

southern limit of this race on the coast. *Geothlypis trichas typhicola*, recently described by the junior author,<sup>1</sup> occurs on the North Carolina coast within a few miles of the Virginia line and in the Dismal Swamp, which lies approximately twenty miles due west of Pungo.

*Pipilo erythrophthalmus canaster*. ALABAMA TOWHEE.—This species was plentiful here, and frequently seen about thickets and underbrush. Specimens taken were in some respects intermediate between *erythrophthalmus* and *canaster*, but were sufficiently characteristic of *canaster* to be referable to this race. Heretofore this form has not been recorded north of Beaufort, North Carolina.

*Passerherbulus henslowi susurrans*. EASTERN HENSLOW'S SPARROW.—A small colony of these birds, apparently breeding, was found in the same area on the beach where the Short-billed Marsh Wrens were seen. The two days that they were observed males were frequently heard singing, and there is little question but that they were nesting here. In fact the species was reported as breeding in this county by H. H. Bailey in his 'Birds of Virginia' but this record seems to have been overlooked in the preparation of the fourth edition of the A. O. U. Check-List (1931), where the subspecies is said to range "south to northern Virginia."

*Melospiza melodia atlantica*. ATLANTIC SONG SPARROW.—This little known race was fairly plentiful about clumps of myrtle bushes growing among the low dunes on the ocean beach a few rods from the water's edge. Here these birds were inconspicuous and very shy, this shyness being evident when an attempt was made to approach one. The song uttered by the males sounded weak, and was not audible at any great distance, but this was possibly due to the strong northeast wind that blew each day, and to the noise of the surf. The few females that were observed were apparently incubating at this time for there was no evidence of their feeding young. With one exception Song Sparrows were totally wanting away from the beach; one pair was found at the edge of a large marsh about five miles inland.—ARTHUR H. HOWELL AND THOS. D. BURLEIGH, *Bureau of Biological Survey, Washington, D. C.*

**Northern and Southern Birds Meeting on a West Virginia Mountain.**—Along the southern border of Randolph County, West Virginia, lies the range of Cheat Mountains, the altitude of the various peaks running from thirty-seven to forty-three hundred feet. These mountains are notable as a meeting place of northern and southern birds. To some extent the plant kingdom carries out the same mingling of forms.

In listing the birds, I have divided them into those typically found in the Canadian or Upper Transition life zones, and those more typical of the Carolinian zone. Frequent visits over a ten-year period have turned up a number of surprises.

<sup>1</sup> Proc. Biol. Soc. Washington, vol. 47, p. 21. 1934.

Canadian Forms.

*Sphyrapicus varius varius*. YELLOW-BELLIED SAPSUCKER.—A common bird in the nesting season.

*Nuttallornis mesoleucus*. OLIVE-SIDED FLYCATCHER.—Seen occasionally along the borders of some mountain swamps, where the altitude drops to 3,700 feet.

*Penthestes atricapillus atricapillus*. BLACK-CAPPED CHICKADEE.—The common Chickadee, but mingling with the Carolina Chickadee (*P. carolinensis*). The two-note song of the Black-cap, seems absolutely determinative when compared with the constant four-note song of the Carolina.

*Sitta canadensis*. RED-BREADED NUTHATCH.—Common as a breeding bird.

*Certhia familiaris americana*. BROWN CREEPER.—Since these mountain-tops are within the red spruce belt, Brown Creepers occur in considerable numbers.

*Nannus hiemalis hiemalis*. EASTERN WINTER WREN.—The liquid notes of this tiny bird greet you from every shaded ravine along this range.

*Hylocichla guttata faxoni*. EASTERN HERMIT THRUSH.—This is the only place in West Virginia, so far as I know, where a full Hermit Thrush chorus may be heard in summer. The birds seem extraordinarily abundant.

*Hylocichla ustulata swainsoni*. OLIVE-BACKED THRUSH.—Not so common as the last, but heard every season. Nests have been found.

*Regulus satrapa satrapa*. EASTERN GOLDEN-CROWNED KINGLET.—At times very abundant. Young birds seem to be in every tree in late July and August.

*Oporornis philadelphia*. MOURNING WARBLER.—Most of this mountain area has been cut over, and where the Millsbaugh's blackberries have grown up this Warbler is common.

*Carpodacus purpureus purpureus*. EASTERN PURPLE FINCH.—One of the real surprises of the region was to find dozens or even hundreds of these birds in this area during the summer. On June 10, 1933, I watched one carrying nesting material. They are regularly common to abundant.

In addition to the species named above, the Northern Raven, Northern Pileated Woodpecker, Mountain Solitary Vireo, Cairns' Warbler, Magnolia Warbler, Blackburnian Warbler, Northern Water-Thrush, Eastern Savannah Sparrow, and Carolina Junco are other Canadian representatives.

What seems much more surprising is to find so many typically Carolinian forms. Of the species listed below, not one was recorded from an altitude lower than 3,500 feet.

Carolinian Forms.

*Centurus carolinus*. RED-BELLIED WOODPECKER.—Seen on August 7, 1931, and June 10, 1933.

*Thryomanes bewicki bewicki*. BEWICK'S WREN.—Nests around the buildings at Cheat Bridge settlement.

*Poliophtila caerulea caerulea*. BLUE-GRAY GNATCATCHER.—In many places in the state I have seen these birds at high elevations, but nowhere else quite so near the 4,000 foot mark.

*Helmitheros vermivorus*. WORM-EATING WARBLER.—This is another Carolinian form that climbs the mountains in this state. A pair was observed in June, 1932, along Red-bridge Run, near one of the tops.

*Oporornis formosa*. KENTUCKY WARBLER.—One of these birds was heard and seen singing in the same thicket with a Mourning Warbler on June 10, 1933.

*Wilsonia citrina*. HOODED WARBLER.—Not uncommon in the deciduous borders but not found in the evergreen thickets.

Yellow-breasted Chats, and a stray Cardinal (seen in August, 1929) are other Carolinian forms. I know of no other region in the state with such a crossing-over of life-zone forms.—MAURICE BROOKS, *French Creek, W. Va.*

**1933 Notes from Chapel Hill, N. C.**—We believe that the following notes will be of more than local interest since they include some information supplementary to Pearson and Brimleys' 'Birds of North Carolina,' C. S. Brimley's 'Birds of Raleigh' and other publications from this and other parts of the state.

*Egretta thula thula*. SNOWY EGRET.—A single individual was observed at various times between July 15 and September 12 both on a small pond and the large lake and constitutes our first record. Inland records for this species seem to be very scarce up to the present time and we hope that its appearance here is indicative of a comeback on the part of this species similar to that which the American Egret has experienced during the past few years.

*Phalacrocorax auritus auritus*. DOUBLE-CRESTED CORMORANT. May 21 and November 5 (1 bird).

*Glaucioneitta clangula americana*. AMERICAN GOLDEN-EYE. March 26 (1) and April 2 (small flock).

*Larus argentatus smithsonianus*. HERRING GULL. April 16 (flock of 200) and April 22 (1).

*Sterna hirundo hirundo*. COMMON TERN, October 15 (1).—These are our first local records for these coastwise species. The first two are probably regular inland transients, but, nevertheless, no other records from central North Carolina have come to our attention. The latter two species have been observed at Durham and Raleigh, and Durham respectively, and are probably to be looked upon as irregular stragglers. The Herring Gulls appeared following heavy rains.

*Dendroica tigrina*. CAPE MAY WARBLER.—This bird is ordinarily a rare transient this far east of the mountains, but a sizable flight was observed between October 15 and 25. The maples outside of the University zoology building were full of Cape Mays for several days, the birds ranging from extremely dull immatures to individuals with bright yellow rumps. Several specimens were taken.