DISTRIBUTION OF THE WILD TURKEY
IN WEST VIRGINIA

by

Russell Le Garmo

Since pioneer days the wild turkey has retained its place in the hearts of Americans as a favorite among game birds. It still remains as a symbol of wildness and cunning which has served well to prevent its becoming extinct long ago. Yet, in spite of this wariness and ability to elude man and its other predators, it is no longer found over much of its former range. In West Virginia, it has almost entirely disappeared south of the Kanawha River, a territory which contains over seventy-five percent woodland and which should support large numbers of turkeys. In the past five years the last remnants of scattered flocks have apparently disappeared in Wyoming, Logan and Summers Counties. In Hardy County the reported kill as made to the Conservation Commission has declined from 235 in 1940 to 89 in 1945.

Taking cognizance of the rapidly decreasing wild turkey population in certain sections of the State, the Conservation Commission has undertaken a program designed to restore the bird to at least portions of its former range and in sufficient numbers to permit legal shooting. As in any such undertaking the first step was that of conducting a survey to determine the present status and distribution of the wild turkey over the State. This survey extended from July 1, 1944 to June 30, 1945. The procedure was varied, but was simplified by the fact that the wild turkey is more easily censused than any other game bird. The first step consisted of contacting by letter, all persons who made reports of turkey kills to the Conservation Commission during the 1943 and 1944 open seasons. Such reports are required by law.
From this source the location of many flocks was learned. A field survey was then begun, county by county, in which game protectors, county agents, U. S. Forest Service employees and many local residents were contacted in person. Through these means practically the entire mountainous section of the State was carefully canvassed, and the location and range of all reported flocks was determined.

In addition to the reports of locations of wild turkey flocks, much information was received which will be of value in future management. For example, it was graphically demonstrated that a well-rounded refuge system is the salvation of the wild turkey in several counties. Turkeys soon learn the location of any refuges, and of the protection offered by them. It was also found that illegal hunting has in many cases resulted in the disappearance of the wild turkey from local areas. Though additional study is advisable, it also became apparent that there is a wide variance in the degree of wildness in turkeys over various parts of the State. There appears to be a great amount of domestic blood in the birds of the northeastern part of the State while those ranging in the drainage areas of the Williams and Cranberry Rivers appear unaltered by domestic strains and possess all of the characteristics of the original wild turkey.

During the course of the survey the wild turkey was reported in 21 counties. There still remains the possibility that small flocks range in four other counties, namely Braxton, Logan, Wetzel and Wyoming. The following distribution is based upon the number of flocks and total number of birds for each county:

<table>
<thead>
<tr>
<th>County</th>
<th>No. Flocks</th>
<th>No. of Turkeys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkeley</td>
<td>8</td>
<td>55</td>
</tr>
<tr>
<td>Boone</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Clay</td>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td>Fayette</td>
<td>10</td>
<td>141</td>
</tr>
<tr>
<td>Grant</td>
<td>28</td>
<td>348</td>
</tr>
<tr>
<td>Greenbrier</td>
<td>45</td>
<td>411</td>
</tr>
<tr>
<td>Hampshire</td>
<td>78</td>
<td>678</td>
</tr>
<tr>
<td>Hardy</td>
<td>41</td>
<td>560</td>
</tr>
<tr>
<td>Kanawha</td>
<td>2</td>
<td>26</td>
</tr>
<tr>
<td>Mineral</td>
<td>25</td>
<td>160</td>
</tr>
<tr>
<td>Monroe</td>
<td>5</td>
<td>36</td>
</tr>
<tr>
<td>Morgan</td>
<td>13</td>
<td>86</td>
</tr>
<tr>
<td>Nicholas</td>
<td>31</td>
<td>304</td>
</tr>
<tr>
<td>Pendleton</td>
<td>43</td>
<td>563</td>
</tr>
<tr>
<td>Pocahontas</td>
<td>60</td>
<td>1053</td>
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<td>Preston</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Raleigh</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Randolph</td>
<td>74</td>
<td>1139</td>
</tr>
<tr>
<td>Tucker</td>
<td>10</td>
<td>113</td>
</tr>
<tr>
<td>Upshur</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>Webster</td>
<td>23</td>
<td>237</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>507</strong></td>
<td><strong>5988</strong></td>
</tr>
</tbody>
</table>
Due to the period of time involved in conducting the survey, no accurate census could be obtained which would apply to any one period. The present distribution of the wild turkey in West Virginia and the basis for adopting future policies in establishing open seasons, refuges, restocking areas and habitat improvement. It is to be hoped that the efforts of the Conservation Commission will enable the wild turkey to return to much of its former range and in far greater numbers over most of its present range.

--- Conservation Commission
Charleston, West Virginia

SWAINSON'S WARBLERS' NESTS IN NICHOLAS COUNTY

On June 1, 1945, a member of the Handlan Chapter of the Brooks Bird Club, Charleston, W. Va., wrote me that the first nest of Swainson's warbler (Limnothlypis swainscii) for the state had been found in Kanawha County a few days previously by a member of the club. Mr. James Gillin, Ambler, Pa., and I had been searching for a nest on that day at a station on Melinda Creek where our only Swainson's warbler of the day had been heard singing. Previous to this several had been heard along this creek, however. As had been the case since 1939, our searching on this day had been futile. Learning that this warbler does nest in West Virginia must have had a psychological affect on us or else we were extremely lucky, as the following events will prove.

On June 2, Mr. Gillin and I traveled down Bearpen Hollow Creek until we heard the first warbler singing, on a station that was new to me. We noted for some time where the bird ranged and found that its territory was some 200 feet long and probably 150 feet wide. We each selected a different area of the bird's territory and worked them for some time. Progress was very slow as this was one of the most difficult thickets that we had ever searched in.

The singing bird ranged about quite a bit during this period but finally began concentrating its singing activity in my part of the territory. I thought I heard young birds a few times before Mr. Gillin joined me. All of a sudden I found myself looking at the bulky nest. Mr. Gillin looked at it and said "Bill, that's it!" The nest was empty. It was 4½ feet high in a rhododendron on a dead branch. The outside measurement was 7 in. and inside 2½ in. wide by 1½ in. deep. It was lightly but firmly built by leaves, many of them skeletonized, and lined with grass and fern stems.

Tall holly (Ilex opaca), tulip, red maple, hemlock and sweet birch afforded the overstory. The thicket was composed of rhododendron, kalmia, small holly, hemlock and other shrubs and saplings. Even the dense growth permitted a little light to penetrate (a play of light and shadows) to the nest at midday. There were no herbaceous plants in the vicinity of the nest except
some partridge berry (Mitchella repens). Dead limbs, tree tops and rotten logs, which had lain there for some twenty years, littered the floor of the thicket. The nest was about 100 feet from an old grownup logging road along the creek.

We went about 250 yards to a station where on the previous Sunday a Swainson's warbler had been heard singing by Alvin Allison, A. Lee Stewart, Jr., and the writer, but we had not searched for a nest on that occasion. Today no bird was singing when we arrived on this territory nor did it sing while we were there. A few minutes after our entry into the bush, I saw a Swainson's warbler sitting on a nest. We approached it and the bird did not hop off until my hand was two feet or less from her. She fluttered to the ground and ran off like an oven-bird, acting as if her wing was broken. She soon disappeared and we saw no more of her.

The nest, which held 4 white eggs, was 4 feet up in a dead kalmia. This habitat was less dense than the first one. Blackberry and greenbriers, New York and Christmas ferns, trillium, maple-leaved viburnum, sassafras and sourwood grew in the vicinity of the nest in addition to the plants found at the first station. The nest and eggs were collected by Mr. Gillin, an oologist who has an extensive collection. He had recently received a collection of eggs from the Pacific from Naval Commander Dick Harlow, the bird hunting football coach.

The first nest was visited a few times at later dates but never held anything except mice scats, which probably is significant as to a natural enemy of this warbler. The nest was eventually collected and sent to the Editor of this Journal.

-- W. C. Legg
Mt. Lookout, W. Va.

**RUBY-CROWNED KINGLETS**

The new "Check List of W. Va. Birds" states that there are winter records of ruby-crowned kinglets, *Regulus calendula calendula*, from the Charleston and Huntington areas as well as one from Fairmont. However, reports are scarce and a check through recent REDSTARTS yields little information.

The past two Christmas counts at Charleston and those at Huntington from 1940 through 1943 (Redstart, January, February of 1944) fail to list this species. Mr. Green (Redstart, in March 1944) does not mention it as a winter bird at Huntington. Mrs. Dickinson Redstart, January and February 1944) has recorded the bird only once "between November and April" at Bluefield.

Therefore I feel it might be of interest to mention my finding ruby-crowns with regularity in winter at Charleston. Each of the past three winters has turned up at least one kinglet and during the 1943-44 season the bird was listed several times in December.
and January. Specific dates are: January 9, 1944; December 7, 1944; and, January 6, 1946.

I find them on lawns right in the heart of the city and in a large cemetery just outside the city limits, usually in small evergreens and never more than one individual at a time.

-- Alston Shields
Charleston, W. Va.

HERMIT TRUSH WINTERING IN OHIO COUNTY.

On December 21, 1945, Don Keyser and I were observing birds on Fulton Heights, Wheeling, Ohio County, West Virginia. We were traveling over a steep wooded hillside of black locust, American elm and staghorn sumac when a bird was flushed but not immediately identified. The bird was followed and collected. It proved to be a hermit thrush, Hylocichla guttata. On the same day two more examples of this species were seen. On December 26, 1945, I returned to the same general territory and saw one hermit thrush. The next day, December 27, 1945, the species was noted twice but not at the same locations as the other birds. The second bird was a first year female and had a very slightly deformed bill. The second bird was a first year male. The intestinal tract and crop of both birds were filled with the juice and seeds of pokeweed, Phytolacca.

I have been observing birds on the above mentioned area for the past ten years. The first five it was investigated methodically and consistently. During the past five it has been visited at seasonal intervals. This is the first time I have recorded this thrush in the winter in this particular locality or elsewhere in Ohio County. The species has been recorded in nearby Marshall County during the late autumn.

-- George H. Breiding
Ohio State University
Columbus, Ohio

SOME EXAMPLES OF "ALBINISM" IN BIRDS

The title above is rather misleading as probably only one of the birds recorded below was a true albino. The other examples doubtless were cases of depigmentation of the plumage or abnormalities of some kind. True albinism, I understand, is considered rare while birds with white in their plumage is more or less common. Most ardent observers, I imagine, like myself notice and record this and other unique phenomena of the avian world. Since 1939
I've recorded all examples of what I loosely termed as albinism in the plumage of birds as well as that observed in mammals and plants. In mammals, a pure albino gray squirrel was killed at Mt. Lookout this last fall. It was white and its eyes were pink. In flowers, two examples came to mind -- snow-white cardinal flowers and white mist flowers.

Feb. 19, 1939, a pure albino meadowlark was observed in a flock of normal colored birds. I say "pure" but in reality the color appeared to be more of a cream color, a tendency toward xanthochroism, I wonder. However, the several people who observed it during its presence of a few days always referred to it as white. I think that its eyes were pink.

March 21, 1939, a junco with a white head was observed.

April 23, 1939, Alton McClung reported a white-tailed field sparrow. We both kept this bird under observation until after it nested. In flight the entire tail appeared to be white, but there was a narrow median stripe of gray in the tail.

March 21, 1940, a partial white robin appeared at my sister's home. Most of its back and the entire breast were white. Its head and tail were normal in color. This bird nested in the woodshed and throughout the spring and summer attracted much attention and was called the "white robin". I fail to have a record of it in 1941, but on March 14, 1942, it made its appearance again and nested: also in 1943, on March 23, it came back and nested. A set of the young birds and the robin was never recorded after that.

March 7, 1943, a part white robin was observed. It appeared to be the one above although it was found three miles away in a brushy thicket.

March 3, 1944, a few rusty blackbirds were recorded. About half of the right wing of one bird was white.

April 16, 1944, an almost pure white field sparrow was recorded. This was such a unique bird that I was puzzled for a few minutes, thinking at first glimpse that it was a snow bunting. It was not recorded afterward until the following year apparently the same bird was seen at the same spot on April 21. It was recorded on May 8 in the same vicinity and was with its mate, but no nest was ever found.

May 28, 1944, a field sparrow was noted to have a white throat, sides of head and the most of the top of its head. It is known to have nested.

-- W. C. Legg
Mt. Lookout, W. Va.
NOTES FROM NICHOLAS COUNTY

After an uneventful December and January (Alton and I looked so hard for evening grosbeaks) February began to show some bird life. Heretofore woodfrogs, spring peepers, and chorus frogs had begun their choruses and the spotted salamander had laid its eggs before the woodcock migration began in this area, but this year the woodcock started through before any of the lowly batrachians had uttered a peep or laid an egg. February 23 a "wave" was here and birds were heard "peenting" and twittering by Clyde and Alton McClung and the writer. The birds have been heard daily since but at scattered locations. The earliest date for woodcock was March 6 before this year. We wonder if this bird is a week and a half earlier in other localities?

The turkey vulture appeared in numbers the first of February. Two marsh hawks were recorded the middle of the month and toward the last Alton McClung recorded two broadwinged hawks. Redwinged blackbirds, meadowlarks, killdeers, fox sparrows and Bewick's wrens were apparently absent in December and January but were recorded in February. On the 28th phoebes were present on Meadow River.

To me the most surprising rarities in this section for the winter were owls. Not a single screech owl was recorded and horned owls haven't been heard hooting over half a dozen times. The Wilson snipe, which had been present the past few winters, was absent this winter, as far as I could determine. It was last recorded November 30, 1945.

-- W. C. Legg
Mt. Lookout, W. Va.

SPARROW HAWKS AND SQUIRRELS IN COMPETITION

On the lawn of the state capitol at Charleston, W. Va. are numerous large trees, notably American elms, several of which are centers of attraction for the numerous gray squirrels which frequent the grounds. Drinking fountains and food shelves are located near these trees and several nesting boxes are placed in each.

On March 8, 1945, two squirrels and two sparrow hawks, Falco Sparverius, were observed in what might have been competition for one of these nest boxes. Observers at windows in the capitol building first were attracted by swoops of one hawk from perches
high in the tree toward one of the nest boxes. The swooping bird was a male and a second hawk, a female, was observed perched quietly near the nest box. Two gray squirrels occasionally darted toward the female hawk -- each such dash by a squirrel resulting in a plunging swoop by the male bird which, however, always veered from its target when some two to three feet distant.

The squirrels occasionally retreated from the box location, whereupon the male hawk flew to perches near the female. An advance by one or both squirrels regularly resulted in a sharply rising flight by the male bird and a subsequent dive at the offending mammals.

This apparent competition still was in progress when duties ended servation.

In previous years this observer has known both sparrow hawks and screech owls, Otus asio, to utilize these nest boxes and to successfully hatch and rear young despite any eviction efforts of the squirrels for which the boxes are intended.

-- John W. Handlan
409 - 41st St. S. E.
Charleston (4), W. Va.

FIELD NOTES

Partially White Junco Returns

A Carolina junco with white auricular patches, first noted last year, has returned this season to Bluefield. He came in with the first juncos to come to our yard about November 11, 1945. He was very prominent all during November but I do not remember seeing him after the deep December snows.

-- Miriam Dickinson
Bluefield, W. Va.

WATER BIRDS AT TAPPAN RESERVOIR

The waters impounded by the new Tappan Dam of the Muskingum Watershed Conservancy District, fifteen miles west of Cadiz on U. S. Route 250 in Harrison County, Ohio, have continued this spring season to attract birds previously unknown or unusual in this hilly area.
Several hundred acres of water collected behind the dam following
the heavy rains of mid-April, and large flocks of ducks settled
for a short period of time. On April 19, 1946, approximately
three hundred were observed within a small area. These were mostly
scaups, Nyroca affinis, but with them were a few bufflehead,
Charitonetta albeola.

For the last two weeks of April a sight uncommon for this territory
was presented in a flock of at least fifty herring gulls, Lerus
argentatus, among which were a lesser number of common terns, Sterna
hirundo, seen over the lake or on the shallow ponds made by the
overflow covering the plowed fields here and there for several
miles above the dam. The larger Caspian terns, Sterna caspia,
seen here last year, have not been observed this year.

Red-billed Grebes, Podilymbus podiceps, were present in consider­
able numbers along the margins of the lake, and a few horned grebes,
Columbus auritus, could be seen swimming and diving farther from
shore. Several of Fulaica americana, spent a week or so on the
back waters and on one occasion a red-breasted merganser, Mergus
serrator, was seen.

By the first of May the flights of ducks were succeeded by the shore
birds, although a solitary sandpiper, Tringa solitaria, was seen
among the gulls and terns as early as April 17th. Up to the middle
of May, both greater, Totanus melanoleucus, and lesser yellow-legs,
Totanus flavipes, were still present. This territory appeared to
attract fall migrating shore birds to a much greater extent, as
several other species of sandpiper, as well as the semipalmated
plover, were found there last August and September.

Of the herons, great blues, Ardea herodias, and little greens,
Butorides virescens, frequent the area. The great blues stayed
during August and September last year, and a number of little blues,
Florida coerulca, were found there at that time.

During the past season Wilson snipe, Cooperia delicata, were fre­
quently seen, as many as a dozen in a group, appearing early in
April.

We missed this year, the pipits, Anthus spinoteleta, that appeared
at the dam last Spring. A flock of more than one hundred came in
April and stayed until the last of May. This was the first time
in thirty-five years of observation of local bird life that the
veteran bird student, H. E. McConnell, or myself had found these
birds here. The possibilities are hopeful for this region in the
coming years.

-- John G. Worley
Cadiz, Ohio

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