

dant resident in the wooded parts about the Big Plain and in the Red River Valley. Red Deer River. Most plentiful in winter, therefore probably in some degree migratory.

122. *Picoides americanus*. AMERICAN THREE-TOED WOODPECKER.—Not taken, but Richardson ascribes to it a range which includes Northern Manitoba.

123. *Sphyrapicus varius*. YELLOW-BELLIED SAPSUCKER.—Common summer resident about the Big Plain, on the Souris (*Coues*), and in the Red River Valley. Manitoba House and Swan Lake House.

124. *Ceophlœus pileatus*. PILEATED WOODPECKER. COCK-OF-THE WOODS.—Rare resident in heavy timber. Occurs at Lake Winnipeg and Lake of the Woods (*Hine*). Selkirk (*Gunn*). At Swan River. Probably in all the great forests to the north, as it is found north to latitude 63° (*Richardson*).

125. *Melanerpes erythrocephalus*. RED-HEADED WOODPECKER.—A tolerably common summer resident about the Big Plain, and also along the Red River. It is probably a summer resident in all wooded sections.

126. *Colaptes auratus*. FLICKER. HIGHHOLDER.—Very abundant summer resident all over. Red Deer Lake. Arrives April 15; departs September 30.

127. *Antrostomus vociferus*. WHIP-POOR-WILL.—Abundant summer resident at Big Plain, Turtle Mountain, and in Red River Valley. Manitoba House. Arrives May 20; departs September 15.

128. *Chordeiles virginianus henryi*. WESTERN NIGHT-HAWK.—Very abundant summer resident all over. Manitoba House. Arrives May 24; departs August 30.

129. *Chætura pelagica*. CHIMNEY SWIFT.—Tolerably common summer resident all over. "A few observed at Swan Lake House."

(To be concluded.)

NOTES ON BIRDS OF THE SALT POND MOUNTAIN, VIRGINIA.

BY WILLIAM C. RIVES, JR., M. D.

It has been well established by numerous observations that, as far as birds are concerned, the northern and southern limits of the various faunæ correspond far more closely with isothermal lines than with parallels of latitude.

In his very interesting paper on the Summer Birds of the Catskills,* Mr. Eugene P. Bicknell, after referring to an article by Professor Cope tending to prove that in accordance with the above-mentioned law the fauna of the southern Alleghanies possesses marked Canadian characteristics, calls attention to the fact that the Snowbird (*Junco hyemalis*) is the only species really typical of the Canadian fauna which has actually been ascertained to breed with regularity south of Pennsylvania.

During a short visit to the Salt Pond Mountain, in Giles County, Virginia, on June 4, 1885, and a few subsequent days, one or two additional species were seen by the writer, which, from the circumstance of its being the breeding season, would seem to show that they rear their young in this locality, and though the observations made were necessarily incomplete from want of time, some account of the birds met with during the few days spent at this little known locality may be of sufficient interest to be recorded.

The Salt Pond Mountain, one of the loftiest in Southwest Virginia, attains the height of 4500 feet,—the highest in the State, White Top Mountain, near the North Carolina line, reaching the altitude of 5530. It derives its name from the Salt Pond, now more appropriately called Mountain Lake, a beautiful sheet of fresh water enclosed between the summit of the mountain and its spurs, and lying at the great elevation of 4000 feet. The lake has for many years been a summer resort, but since the building of the New River Railway has become much easier of access, as it is but nine miles distant from Staytide, a station upon the west bank of the New River, opposite Eggleston's Sulphur Springs. The Salt Pond Mountain has long been known to botanists as possessing a very interesting flora, and has been visited by Professor Asa Gray and others of eminence in the science. It is one of the few places in which the rare plant *Sedum nevii*—originally discovered in Alabama—has been found. The flora of this region in general, which comprises as might be expected many northern species, has been carefully investigated by Howard Shriver, Esq., of Wytheville, Va., whose writings should be consulted by those interested in this subject.

* Transactions of the Linnæan Society of New York, Vol. I, 1882.

On the occasion of my visit the mountain was reached by a drive of twenty-four miles from Christiansburg, on the Norfolk and Western Railway, passing through Blacksburg, the seat of the Virginia Agricultural and Mechanical College, situated in a beautiful and fertile valley, and over the Brush and Gap Mountains. The Salt Pond Mountain is visible for a great distance, but its massive proportions are particularly well seen from the northern slopes of the Gap Mountain, above the village of Newport. It presents, like many of the Virginian ranges, a long level top, which is slightly interrupted by the rounded eminence of Bald Knob, its highest peak, and at its western end falls away rather abruptly towards the valley of the New River. After leaving Newport and fording Sinking Creek, the ascent began. Proceeding upwards, a number of Bewick's Wrens (*Thryothorus bewickii*), with young already quite well grown, were found along the fences and among piles of brush in one of the clearings. Their movements were restless and active, like those of other Wrens, and their long tails were especially conspicuous. During the rest of the ascent but few if any birds were noticed. The road, which was very rough in places, at a point about two-thirds up the mountain turns completely round its western shoulder, here affording a magnificent and extensive view of distant ranges to the south and west, and of the New River Valley, and is carried along the side of a deep ravine, lying between this portion of the mountain and one of its outlying spurs.

Just beyond the summit of the ridge which terminates this valley, lies the lake, fringed in the greater part of its extent with rhododendrons (*Rhododendron maximum*), which when in flower in July must present a beautiful sight, and form an exquisite setting for this mountain gem. As it now exists, the lake is of comparatively recent origin, and is thought to have been formed by the accidental stoppage of some of the outlets of the stream, or small pond, which existed in this spot in the last century. Its greatest depth, according to Professor William B. Rogers, is from 56 to 60 feet. It is three-quarters of a mile long by half a mile wide, and at its northern end discharges its waters by a brook, which after a short course enters Little Stony Creek, a beautiful and picturesque stream, abounding in trout, which, in the course of its rapid descent to the New River, forms a fine

waterfall about seventy feet in height. Singularly enough, fish do not thrive in the lake itself.

At this lofty elevation the air is cool and bracing, and the numerous pleasant walks over the mountain crests offer many attractions. The condition of the vegetation showed a marked contrast with that of the lower country, which was in a much more advanced state, and the oaks still retained the silvery gray appearance which they present before the leaves are fully developed. The mountain is for the most part thickly wooded with various kinds of trees, but wherever there is a clearing the grass grows readily. The buckeye and the sugar maple—here known as the sugar tree—flourish, and in many of the ravines and sheltered spots are brakes of rhododendrons and dark and lofty hemlock spruces.

Among the plants observed were fine specimens of *Trillium grandiflorum*, with large rose-colored petals, the deep purple *Trillium erectum*—a characteristic northern species—*Cypripedium acaule*, *Cypripedium pubescens*, *Cypripedium parviflorum*, *Arisæma triphyllum*, *Pedicularis canadensis*, *Geranium maculatum*, *Sedum turnatum*, and *Houstonia cærulea*. The lily of the valley (*Convallaria majalis*) was in flower and moderately abundant, the laurel (*Kalmia latifolia*) was common, and in many places the woods were resplendent with the gorgeous blossoms of the beautiful flame-colored azalea (*Azalea calendulacea*). In the neighborhood of the lake and in the moist and shady woods the cinnamon fern (*Osmunda cinnamomes*) grew in abundance, while in many places the ground was covered with a dense growth of Clayton's fern (*Osmunda claytoniana*). Among other ferns met with were *Aspidium acrostichoides*, *Pteris aquilina*, and *Adiantum pedatum*.

The bird life did not appear to be very abundant. The Robin, however, was tolerably plentiful, and I noticed a nest doubtless constructed by this species, but which I did not examine. The Common Yellowbird (*Spinus tristis*) was seen in open ground near the lake, and in the woods the notes of the Oven-bird (*Seiurus aurocapillus*) were frequently to be heard. The thick growth of oak and other bushes on the summit of Bald Knob afforded excellent shelter for ground birds, but appeared to be monopolized chiefly by the Towhee Bunting (*Pipilo erythrophthalmus*), whose notes were heard more frequently than the birds

themselves were seen. I observed a Turkey Buzzard (*Cathartes aura*) sailing about at the top of Bald Knob, and was afterwards informed that the nest had been discovered a short time previously, in a somewhat inaccessible position in one of the crevices among the rocks at the summit, but I did not secure an opportunity of seeing it. The Wood Thrush (*Turdus mustelinus*) frequented the mountain, as well as the Least Flycatcher (*Empidonax minimus*), which is not found in Tidewater and Middle Virginia in the breeding season, but was here noticed and heard uttering its usual *chebec*. The note of a Pewee (*Sayornis phæbe*) was also heard. The common Golden-winged Woodpecker (*Colaptes auratus*) was encountered, and a pair of Hairy Woodpeckers (*Dryobates villosus*) was observed at a high elevation, and from their excited notes and actions I inferred that they probably had young. A single specimen of the Green Heron (*Ardea virescens*) was seen at the outlet of the lake. A Catbird (*Galeoscoptes carolinensis*) was found June 6 sitting upon its nest, which contained four eggs, and was built in a rhododendron on the bank of Little Stony Creek.

It was of especial interest to meet with birds of the Canadian fauna. Of the Snowbird (*Junco hyemalis*) I saw in all about half a dozen individuals, the males in beautiful spring plumage. One pair was evidently mated and kept uttering their sharp alarm note *chick*, but though I searched for the nest for some time I was unable to find it. The fact of their breeding in this vicinity is not new.* The Black-throated Blue Warbler (*Dendroica caerulescens*) seemed to be not uncommon, and their hoarse *b-z-z-z-e-e* was often heard proceeding from the depths of the rhododendron thickets. Several Chestnut-sided Warblers (*Dendroica pennsylvanica*) were noticed, though they did not appear to be abundant. The Canada Warbler (*Myiodiactes canadensis*) was met with several times; one of them by its actions led me to suspect that it might have a nest, but in this case I was also unsuccessful in finding one. I saw, I believe, a pair of Blue Yellow-backed Warblers (*Compothlypis americana*), but was not certain of their identification, and also one or two shy Thrushes whose species I did not determine. None of the other *Dendroica* were identified during my short stay, and the very characteristic note of the Black-poll (*Dendroica striata*) was

* See Avifauna Columbiana, pp. 63 and 97.

not heard, although it could hardly have escaped my observation had that bird been at all common.

The Snowbirds and the Warblers I have mentioned were not observed below the level of about 3000 feet.

In the country between the Salt Pond Mountain and Christiansburg, which has an average elevation of 2000 feet, were found the Wood Thrush, Towhee Bunting, Indigo Bird, Kingbird, Bay-Winged Sparrow, Catbird, Baltimore Oriole, Red-winged Blackbird, Common Dove, Crow, Purple Grackle, Yellow Warbler, Purple Martin, and Night Hawk, or Bull Bat, as it is called in the South. A single Red-headed Woodpecker (*Melanerpes erythrocephalus*) was seen, and the now ubiquitous English Sparrow has penetrated into even this comparatively remote part of the State. A small colony of Cliff Swallows (*Petrochelidon lunifrons*) had attached their nests to the shed of a stable at Blacksburg. The Quail (*Colinus virginianus*) was said to be abundant.

The species here recorded must form of course, but a very insignificant proportion of the birds of this region. The recent investigations of Mr. William Brewster in Western North Carolina will doubtless prove to have been of much importance and interest, and greatly increase our knowledge of the birds of the mountain districts of the South.

FIELD NOTES ON THE BIRDS OF WASHINGTON COUNTY, OREGON.

BY A. W. ANTHONY.

WASHINGTON COUNTY, Oregon, lies in the northwestern part of the State, about thirty miles from the coast, and ten miles southwest of the Columbia River, at its nearest point—far enough away to catch but comparatively few of its many sea birds. The Willamette River, about eight miles to the east, is a great resort for nearly all of the species of Ducks known to the State. These, however, are seldom seen in the eastern half of the county, except as they fly over to and from their feeding grounds, owing