and filling station at Leet, about a dozen sub-marginal farms, and the gas wells.

POPULATION STUDIES AT THE BIG UGLY SORTIE

Three population studies were made at varying elevations. The Mudlick plot included the ravine, the lower border of the Charley Trace plot was just above the ravine, and the Doss Fork plot was halfway up the hillside. Together they are typical of the forest for several miles each way, except for the ridges. We hope to return to Big Ugly for a future Sortie with sufficient personnel and a 4-wheel drive vehicle so we can add a 4th plot, one along a ridge, to our studies.

The area was "high-graded" in 1940 which left many of the Beech, Hemlock and cull trees standing to form a partial canopy, especially in the coves and ravines. This made the present trees grow tall to reach the sunlight and allowed a disproportional few Beech to tend to dominate the forest.

It took three preliminary trips to choose and lay out the study plots. Norris Gluck accompanied me in April 1972 at which time Supt. Hill gave us a scenic tour of the Hunting Area and we looked over a few possible plot sites. In May 1973 Joyce and Gary Preece helped me lay out two plots and the week before Sortie Maxine Kiff helped me choose and measure the third plot.

The Sortie did not end on June 1st. After some study of the James Shugart method and after buying, borrowing or making the equipment, I made three trips in July to Big Ugly to make quantitative vegetation surveys of the study plots. Maxine Kiff, Ken Anderson, and Betsy Eaton, a Sierra Club member, each assisted me on one of these surveys.

Mudlick Plot—Tuliptree-Beech-Hickory Forest

Location: Lincoln County, West Virginia, Big Ugly Public Hunting Area, 14 miles west of Madison. The centerline starts at 38 deg. 05' 28" N, 82 deg. 03' 37" W, Big Creek Quadrangle, U.S.G.S., and extends NW.

Size: 15 acres (rectangular, 110 x 660 yards, measured longitudinally).

Topography: Very steep perpendicular to centerline. The centerline follows a jeep trail along the left side of a ravine from elevation 800 to 1000 ft. The ravine is about 50 feet deep at the start with sides sloping 45 degrees. The depth decreases to only a few feet at the upper end while the slope decreases to about 20 degrees, the average slope of the rest of the plot.

Plant Cover: The dominant canopy trees are Tuliptree [*Liriodendron tulipifera*] and Am. Beech [*Fagus grandifolia*]. Most prominent in the understory are Spicebush [*Lindera Benzoin*], Wild Hydrangea [*Hydrangea arborescens*], and saplings of the canopy trees. The ground cover is primarily Poison Ivy [*Rhus radicans*] which was not included in the woody stem count, Golden Ragwort [*Senecio aureus*], and Black Cohosh [*Cimicifuga racemosa*]. From a quantitative vegetation survey of six, 0.1 acre circular samples: Trees 3 inches dbh and over, 328/acre; total basal area 127.6 sq.ft./acre. Species comprising 90% of the total number of trees (figures after each give number of trees/acre, relative density (%), relative dominance, frequency, in that sequence): Tuliptree, 78, 24, 29, 100; Am. Beech, 30, 10, 15, 50; Hickory [*Carya sp.*], 47, 14, 10, 67; Basswood [*Tilia americana*], 12, 3, 10, 67; Cucumber-tree [*Magnolia acuminata*], 20, 6, 6, 83; White Oak [*Quercus alba*], 12, 3, 6, 83; Red Oak [*Q. rubra*], 10, 3, 4, 67; Eastern Hemlock [*Tsuga canadensis*], 5, 2, 5, 33; White Ash [*Fraxinus americana*], 8, 3, 2, 50; Flowering Dogwood [*Cornus florida*], 22, 6, 2, 50; Black Walnut [*Juglans nigra*], 5, 2, 2, 33; Black Birch [*Betula lenta*], 8, 3, 1, 50; Black Gum [*Nyssa sylvatica*], 16, 5, 1, 67; Dead trees, 24, 7, 3, 83. Trees by diameter size class (number of trees/acre, relative density, basal area in sq. ft./acre, relative dominance): A (3-6 in.) 162, 49, 16.2, 13; B (6-9 in.) 87, 27, 26.2, 21; C (9-15 in.) 67, 20, 56, 43; D (15-21 in.) 7, 2, 12, 9; E (21-27 in.) 3, 1, 10.3, 8; F (27-33 in.) 2, 1, 8.2, 6. Shrub stems/acre 5620; ground cover 66%; canopy cover 74%; average canopy height 80 feet (range 50-105).

Coverage: May 26-29, 1973. Ten trips between daylight and 0830, two in the late morning and two in the evening. Total party-hours: 12.

Visitors: Great Crested Flycatcher, Common Crow, American Goldfinch.

Remarks: Very remote, heavily wooded area. Seemed like there should have been more Wood Thrushes. Populations of other species of this habitat seemed to be normal or above.

Census Takers: Kenneth Anderson, William Smith, Nevada Laitsch, Betsy Eaton, George Koch (compiler).

Charley Trace Plot—Oak-Beech-Magnolia Forest

Location: Lincoln County, West Virginia, Big Ugly Public Hunting Area, 12.5 miles west of Madison. Starts at 38 deg. 04' 51" N, 82 deg. 02' 22" W, and extends NE, Big Creek Quadrangle, U.S.G.S.

Size: 15 acres (rectangular 110 x 660 yards, measured longitudinally).

Topography: Northwest hillside sloping 35 degrees. Centerline elevation rises from 800 to 900 feet.

Plant Cover: The dominant canopy trees are Oak [*Quercus sp.*], Am. Beech [*Fagus grandifolia*], and Cucumber-tree [*Magnolia acuminata*]. *M. tripetala* and *M. fraseri* are also present on the plot. About one fourth acre is kept cleared at the site of a gas well. Many such wells and clearings are distributed throughout the area, hence its inclusion in a study plot. Most prominent in the understory are Flame Azalea [*Rhododendron calendulaceum*], Spicebush [*Lindera benzoin*], Maple-leaved Viburnum [*Viburnum acerifolium*], and saplings of the canopy trees. The ground cover is primarily Christmas Fern [*Botrychium acrostichoides*], Broad Beech Fern [*Thelypteris hexagonoptera*], [*Trillium sp.*], and Pussytoes [*Antennaria plantaginifolia*]. From a quantitative vegetation survey using six circular samples of 0.1 acre each: Trees 3 inch diameter and over 242/acre; total basal area 89.8 sq. ft./acre. Species comprising 90% of total number of trees: White Oak [*Quercus alba*], 63, 26, 29, 83; Black Oak [*Q. velutina*], 10, 4, 3, 33; Am. Beech, 12, 6, 21, 50; Cucumber-tree, 17, 7, 11, 83; Pignut Hickory [*Carya glabra*], 20, 8, 8, 33; Shagbark Hickory [*C. ovata*], 15, 6, 2, 83; Tuliptree [*Liriodendron tulipifera*], 22, 9, 7, 67; Basswood [*Tilia americana*], 13, 6, 6, 33; Sourwood [*Oxydendron arboreum*], 13, 6, 3, 33; Flowering Dogwood [*Cornus florida*], 12, 5, 2, 67; Black Birch [*Betula lenta*], 12, 5, 2, 67; Dead trees, 7, 3, 1, 33. Trees by diameter size class: A (3-6 in.) 139, 57, 13.9, 15; B (6-9 in.) 60, 25, 17.5, 20; C (9-15 in.) 28, 12, 22.7, 25; D (15-21 in.) 8, 3, 15, 17; E (21-27 in.) 7, 3, 20.7, 23. Shrub stems/acre 4520; ground cover 48%, canopy cover 79%, average canopy height 68 feet (range 50-84).

Coverage: May 26-28, 1973. Ten trips between 0545 and 0850 and four trips in the late evening. Total party-hours: 13.

Visitors: Green Heron, Bobwhite, Yellow-billed Cuckoo, Black-billed Cuckoo, Rufous-sided Towhee.

Remarks: Nests of the Black-throated Green Warbler and the Indigo Bunting were found. It is felt that the wet weather caused less activity among the hawks and owls of the region so that their evaluation was more difficult. The Tufted Titmice were already fledged and moving throughout the plot.

Census Takers: George & Laura Koch, Mark & Betty Gatewood, Maxine Kiff, Janice Musser and Glen Phillips (compiler).

Doss Fork Plot—Oak-Beech-Hickory Forest

Location: Lincoln County, West Virginia, Big Ugly Public Hunting Area, 12 miles west of Madison. Starts at 38 deg. 04' 50" N, 82 deg. 01' 56" W, Big Creek Quadrangle, U.S.G.S., and extends NE.

Size: 15 acres (rectangular, 110 x 660 yards, measured longitudinally).

Topography: Very steep hillside, NW exposure. The centerline follows a jeep trail which rises from elevation 940 to 1020 about mid way then continues level. The hillside slopes from 30 to 35 degrees.

Plant Cover: Dominant in the canopy are Oak [*Quercus sp.*], Am. Beech [*Fagus grandifolia*], and Hickory [*Carya sp.*]. The understory is thick, seldom over 10 feet tall, and is mostly saplings of the canopy trees, Mountain Laurel [*Kalmia latifolia*],

Azalea [*Rhododendron nudiform* and *calendulaceum*], and Maple-leaved Viburnum [*Viburnum acerifolium*]. Christmas Fern [*Polystichum acrostichoides*] is the most prominent ground cover plant. From a quantitative vegetation survey of six 0.1 acre circular samples: Trees 3 inch diameter and over 215/acre, total basal area 75.7 sq. ft./acre. Species comprising 90% of the total number of trees: White Oak [*Quercus alba*], 43, 20, 18, 83; Red Oak [*Q. rubra*], 17, 8, 17, 67; Black Oak [*Q. velutina*], 23, 11, 12, 67; Chestnut Oak [*Q. prinus*], 28, 13, 9, 67; Shagbark Hickory [*Carya ovata*], 23, 11, 5, 83; Pignut Hickory [*C. glabra*], 10, 5, 4, 83; American Beech, 7, 3, 14, 50; Red Maple [*Acer rubrum*], 10, 5, 41, 83; Black Birch [*Betula lenta*], 13, 6, 4, 50; Cucumber-tree [*Magnolia acuminata*], 10, 5, 9, 67. Trees by diameter size class: A (3-6 in.) 145, 67, 14.5, 19; B (6-9 in.) 25, 12, 7.5, 10; C (9-15 in.) 32, 15, 25.4, 33; D (15-21 in.) 10, 5, 18, 24; E (21-27 in.) 3, 1, 10.7, 14. Shrub stems per acre 7360; ground cover 42%; canopy cover 60%; average canopy height 55 feet (range 40-75).

Coverage: May 26-28, 1973. Ten trips between dawn and 0900, two trips in the late morning and two in the evening. Total party-hours: 13.

Visitors: Turkey Vulture, Black-billed Cuckoo, Ruby-throated Hummingbird, Blue Jay, Wood Thrush, Prairie Warbler, Cardinal, American Goldfinch.

Remarks: Nests of the Red-eyed and Yellow-throated Vireos were found. The Yellow-throated Warbler sang in Sycamore [*Platanus occidentalis*] and Pitch Pine [*Pinus rigida*].

Census Takers: Virginia B. Olsen and George Hurley.

Big Ugly Population Studies—Composite Census

Species	Terr. Males in 15 Acre Plot			Males per	
	Mudlick	Char. Tr.	Doss Fork	45 acres	100 acres
Red-eyed Vireo	8	8	6	22	49
Acadian Flycatcher	10	6	0	16	36
Cerulean Warbler	5	6	4	15	33
Worm-eating Warbler	3	5	5	13	29
Ovenbird	3	5	2	10	22
Am. Redstart	5	5	0	10	22
Black-and white W.	1.5	5	3	9.5	21
Blue-gray Gnatcatcher	3	3	2	8	18
Black-th. Green W.	2	2.5	1	5.5	12
Hooded Warbler	2.5	1	2	5.5	12
Kentucky Warbler	1	2	2	5	11
Tufted Titmouse	2	1	1	4	9
Indigo Bunting	+	3	1	4+	9
Summer Tanager	1.5	1	1	3.5	8
Parula Warbler	1	2	0	3	7
Yellow-billed Cuckoo	0.5	+	2	2.5+	6
Scarlet Tanager	0.5	1	1	2.5	6
Yellow-throated Vireo	0	1	1	2	4
Louisiana Waterthrush	1	1	v	2	4
Rufous-sided Towhee	1	v	1	2	4
Ruby-th. Hummingbird	0	1	v	1	2

Species	Mudlick	Char. Tr.	Doss Fork	Males per	
				45 acres	100 acres
Carolina Chickadee	1	+	+	1++	2
White-br. Nuthatch	1	0	0	1	2
White-eyed Vireo	0	0	1	1	2
Blackburnian Warbler	0	0	1	1	2
Yellow-throated Warbler	0	0	1	1	2
Cardinal	0.5	+	v	0.5+	1
Whip-poor-will	+	+	+	+++	
Brown-headed Cowbird	+	+	+	+++	
Pileated Woodpecker	+	+	0	++	
Wood Thrush	+	+	v	++	
Turkey Vulture	0	+	0	+	
Red-tailed Hawk	0	+	0	+	
Black-billed Cuckoo	+	v	v	+	
Barred Owl	0	+	0	+	
Red-bellied Woodpecker	+	0	0	+	
Hairy Woodpecker	0	+	0	+	
Downy Woodpecker	+	0	0	+	
Gr. Crested Flycatcher	v	0	+	+	
E. Wood Pewee	0	+	0	+	
Blue Jay	0	+	v	+	
Common Crow	0	+	0	+	
Total: 42 Species	54	60.5	38		
		28 Species	30 Species	23 Species	
Males per 100 Acres	360	403	253		Avg. 339

BREEDING BIRD SURVEY

The Survey totals include all birds seen or heard during a three minute stop at each of fifty (50) stations spaced one half mile apart.

After the short and easy survey at McClintic in 1971 Constance Katholi volunteered for a survey at Big Ugly. This one was full length and was neither easy nor smooth. The route went up Big Ugly, then down Big Creek, along Route 10, West, and home via Green Shoals Branch. The road up Big Ugly, stations 9 to 30, and down Big Creek, stations 30 to 45, had once been paved but not maintained and was a continuous series of potholes. The road was close beside the streams most of the way and it was difficult to hear bird songs over the sound of swift flowing water.

On the cool (45 deg) but pleasant morning of Wednesday, May 30, 1972, Connie with Laura Koch as scorekeeper made the run. Even with the handicaps they finished about noon, having tallied 56 species.

The most noteworthy features of the survey were the few Brown Thrashers encountered and the scarcity of those birds that are usually considered as pests.

The totals for each species indicate the abundance and the stops per species the distribution.

A Preliminary Look at Burr Oak State Park's Birds

Glen Phillips

Following a custom of making singing male population studies at various places in the tri-state area, I chose Burr Oak State Park near Athens, Ohio in 1973. The park was created in 1952 to take advantage of the recreational opportunities afforded when a flood control dam (Tom Jenkins Dam) was made in 1950. The park contains 3314 acres including the 664 acre lake. Most of the lake is in Morgan County, but part is in Athens County. Most of the park is wooded.

With the help of the naturalist, Mrs. Cleo Gold, a study plot was selected and a vegetation survey made in the fall of 1972. Mrs. Gold is a competent botanist and leads walks throughout the park, but said that no resident naturalist had been primarily interested in birds. However she and vacationing people had identified many of the birds.

The studies were complicated by a strike at the Lodge during the entire summer of 1973 so that access to the lodge area was restricted. After the studies were completed, I asked Mrs. Gold for her list of birds and was agreeably surprised that it contained several species which I had not found. Many species on Mrs. Gold's list, of course, were migrants and winter residents, but perhaps half a dozen were unusual enough to warrant further study. Tom Shields' articles on the breeding birds of adjacent Muskingum County were the source of most of the verifying information.

The following list of species is what visitors might expect to find in the Park. The ones marked with an asterisk * were found by the author between June 2 and 8, 1973 and, with one exception, are probably breeding species. The exception is the Swainson's Thrush heard June 4th. The author feels that it was a late migrant. The results of the population study on second growth hardwoods along part of the ravine nature trail in the Park are also given below. **ANNOTATED LIST OF SPECIES**

1. Great Blue Heron. On Mrs. Gold's list of species. Listed as breeding bird in adjacent Muskingum County by Shields (Redstart vol. 32, pg. 7).

2. Little Blue Heron. Listed by Mrs. Gold. This species is one of very few for which no confirming evidence could be found but it is well known that the young of the species often migrate north after the breeding season. The record is all the more surprising in the absence of a record of the Green Heron.

3. Common Egret. On Mrs. Gold's list of species. The bird is known to migrate through the area.

4. Mallard. Probably a migrant as it is commonly found on other lakes in spring.

5. Black Duck. Also probably a migrant but listed as a very rare breeding bird in nearby Muskingum County by Shields (Redstart vol. 29 pg. 3).

6. Blue-winged Teal. A regular migrant found on Mrs. Gold's records.

7. Wood Duck. Probably a migrant, but known as a rather rare breeder in Muskingum County (Redstart vol. 29 pg. 3).

8. Ruddy Duck. Probably a migrant as it is known to pass through the region.

9. * Turkey Vulture. One bird seen over Jenkins Dam June 4.

Species	Stops per		Species	Stops per	
	Total	Species		Total	Species
Turkey Vulture	1	1	Warbling Vireo	1	1
Red-tailed Hawk	1	1	Black-and-white Warb.	2	2
Bobwhite	8	6	Worm-eating Warbler	1	1
Yellow-billed Cuckoo	3	3	Blue-winged Warbler	1	1
Black-billed Cuckoo	2	2	Parula Warbler	5	5
Whip-poor-will	1	1	Yellow Warbler	32	27
Belted Kingfisher	1	1	Cerulean Warbler	14	14
Pileated Woodpecker	4	4	Yellow-throated Warb.	3	3
Downy Woodpecker	5	5	Prairie Warbler	10	7
Eastern Phoebe	12	11	Ovenbird	13	11
Acadian Flycatcher	26	22	Louisiana Waterthrush	2	2
Eastern Wood Pewee	7	7	Kentucky Warbler	13	13
Barn Swallow	5	2	Yellowthroat	29	27
Blue Jay	5	3	Yellow-breast. Chat	34	30
Common Crow	20	15	Hooded Warbler	1	1
Carolina Chickadee	11	9	American Redstart	9	9
Tufted Titmouse	21	18	House Sparrow	16	4
White-breast. Nuthatch	1	1	Red-winged Blackbird	4	4
Carolina Wren	14	13	Brown-head. Cowbird	13	8
Gray Catbird	12	11	Scarlet Tanager	6	5
Brown Thrasher	1	1	Summer Tanager	7	6
Robin	15	10	Cardinal	31	26
Wood Thrush	31	22	Indigo Bunting	41	33
Eastern Bluebird	11	6	American Goldfinch	13	8
Starling	26	4	Rufous-sided Towhee	10	9
White-eyed Vireo	22	19	Chipping Sparrow	7	7
Yel.-throated Vireo	2	2	Field Sparrow	21	19
Red-eyed Vireo	51	35	Song Sparrow	32	22

—370 Central Avenue, South Charleston, W. Va.

10. Cooper's Hawk. On Mrs. Gold's list of Park birds. Listed as uncommon breeder in Muskingum County (Redstart vol. 29 pg. 3).
11. * Red-tailed Hawk. A pair frequented the population study plot, but the nest could not be located.
12. Red-shouldered Hawk. Not seen by the author but Shields lists it as a very rare breeding bird in nearby Muskingum County (Redstart vol. 29 pg. 3).
13. * Broad-winged Hawk. One was observed in front of the Park Office June 4th.
14. Bald Eagle. Listed by Mrs. Gold. The author could find no recent references this far south in Ohio, but the bird would be hard to mistake.
15. Osprey. On Mrs. Gold's records. Though now declining in numbers, the bird is often seen in the region and listed as a probable breeding species in Muskingum County (Redstart vol. 30 pg. 55).
16. Kestrel. * One record, between Dock no. 1 and Cotter's lodge June 6.
17. Ruffed Grouse. Listed by Mrs. Gold. The author fully expected to find it.
18. * Bobwhite. The numbers of quail were a pleasant surprise. They were everywhere, in and out of the park.
19. American Coot. On Mrs. Gold's records and a common migrant through the region.
20. Killdeer. Also on Mrs. Gold's records. The author was surprised not to find them.
21. American Woodcock. A fairly common migrant through the region and listed by Shields as a rare nesting species in Muskingum County (Redstart vol. 29 pg. 3).
22. Herring Gull. Known to occur throughout the region.
23. * Mourning Dove. Common. As usual, mourning doves seemed more plentiful in Ohio than I am accustomed to in W. Va.
24. * Yellow-billed Cuckoo. During the early part of the week only the song of the black-billed cuckoo was heard and it was puzzling. Then, during the remainder of the week, the only songs heard were those of the yellow-billed.
25. * Several times during the early part of the week, the kuk-kuk-kuk notes of the black-billed were heard before one was seen.
26. Screech Owl. Listed by Mrs. Gold. The author was surprised not to find it.
27. Great Horned Owl. On Mrs. Gold's records. Known to occur in the region and Shields listed it as a rare nesting species in Muskingum County (Redstart vol. 29, pg. 3).
28. Barred Owl. The comment for the preceding species applies, but Shields lists it as very rare.
29. * Whip-poor-will. An excursion to most any of the boat docks or along the trails at dusk or before daylight was rewarded by the song of this species.
30. Common Nighthawk. A common migrant through the region. Shields lists it as an uncommon nesting species in adjacent Muskingum County. (Redstart vol. 29 pg. 3).
31. * Chimney Swift. Seen over most any facility in what appeared to be normal numbers.
32. * Ruby-throated Hummingbird. One record, a female, seen in heavy woods on the trail between Jenkins Dam and Dock 4, June 5.

33. * Belted Kingfisher. Several records, June 3 & 5 at Jenkins Dam, June 6th near the Lodge Boat Dock.
34. * Common Flicker. Seen and heard at various places. Seemed to be present in normal numbers.
35. * Pileated Woodpecker. Rather common—a pair frequented the study plot and others could be seen and heard regularly.
36. * Red-bellied Woodpecker. Did not seem as plentiful as preceding species. They were on the study plot and at the beach on the north side of the lake.
37. Red-headed Woodpecker. Included on Mrs. Gold's records. It is uncommon but scattered throughout the region. Shields calls it a rather rare breeder in Muskingum County (Redstart vol. 29 pg. 4).
38. Yellow-bellied Sapsucker. Known to be an uncommon migrant and wintering bird in the region.
39. Hairy Woodpecker. Included in Mrs. Gold's records. The author expected to find it.
40. * Downy Woodpecker. Numbers seemed about normal. A nest with young was found at tent camp area site 80.
41. * Eastern Kingbird. Heard on population study plot. Seen at Jenkins Dam and Dock #3.
42. * Great Crested Flycatcher. Heard on study plot and seen near public bathing beach.
43. * Eastern Phoebe. One sang briefly each morning on the population study plot and others could be seen by most bridges and some buildings.
44. * Acadian Flycatcher. Abundant. The combination of timbered shoreline, damp hollows, etc. seemed ideal for this species.
45. * Eastern Wood Pewee. Most of the shoreline of the lake is wooded and this species seemed to be present in all woods visited.
46. Horned Lark. Listed by Mrs. Gold. A rather common species throughout the region but here it eluded the author.
47. * Rough-winged Swallow. At least two or three pairs were present at Tom Jenkins Dam using the "weep holes" in the concrete of the spillway as nesting sites.
48. * Barn Swallow. This species was more numerous and more widely distributed than the preceding one. One pair had a nest above the light fixture of the water purification plant at Jenkins Dam.
49. * Blue Jay. Widely distributed but nowhere did there seem to be a concentration heavy enough to be a nuisance.
50. * Common Crow. There seemed to be the usual number of crows. Young were fed on the population study plot June 5 and 6.
51. * Carolina Chickadee. Chickadees were heard on the study plot on at least two occasions as well as at other places. Apparently they had hatched their broods and were wandering about. Doubtless there are Black-capped Chickadees here as well in winter.
52. * Tufted Titmouse. The Titmice, as well, seemed to have hatched their young. However, they seemed more numerous as one was seldom out of hearing of their calls.

53. * White-breasted Nuthatch. They were either quiet or scarce. One was heard twice on the study plot and one seen on Buckeye Cove Trail.

54. Brown Creeper on Mrs. Gold's records. It is a fairly common winter resident throughout the region.

55. * House Wren. Probably the inability to walk around the buildings and Lodge added to the difficulties of finding this species. When it was finally located in the Park, it was near the lake headwaters in a brushy tangle near a small stream.

56. Bewick's Wren. Listed by Mrs. Gold. The species has been decreasing in the region. Shields lists it as a rather rare breeding species in neighboring Muskingum County (Redstart vol. 29 pg. 4).

57. * Carolina Wren. One usually associates this species with habitation or abandoned buildings. The most frequent place that they were observed this week, however, was in brush along the lake shores.

58. Mockingbird. Listed by Mrs. Gold. Recorded by Shields as an uncommon breeding species nearby (Redstart vol. 29 pg. 4).

59. * Catbird. Found where expected, in most brushy tangles.

60. * Brown Thrasher. Observed in brushy habitat adjacent to Nature Center June 6.

61. * American Robin. Abundant in open areas.

62. * Wood Thrush. Although there was only part of one territory on the population study plot, there seemed to be no scarcity elsewhere. More were found in moist places with smaller growth than in heavier woods.

63. Hermit Thrush. Recorded by Mrs. Gold. A common migrant through the region.

64. * Swainson's Thrush. One record, on the study plot June 4. Probably a late migrant.

65. Veery. On Mrs. Gold's list. A common migrant through the region.

66. * Eastern Bluebird. Found several places in the Park, between Park Office and Class A campground June 4, in area of Jenkins Dam June 5.

67. * Blue-gray Gnatcatcher. Could be heard almost anytime, anywhere.

68. * Cedar Waxwing. One record in the Park. Along the Buckeye Trail in the general vicinity of Horseman Camp.

69. * Starling. All too plentiful.

70. * White-eyed Vireo. Several records, one from Lookout Point another on Dock 4—Jenkins Dam Trail near dock 4 end.

71. * Yellow-throated Vireo. Heard and seen on population study plot.

72. * Red-eyed Vireo. Heard almost everywhere there were trees over 40 feet high.

73. Philadelphia Vireo. On Mrs. Gold's records. This is the one bird in all the records that I hope someone was positive of.

74. * Warbling Vireo. One male of this species would sing on the population study plot then fly across to the Lodge side of the lake and sing there. Others were heard at Docks 1, 2 and #3.

75. * Black-and-white Warbler. One record about half-way between Jenkins Dam and Dock #4, June 5.

76. Prothonotary Warbler. On Mrs. Gold's records. Shields lists the species as breeding in nearby Muskingum County (Redstart vol. 32 pg. 8).

77. * Worm-eating Warbler. One record. The bird sang several times about 1½ miles from the dam end of the Jenkins Dam—Dock #4 Trail.

78. * Blue-winged Warbler. Three or four males singing in the vicinity of the Nature Center. Also in other brushy habitats such as Dock #4.

79. Parula Warbler. Recorded by Mrs. Gold. Known to migrate through the region.

80. * Yellow Warbler. Fairly common. Observed at docks 1, 3 & 4 and near headwaters of lake along Buckeye Trail.

81. Magnolia Warbler. Listed by Mrs. Gold. Like the Parula Warbler, probably a migrant.

82. * Cerulean Warbler. In all the taller stands of oak trees.

83. Blackburnian Warbler. Recorded by Mrs. Gold. Also probably a migrant.

84. Yellow-throated Warbler. Mrs. Gold's records included this species. The species is either becoming more plentiful or field workers more skilled. Shields cites twenty singing males under observation in Muskingum County during 1963 (Redstart vol. 32 pg. 8).

85. * Prairie Warbler. In most brushy habitats on higher ground, notably in front of Nature Center and in front of Park Office.

86. * Ovenbird. One record. In fairly small timber (8-10" dbh) about one mile from dam end of Jenkins Dam-Dock 4 Trail, heard repeatedly.

87. * Louisiana Waterthrush. Heard and seen near Jenkins Dam June 3 & 5 and near Lodge boat dock June 5.

88. * Kentucky Warbler. More common than at first estimated. Heard mostly in heavier timber on the study plot on the Ravine Trail and along the Dam-Dock 4 Trail.

89. * Yellowthroat. Rather common as expected. Recorded back of Park Office, June 4. Pair scolding me for intruding in nesting vicinity at Dock 4, June 6.

90. * Yellow-breasted Chat. Common in brushy areas. Observed in front of Nature Center, front and back of Park Office to name a few.

91. * American Redstart. One frequented the population study plot. Also one at headwaters of lake (Buckeye Trail) and back of Park Office.

92. House Sparrow. There were probably several around the buildings, but the one record was made at Dock 3.

93. Bobolink. On Mrs. Gold's list of species. Known to migrate through the area and Shields lists it as a rather rare breeding bird in Muskingum County (Redstart vol. 29 pg. 5).

94. * Eastern Meadowlark. One of the few places open enough to supply habitat for this bird is near the Lodge. The species is more plentiful at Jenkins Dam.

95. * Red-winged Blackbird. First record inside the park was made near the cattails by Dock #3 June 6, other records near headwaters of the lake in cattails.

96. * Northern Oriole. Two records. One on population study plot June 5 and in the class A campground June 4.

97. * Common Grackle. They seemed to be everywhere that humans were accustomed to spend time, all docks, picnic areas, etc. Scarce or absent in deeper woods.

98. * Brown-headed Cowbird. Few were seen in the deeper woods but even there an occasional pair could be found.

99. * Scarlet Tanager. Numbers seemed to be a little below what I expected after just returning from mountain woodland.

100. * Summer Tanager. It is difficult to judge whether this or the preceding species was more plentiful. A delightful surprise.

101. * Cardinal. Common in the more open of brushy habitats.

102. Rose-breasted Grosbeak. A regular migrant and classed as an irregular breeding species in Muskingum County by Shields (Redstart vol. 32 pg. 9).

103. * Indigo Bunting. Every opening had it's bunting and they sang persistently.

104. * American Goldfinch. Not nearly so plentiful when compared to other areas. Probably because of lack of open fields.

105. * Rufous-sided Towhee. Quite common in habitat. Singing in front of Nature Center.

106. Grasshopper Sparrow. Included in Mrs. Gold's records. The author expected, and looked unsuccessfully, for this species as Shields found it fairly common in Muskingum County (Redstart vol. 29 pg. 5).

107. Vesper Sparrow. This one, too was found by Mrs. Gold but, though expected, was not found by the author.

108. Dark-eyed Junco. A common migrant and winter bird throughout the region. Listed by Mrs. Gold.

109. Tree Sparrow. Like the one above, Mrs. Gold should have easily found this species.

110. * Chipping Sparrow. Common, the open but tree-covered picnic areas and all road edges were favorite sites. They did not seem to frequent the edges where the trees came down to the water's edge.

111. * Field Sparrow. Common in any patch of meadow-like habitat. In front of Nature Center, by Park Office, or any other grassy opening.

112. White-crowned Sparrow.

113. White-throated Sparrow. Both this and the above species were seen by the author and Mrs. Gold during an exploratory trip in the park in the fall of 1972.

114. * Song Sparrow. Not as common and certainly not as vocal as the field sparrows. Probably the period of maximum singing was past.

REFERENCE READING:

Hicks, Lawrence E. 1937 Breeding Birds of Unglaciated Ohio, **THE CARDINAL** IV No. 6 July 1937

Borror, Donald J. 1950 **Ohio Journal of Science**, 50, 1-32 (1950)

Shields, Tom E. Location Study of Some Muskingum County, Ohio Birds **The Redstart** 28, 45-9 (1961)

Changes In the Breeding Birds of Muskingum County, Ohio between 1937 and 1960 **The Redstart** 29 2-10 (1962)

SECOND-GROWTH HARDWOODS

Location: Part of Ravine Nature Trail, Burr Oak State Park, Morgan County, Ohio. Starts about 100 yds. from Lodge boat ramp; 39 deg. 31' 42"N, 82 deg. 2' 7" W,

Corning Quadrangle, U.S.G.S. and extends approx. northwest.

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

CENSUS

Species	Territorial Males	Males per 100 Acres
Acadian Flycatcher	7	47
Cerulean Warbler	5	33
Red-eyed Vireo	4	27
Blue-gray Gnatcatcher	3	20
E. Wood Pewee	2.5	17
Tufted Titmouse	2	13
Downy Woodpecker	1	7
E. Phoebe	1	7
Yellow-throated Vireo	1	7
Common Flicker	1	7
Carolina Wren	1	7
Gray Catbird	0.5	3
Kentucky Warbler	0.5	3
American Redstart	0.5	3
Scarlet Tanager	0.5	3
Summer Tanager	0.5	3
Cardinal	0.5	3
Red-tailed Hawk	+	+
Whip-poor-will	+	+
Pileated Woodpecker	+	+
Red-bellied Woodpecker	+	+
Common Crow	+	+
Carolina Chickadee	+	+
White-breasted Nuthatch	+	+
American Robin	+	+
Wood Thrush	+	+
Brown-headed Cowbird	+	+
Totals 27 Species	31.5	210

Visitors: Yellow-billed Cuckoo, Belted Kingfisher, E. Kingbird, Great Crested Flycatcher, Swainson's Thrush, Warbling Vireo, Louisiana Waterthrush, Northern Oriole, Common Grackle and American Goldfinch.

Remarks: The pair of Red-tailed Hawks using the plot as a nesting site as were a pair of Crows. One nest of the Acadian Flycatcher was found. The Yellow-throated Vireo's territory was close to that of a Red-eyed Vireo and, occasionally, they could be heard singing at the same time. The Tufted Titmice were ranging widely suggesting that they had hatched their young and were feeding as families. The Carolina Wren spent most of its time near the edge of the lake. In other parts of the park, others of this species were also numerous near the lake shore. The Summer Tanager was the most unexpected species.

Topography: Steep north-facing slope, elevation 800 ft.

Edge: Bordered on north by lake and on other sides by similar habitat.

Description: The canopy is entire, averaging 60-70 ft. Dominant canopy trees are: Sugar Maple [*Acer saccharum*] 10-15 inches dbh, 34%; Red Oak [*Quercus rubra*] 15-28 inches, 20%; Shagbark Hickory [*Carya ovata*], Pignut [*C. glabra*] and Bitternut [*C. cordiformes*] up to 15 inches, 20%; Beech [*Fagus grandifolia*] to 30 inches, 12%. The remainder includes White Ash [*Fraxinus americana*], Tulip Tree [*Liriodendron tulipifera*], White Oak [*Q. alba*] and Basswood [*Tilia americana*]. The understory includes: Pawpaw [*Asimina triloba*], Spicebush [*Lindera benzoin*], Rattlebush [*Staphylea triloba*], Flowering Dogwood [*Cornus florida*], Ironwood [*Carpinus caroliniana*], and Hawthorn [*Crataegus* sp.]. Significant plants of the forest floor include: Christmas Fern [*Polystichum acrostichoides*], Maidenhair Fern [*Adiantum pedatum*], Mayapple [*Podophyllum peltatum*], Smooth Yellow Violet [*Viola pennsylvanica*], Tick Trefoil [*Desmodium* sp.], Jewelweed [*Impatiens pallida*], Blue Cohosh [*Caulophyllum thalictroides*], [*Hepatica*] and [*Trillium grandifolia*]. Scientific names of plants from M. L. Fernald, **Gray's Manual of Botany**.

Weather: Fair in mornings with thunderstorms almost every afternoon.

Coverage: June 2-7 1973, 12 trips between 0540 and 0830 plus three in the late evening.

A BACHMAN'S SPARROW IN KANAWHA COUNTY

A Bachman's Sparrow was seen at Middle Ridge, Kanawha County, from July 10 to August 12, 1972.

A very wet May caused nest-failure for many ground-nesting birds this year, so a fifteen-acre field was allowed to go unmowed until fall. Growth was about twenty-five inches high on July 10 when a new song caught my ear. It was a Bachman's Sparrow in heavy body molt with traces of a striped breast still present. It sang incessantly, becoming more eloquent in late evening, sometimes being heard even after dark. It never strayed from the grown-up field, making locusts, small pines and several dead sassafrasses favored singing posts. Its habits and molt were studied closely with a 3½" Questar. By August 1, the head and body molt was complete and its breast was clear. The tail was very worn and I could see new, partly-sheathed retrices coming in. At first I believed it to be a hatching-year bird because of its striped breast, but the tail molt and skilled singing would seem to indicate that it was in its second year. When approached, it would disappear into the grass and could not be flushed. No mate was seen. Singing gradually stopped by August 10 and the bird was last seen on August 12.

The most prominent associated species in the north-sloping field, which is bordered by cut fields and woods, were Field Sparrow, Chipping Sparrow, American Goldfinch, Rufous-sided Towhee and Prairie Warbler.

The only other record of a Bachman's Sparrow in the county was made by Hurley and Koch in May, 1963. That area was a similar field about one air-mile away from Middle Ridge. —Anne Shreve



FIELD NOTES

Mrs. Nevada Laitsh, Editor
MC 21, East Liverpool, Ohio

FALL SEASON

September 1 through November 30, 1974

Most of the reports indicated a very good fall migration. Generally the weather was mild and there were no prolonged rainy spells. The first cold front moved in the last week of September and persisted into the first few days of October when snow fell at the higher elevations. The weather moderated after that and conditions were mild and pleasant until near the end of November.

The lack of weather fronts no doubt affected the waterfowl migration. There was no mention of heavy flights of geese or ducks in our region. The hawk flight appeared to be one of the best in recent years. The real proof of the success of the passerine migration came from the Allegheny Front Migration Observatory (AFMO) in Tucker County, West Virginia where banders handled 7200 birds during six weeks of operation. This surpassed all previous records. Migrants were from a week to ten days earlier than usual peaking between Sept. 15-20.

Loons, grebes and herons—Few October records of **Common Loons** were submitted. However during unsettled weather conditions and snow at high elevations many birds were forced down between Nov. 22-25. Six loons were rescued from ice crusted snow and placed in streams in Randolph County, W. Va. (EMO). Several were seen on Ohio lakes and at least 30 were on Lake Bluestone, Summers County, W. Va. during this period (JLS). A good migration of **Pied-billed Grebes** was indicated by most contributors. More than usual **Great Blue Herons** were seen in the eastern panhandle of West Virginia (CM). **Great Egrets**, not often reported in our region, were present at Charleston, W. Va. Sept. 12 (NG).

Waterfowl—There were few reports of geese and swans in flight and no occurrence of any great number of stop overs. Four **Snow Geese** (white phase) were seen in Beaver County, Pa. Oct. 12 (NL). The number of ducks found at McClintic Wildlife Station, Mason County, W. Va. and at Kyger Creek ponds in Galia County, Ohio was disappointing when BBC visited those localities Oct. 24-26.

Vultures and hawks—**Turkey Vultures** were considered to be quite common during the fall season by several reporters. **Black Vultures** were seen at Peters Mt., Monroe County, W. Va. by hawk counters. There was good news concerning birds of

prey. The heaviest flight of migrating hawks ever recorded in West Virginia was tallied by hawk counters who manned the Hanging Rock station on Peters Mt. between Sept. 13-23. Although weather conditions closed the station on two of these days, 10,629 hawks of 11 species passed the lookout. The bulk of the flight was **Broadwinged hawks** and during one 5 minute period 800 **broadwings** were counted. A fair flight was seen at AFMO on Sept. 21 (GAH). A **Goshawk** seen at Pipestem State Park, W. Va. Sept. 8 was an early date for the species (Scott Mayberry fide OJ). 4 **Golden Eagles** and one **Bald Eagle** were seen at Peters Mt. during the count. Reports of numbers of **Ospreys** was encouraging and most of the dates were between Sept. 15-25. 18 **Ospreys** passed the Peters Mt. lookout during the week long count and 2 were seen in Greenbrier Valley Sept. 22 (NL). Other reports came from Terra Alta, W. Va., Elkview, W. Va. (HG), Leesville, Ohio (EFB) and Bluestone Lake (JLS). **Peregrine Falcons** were seen at Peters Mt. Sept. 16 and 19 (fide GFH). A **Merlin** barely missed the nets at AFMO Sept. 21 (GAH). **Am. Kestrels** were mentioned in most reports.

Rails and shorebirds—As usual records and comments on shorebirds were meager. A **Sora** was seen near Gap Mills, W. Va. Sept. 21 (NL). A **Purple Gallinule** seen at McClintic Wildlife Station Sept. 11 (NG) is one of the few records of this species in West Virginia. The migration of **Am. Coots** appeared to be better than usual. **Killdeer** were mentioned in most reports and were still in the region on Oct. 31. **Com. Snipe** were found in Greenbrier County Sept. 28 and Oct. 31 (COH) and their numbers were normal in Jefferson County, W. Va. after Oct. 4 (CM). A **Black-bellied Plover** was seen at Marietta, O. Oct. 28 (CK).

Cuckoos and owls—Both species of cuckoos were scarce during the Fall. Noteworthy was a very young **Black-billed Cuckoo**, not long out of the nest, at Peters Mt. Sept. 17 (PB). A **Barn Owl** was flushed from a barn at Lewisburg, W. Va. Nov. 17 (COH). 3 **Great Horned Owls** were heard at the Bell home near Clarksville, Pa. Oct. 25 (RKB). A **Snowy Owl** was seen by several persons near Bethany, W. Va. during the last week of November (GE). **Screech Owls** were mentioned in several reports.

Nighthawks and hummingbirds—**Com. Nighthawks** staged a good flight which peaked Aug. 28-30. A straggler was seen at Lewisburg, W. Va. Oct. 10 and later yet was a small flock seen over Charleston Oct. 14 (NG). There was a good migration of **Chimney Swifts**. The latest date was a flock of 50 or more at Lewisburg on Sept. 28 (COH). Numbers of **Ruby-throated Hummingbirds** appeared to be normal. Good flights were noted at AFMO and Peters Mt. by hawk watchers.

Woodpeckers, flycatchers and swallows—The flight of **Com. Flickers** was thought to be a good one by a number of reporters. **Red-headed Woodpeckers** received more attention than usual. Reports came of sightings at Summersville, W. Va. (HG), Lewisburg (COH), Peters Mt. and a flock of 12-14 birds was seen near Petersburg, W. Va. Sept. 28 (NL). A very early arrival date for **Yellow-bellied Sapsucker** at Charleston was one seen by Katholi on Sept. 4. Flycatchers made a poor showing during migration and epidonax flycatchers were especially scarce. Four **Yellow-bellied Flycatchers** were banded at AFMO. **Wood Pewees** were either silent or notably scarce. More reporters than usual commented on swallows. Smith

reported good numbers of **Cliff, Tree, Barn and Bank Swallows** were seen at Bluestone Lake during first week of September. 50 or more **Purple Martins** joined the swallows on Sept. 6 (JLS). **Cliff Swallows** and **Purple Martins** were seen at Peters Mt. Sept. 20. Charleston observers were unable to collect information on the **Purple Martin** roost there this fall due to its inaccessibility.

Corvids—The flight of **Blue Jays** across the Allegheny Front Mountain was lighter than in most years (GAH). Otherwise numbers were thought to be normal or increasing in most places in the region. **Com. Ravens** were reported out of their normal range, 6 were seen at Mt. Davis, Pa. Sept. 8 (NL) and one was observed at Tomlinson Run State Park, Hancock County, W. Va. Oct. 9 (JO).

Chickadees through wrens—Few **Black-capped Chickadees** had appeared at low elevations before the end of the period and few records of **Red-breasted Nuthatches** were submitted. The story was different for **Brown Creepers** which were included in most every report and 85 were banded at AFMO for a new high for the station. **Winter Wrens** were also netted at AFMO in unusually high numbers and were well distributed in the region by mid October. A **Bewick's Wren** was banded at AFMO on Sept. 27. **Carolina Wrens** continue to maintain high populations. The 2 banded at AFMO Sept. 4 represent a new species for the station. A **Long-billed Marsh Wren** was observed at Gap Mills, W. Va. Sept. 21 (NL).

Mimids and thrushes—The **Gray Catbird** flight appeared somewhat under par. This was the best in recent years for **Robins** and many good sized flocks were reported to be still in the region at the end of the period. Numbers of **Wood Thrush** appeared to be normal and a good flight of **Swainson's Thrush** was reported in several areas. A few **Hermit Thrush** were still in the region in late November.

Kinglets, pipits, waxwings and vireos—Both species of kinglets migrated in very good numbers as well as earlier than usual. A **Ruby-crowned Kinglet** was banded at AFMO Sept. 15 (GAH) and both species were seen at Moncove Lake, Monroe County, W. Va. Sept. 18 (NL). A good sized flock of **Water Pipits** was seen at Oakland, Md. Sept. 27 (NL). **Cedar Waxwings** appeared in large flocks in several localities in September and good numbers were still present during November. A **White-eyed Vireo** was banded at AFMO Sept. 14. This is only the third record of this species at the station. **Red-eyed Vireos** were considered to be numerous by most reporters although the catch at AFMO was below normal. **Philadelphia Vireos** may move through the region in greater numbers than we suspect. The 33 banded at AFMO was a record high for the station.

Warblers—The number of warblers handled at AFMO left no doubt as to the success of the warbler flight. All previous records were surpassed there and numbers of at least five species was little short of fantastic. Most reporters were in agreement that it was a good migration and that it was earlier than it normally occurs. There were also some later than usual dates for warblers remaining in the region. A **Worm-eating Warbler** banded at Morgantown, W. Va. Sept. 30 was later than usual (GAH). Noteworthy was a **Blue-winged Warbler** banded at AFMO Sept. 14. **Tennessee Warblers** staged a heavy flight at AFMO and were widely reported at low elevations as well. **Nashville Warblers** too made a good showing at AFMO where 131 were banded. 6 **Northern Parulas** were banded at AFMO this fall which equals

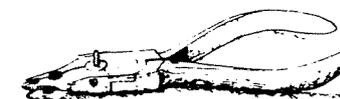
the total of all caught in the previous years. **Cape May Warblers** were widely reported at both high and low elevations. 1224 of this species were banded at AFMO with 328 being handled on one day. Both the **Black-throated Blue** and **Black-throated Green Warbler** showed good results at the banding station. A **Black-throated Blue Warbler** sang daily at Peters Mt. the week of Sept. 15. **Yellow-rumped Warblers** were widely reported. The earliest date was Sept. 9 at Charleston (CK) and many of this species were still in the region at the end of the period. 4 **Chestnut-sided Warblers** were banded at AFMO during the first week of October which is surprisingly late. **Blackpoll Warblers** surpassed all others at AFMO where banders handled 1316 during migration which reached the peak between Sept. 15-19. **Pine Warblers** were seen in good numbers at Charleston and several were heard in good song at Moncove Lake during the week of Sept. 15-22. There were more reports of **Palm Warblers** than usual and several October dates were submitted. **Ovenbirds** seem to have made a modest recovery from their low populations of past few years. A **Northern Waterthrush** banded on Sept. 26 at Morgantown was late date for this species (GAH). Oct. 26 was a very late date for **Mourning Warbler** at Morgantown. 25 **Connecticut Warblers** were banded at AFMO between Sept. 2 and Oct. 5.

Blackbirds—**Rusty Blackbirds** appeared in several localities this fall. A large flock was observed in Jefferson County, O. Nov. 2 (CB). They were also seen at Charleston (CK), Ripley (NL) and Lewisburg (COH). A flock of **Brown-headed Cowbirds** numbering close to 300 was seen at the foot of Peters Mt. on Sept. 17 (NL).

Fringilleds—Most reporters thought that the migration of **Rose-breasted Grosbeaks** was a good one. Although there were scattered reports of small numbers of **Evening Grosbeaks** no major invasion was evident before the end of the period. **Purple Finches** were sporadic in their appearance. Comments ran from fair flights to total absence. **Pine Siskins** were rare and populations of **Am. Goldfinch** were down. A flock of 7 **Red Crossbills** was seen at Moncove Lake campground on Sept. 17 (NL). There were two reports of **Dickcissel**—one at Lewisburg on Oct. 28 (COH) which appears to be the first record for Greenbrier County and one appeared at a feeder at Wheeling, W. Va. during the last week in November (John Cristy fide WB). **Dark-eyed Juncos** arrived on time and there were several comments on their abundance. **Tree Sparrows** were scarce. **Chipping Sparrows** staged a good flight. Numbers of **White-crowned Sparrows** appeared to be better than usual. The earliest date was Oct. 7 at Lewisburg (COH). A **White-throated Sparrow** in Greenbrier County on Sept. 12 was the earliest arrival date. **Fox Sparrows** were scarce at Morgantown and East Liverpool, O. Several were encountered at West Liberty, W. Va. on Nov. 13-15 (WB). **Song Sparrows** were considered plentiful by those commenting.

Contributors—Clinton Banks [CB]; Polly Ballowe [PB]; William Beatty [WB]; Ralph K. Bell [RKB]; Edward F. Brucker [EFB]; Hullett Good [HG]; Norris Gluck [NG]; George F. Hurley [GFH]; Connie Katholi [CK]; Clark Miller [CM]; Ephe M. Olliver [EFO]; Jesse Oyster [JO]; J. Lawrence Smith [JLS]. Mrs Nevada Laitsch, MC 21, Dixonville, East Liverpool, Ohio

The Gathering Cage



Constance Katholi, Editor
930 Woodland Avenue
South Charleston, W. Va.



Columbus, Ohio—Blackbird roosts have been making the headlines recently. One on the campus of Ohio State University was not spectacular but it did bring out a variable in roost-control that has not been mentioned hitherto. The discussion of this episode is legitimate for this column because some of the birds involved were undoubtedly banded at my trap a mile away.

The roost was in a large group of trees, evergreen and deciduous, just west of the Faculty Club building. It began in early December and comprised Starlings, Cowbirds and a few Grackles,—probably a few thousand birds in all. The area directly under the trees consisted of grass or sidewalk. It was several yards to the nearest parking area, so faculty cars remained essentially inviolate. Most complaints dealt with the noise.

The grounds-maintenance people, however, were annoyed by the necessity of maintaining the sidewalks under the roost and they were also sympathetic to the complaints about noise. They decided to "do something about it" by scaring the birds from the roost with shotguns and other explosives. Unfortunately they conducted this operation when there was a large evening function at the Club and every available parking spot in the vicinity was occupied.

The explosives moved the birds alright, although many of them returned later in the evening, and practically all of them by the next night. However, the explosives operated not only on the skeletal muscles involved in flight but also through the sympathetic division of the autonomic nervous system on the sphincter muscles during flight. As a result the detritus that usually appears under a roost the next morning was now spread over several acres in the vicinity as the birds fanned out in all directions. Faculty automobiles that would have been alright if the ground-maintenance people had kept quiet went to the car-wash in large numbers next day. There was no provision for this in the University budget.

The moral of this episode is obvious. Roost-control operations can have unexpected side effects.—**Harold E. Burt**

THE OHIO HISTORICAL SOCIETY, Columbus, Ohio—On February 4, 1975 at our banding station at Wahkeena, a nature preserve in Fairfield County, Ohio, I caught a pair of Tufted Titmice in the same cell of a 2-cell potter trap. When I first

noticed them they were concerned with getting out. I had noticed on several occasions that Titmice are very aggressive little birds. The female had somehow scratched up the area around her culman and she looked fairly bloody. I think she pushed into a corner of the cage and the wire scratched her.

I brought them into the lodge to put on the bands and as I was preparing the band, the two birds got into a fight. I reached into the cage to try and separate them and found that they were locked tightly together. The mate had sunk one of his talons into the eye socket of the female and his other foot was embedded in the ear opening at the other side of her head. At this time many aggressive sounds and distress calls were issuing from both these birds.

As carefully as I could, I removed the male from the female and banded the male and let him go. I held the female for about an hour and she seemed to be in good health despite her ordeal. Her eye did not appear to be permanently injured and she responded normally to sound. I banded her and let her go also. Hopefully she will survive and be more careful of the company she keeps.—**Ann Bingaman**

Editor's Note: Sex determination by wing-chord measurement, Wood's Manual. The male/female usage in the article provides for a more appealing narrative. The author intends no inference of a new formula for such determination in this species. As she said, "Only another titmouse should insist on the sex of any other titmouse." CK

Clarksville, Pa.—For the benefit of the newer birders, I thought it would be a good idea to explain what "skulling" (checking for skull ossification) is all about, so here goes: We banders try to age each bird captured in the fall because this knowledge greatly increases the value of banding records. By aging we can check on the age composition of the catch of fall migrants and with some species this could indicate whether it was a good or poor nesting season. Also, by aging we can sometimes detect if the migration of immatures of certain species leave for their wintering grounds ahead of, at the same time, or later than the adults.

Some species can easily be aged by plumage characters, others by eye color, but there are some that require "skulling" to be absolutely certain of the age. A paper by Dr. Robert A. Norris in the Jan. issue of BIRD-BANDING (32: 55-57) explains "skulling" very well as follows: "The skull of a passerine bird when it leaves the nest is made up of a single layer of bone in the area overlying the brain; at least, the covering appears single when viewed microscopically. Later the brain case becomes double-layered, the outer layer being separated from the inner layer by an air space across which extend numerous small columns of bone. It is not necessary to section the bone to determine this condition. Externally the skull of the immature bird appears uniform and pinkish in live and freshly-killed specimens. The skull of the adult is whitish, due to the air space, and also is finely speckled as a result of the dense white bony columns between the layers."

The above mentioned "double condition" is attained progressively and in some species more rapidly than in others. The skulls of many species are completely ossified by the end of the hatch year, but the Kinglets ossify rapidly and cannot always be correctly aged by the first of October. On the other hand, I noted 4 AHY (after hatch year) Barn Swallows that were not completely ossified as late as Aug.

10, 1974. I must admit that I was surprised to find this and will be doing more checking of AHY birds in 1975.

Over the years, I have occasionally observed something else while "skulling"; an indentation in the skull of some adults that would indicate the bird had once hit something very hard, viz: a TV tower, building, or bridge during a night migration, (or possibly even a picture window in the daytime). The indentation is usually deep enough that it can be felt by simply rubbing one's finger over the feathers on top of the bird's head. The following is a list of 17 birds (of 12 different species) that I have recorded as having indented skulls. I'm sure there were others noted but not recorded, and the skulls of species that are aged by other means (than skulling) are seldom checked.

Date	Species	Sex	Location
Sept. 30, 1966	Blackpoll Warbler		AFMO (Dolly Sods)
Oct. 2, 1966	Magnolia Warbler	M	AFMO (Dolly Sods)
Oct. 8, 1966	Myrtle Warbler	M	Clarksville, Pa.
Oct. 22, 1966	Dark-eyed Junco		AFMO
Oct. 22, 1966	Dark-eyed Junco		AFMO
Oct. 22, 1966	Golden-cr. Kinglet		AFMO
Oct. 11, 1968	White-th. Sparrow		AFMO
Oct. 9, 1971	Tennessee Warbler		AFMO
Nov. 18, 1972	Dark-eyed Junco		Clarksville, Pa.
Sept. 7, 1973	Cape May Warbler	M	AFMO
Sept. 15, 1973	Wilson's Warbler	M	AFMO
Aug. 31, 1974	Cape May Warbler	M	AFMO
Sept. 14, 1974	Tennessee Warbler		AFMO
Sept. 15, 1974	Cape May Warbler		AFMO
Sept. 19, 1974	Bay-br. Warbler		AFMO
Oct. 6, 1974	Chipping Sparrow		Clarksville, Pa.
Oct. 11, 1974	Swainson's Thrush		AFMO

These birds were all adults and I have wondered for some time whether the more flexible skull of the unossified immature birds that hit an object (and lived) would pop back out again and not be noticeable. However, this is pure speculation. Some immature birds are seen with an unusual amount of blood under the outer layer, and I often wonder if these are birds that have bumped into something. Checking dead birds found under TV towers in the fall might solve these questions.

Additionally, do these hard collisions affect the birds habits in any way? Does it affect orientation if the bump is in a certain part of the brain? Are "rarities" that show up at unusual locations the result of improper orientation caused by brain damage during a collision?—**Ralph K. Bell**

GOLDFINCHES FEEDING IN CLUMP BIRCH

Beginning in the Summer of 1966 goldfinches have fed, for several weeks each summer, on the seed "cones" on a clump birch tree [*Betula papyrifera*] in our front yard. When the goldfinches began to appear we watched more closely their feeding method in the tree.

Starting about May 15th as many as ten birds at one time could be seen eating tender green seed "cones" on the tree branches. These "cones" were about 45 mm long and 10 mm in diameter. The parallel location of the "cones", hanging by a 12 mm long stem from a drooping branch (weeping willow like), required that the goldfinch be very inventive (adaptable).

In order to feed on such an "elusive object" of food this was the method the goldfinch used. The bird perched on a branch near the seed "cone". While "holding on" with one foot it reached out with the other foot and grasped a near-by "cone" that was not necessarily on the perch branch. Then it pulled the "cone" along side the perch branch placing it near the other foot. Sometimes when the twig holding the "cone" was a little too strong the grasping foot could not hold on to the "cone". The grasp would then be broken and the "cone" would spring away.

When the seed "cone" was "secured" the bird would begin by eating on the end of the "cone" like a youngster eating a stick of candy. Sometimes the feeding would start nearer the center of the "cone". Only a small part of any "cone" would be eaten. Judging by the amount of debris that fell from the bill of the feeding bird, only a small portion of the chewed off "cone" was retained as food.

Late in May when the birds started feeding the "cones" showed very little evidence that any discrete seeds had formed. Seeds began forming about three weeks later. After seven weeks the seed portion was ripe enough to be turning brown. About this time the birds stopped feeding on the "cones". The only reason we could see for the goldfinches to stop feeding on the birch "cones" and leave the area was that more desirable foods became available. Perhaps the seeds of various grasses that were ripe about this time are such foods.

An interesting sidelight in watching the goldfinches was to see a female house sparrow try to copy the technique of feeding on birch "cones". The sparrow perched near a feeding goldfinch. It watched a while and then flew alongside another goldfinch. After watching this one feed for a short time, the sparrow tried to grasp a cone in its foot. After a few attempts failed, the sparrow gave up and left the tree.

(1) The term "cones" is used to describe the seed bearing portion of birch trees in the book "An Introduction to Trees" by John Kieran. — D. R. Shearer

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