

Summer Birds of Broadhead's Creek, Monroe Co., Pa.

BY CORNELIUS WEYGANDT

IN the northern part of Monroe county, where the Pocono plateau breaks down into lower lands that roll eastward to the Delaware, is a country that I love. Here at Buck Hill Falls, in a shack in the woods on a low mountain, fifteen hundred feet above tide-water, I spent the three months, June 15–September 15, 1905. The forest about the shack was burnt through a little more than twenty years ago and is grown up again into a fairly open woods of rock-oak, chestnut and hickory. Only here and there are left trees of the previous forest, and there is comparatively little undergrowth on the mountain-top, save where the trees have been cut to make way for cottages. There is one cleared space where a farmer lived and worked a few fields before the Friends made a summer settlement there. The building of some seventy cottages has altered somewhat conditions in these woods; it has driven away some birds and brought in others, but, as yet, no English Sparrows.

When we arrived on the evening of June 15, you might have supposed you were deep in the woods, so loud was the dusk with Whip-poor-wills and Ovenbirds and Chebecs.* As we climbed the steps of our shack a Robin fluttered out from her nest under the porch roof, and next morning I found two deserted Pewee's† nests plastered on the timbers underneath the shack, which was raised high from the ground and left open below so that the birds could pass in and out at will. It was slow work going to sleep that first night, tired as we were, so incessant were the Whip-poor-wills; in the very heart of the night I awakened to the flight song of an Ovenbird; in the gray hours the Wood Pewees began to call; and then the Chebecs

* *Empidonax minimus*.

† *Sayornis phoebe*.

and Great-crested Flycatchers joined the chorus that thus became something very different from our Robin chorus in suburban Philadelphia, although this was partially Robin song, for there were many Robins at Buck Hill too. Red-eyes were about in plenty, and I had not been long about in the morning when I heard Barn-Swallows going over and saw two Swifts hurtling by. Swifts were rare birds hereabouts, however, as they were everywhere I went within a radius of ten miles. During this first day I made acquaintance for the first time with the Blue-headed Vireo, which I soon got to know as one of our most ecstatic and delicious singers—the books have failed to do him justice. Most of the many Wood Thrushes of the neighborhood lived far down the mountain side, but I heard them singing in the distance, and on the evening of our second day a Hermit Thrush came close by and sang in calm raptures at intervals for half an hour while the twilight deepened into night. Before many days were over I had found nests of Flickers and Indigo Buntings and Cedarbirds and Tanagers on the mountain-top, where, too, were Catbirds and Chewinks* and Chipping Sparrows, these latter chiefly in the brush where the forest had been cut off to afford a view out over the country.

Looking out from the mountain-top I could see that this Canadensis country—as the natives call the lands of the upper tributaries of Broadhead's Creek—is a great half-bowl scooped back into the Pocono plateau, southwest and west and northwest and north, with little timber of any size on it, except to northward, but with second growth or scrub almost everywhere. A higher point, the lookout on the very top of Buck Hill, a half-mile from our shack, overlooks most of the country I walked over, and in several directions, miles further than I walked. From this point you look upward along the rising sides of the half-bowl over unbroken woodland as far as the eye can reach. It is sombre and desolate, this unbroken greenness, with something in it both of the freedom and menace of the sea. For about three miles westward it is growth like that on Buck Hill, rock-oak and chestnut and hickory, grown up since the

* *Pipilo erythrophthalmus*.

great fire of 1882, but with the horizon you come to the edge of the Pocono plateau, a country of huckleberry barrens, burnt over every few years, and having few trees save scrubby fire-cherries and sassafras. Eastward the outlook was over the gorge of the Buck Hill Branch with its old hemlocks and oaks out into the open valley, and its farmland and over upland farms to the reddish cliffs of Spruce Mountain and Wismer Mountain and to the green, rounded outlines of East Mountain, looking lawn-like and smooth at this distance with its knee-high growth of huckleberries.

At the far end of East Mountain is Goose Pond. Below the far end of Wismer is Price's Pond, and on this side of Wismer Gravel's Swamp, but there is no water in sight anywhere. You can see, however, the deep valleys running back into the Pocono plateau, cut out by the various branches of Broadhead's Creek—Mill Creek furthest southwestward, then Rattlesnake, then the Buck Hill, then Middle Branch and Levis Branch furthest northeastward—all draining parts of the plateau. The valleys of these creeks I explored, becoming more familiar with that of the Buck Hill, but spending a good deal of time on the Middle Branch and the Levis Branch and hunting up the source of the Goose Pond Branch in Goose Pond in the pinebarrens of Pike County. This pond is the only piece of water of any size in the vicinity, Price's Pond being scarcely larger than a country mill-dam, and the tannery dams on the Rattlesnake being all but empty now. Southwestward and westward are the great ice dams on the Tobyhanna—Mr. Carter's neighborhood*—and eastward the big ponds of Pike County.

Along some of the branches of Broadhead's Creek there is still some primeval forest, but only a bit here and there; the upper courses of all of them run through country burnt over for huckleberries or for grazing for cattle or sheep. Just below the Buck Hill settlement and about Buck Hill Falls are a few acres where the old hemlocks are still standing. There is not here continuous hemlock forest with floor bare save for the hobble-bush such as you find in some parts of Pennsylvania, but a

* Cf. CASSINIA, 1904, p. 29.

tract in which the trees are rather far apart and interspersed here and there with great oaks. Underneath and about them is almost impenetrable rhododendron brush, which not infrequently reaches a height of fifteen feet. These hemlocks and the burnt-over woods just above them are the hunting-grounds of the Warblers. The Chestnut-sided Warbler, in my experience here, is a bird of scrub woods near open spaces in the lowlands; the Maryland Yellowthroat I found in his usual swamps, but also high on the huckleberry barrens; the Yellow Warbler was found in open fields in the lowlands and the Black-throated Blue Warbler I came upon on the high, dry slopes of Spruce Mountain, as well as here in the hemlocks, finding the bird in both places until the time I came home; the Black-and-White Creeper, too, I found in all sorts of cover, and from the middle of July on they were much in evidence in the dry woods on the mountain-tops. I saw two of these birds in far separated parts of the Canadensis Valley, with each a young Cowbird. To the hemlocks and rhododendrons along the streams stuck pretty constantly the Parulas, the Magnolias, the Blackburnians, and the Black-throated Greens, and several others I could not identify. A pair of Chats that I came across as I was listening to a Veery singing—an overlapping of faunas that was very interesting to me—were as you would expect in a thicket where field and wood met; the only Hooded Warblers that I saw were in low second growth along the upper waters of the Buck Hill; the Canadian Warbler I found, as I had found him in the Berkshires, in high, dry woods, but just over the gorge through which the Buck Hill flows; the Nashvilles, which I did not see until August 12, evidently migrants, were about our shack.

The Water Thrushes were always along the streams. It was very interesting to find both species along the Buck Hill, and in the breeding season. Later in the summer the northern Water Thrushes seemed more plentiful than the Louisianas. I got to know the smaller bird's appearance and ways of hunting, as well as I knew the ways and appearance of his southern cousins, for the northern birds were the tamer, often coming within a few feet of me as I sat by the stream and waited for them to come down past me. But I never found their nest as

I did that of one pair of the Louisiana Water Thrushes. It was in a shallow gully between two tumbling streams that these Water Thrushes had built their nest. The gully had been scoured out when the snow-waters of the spring thaw had turned these little trout streams to torrents no man dare ford. Along the gully's sides the roots of a great hemlock had been washed bare, and in these roots, not fifteen inches above a little pool of water, the birds had built. Overhead a great hemlock towered, against whose rock-binding roots debris had piled up, wreckage of spring floods. Along the Buck Hill all the way to its junction with the smaller stream, Griscom's Creek, a hundred feet below the nest, and on a hundred yards further, great hemlocks pillared a lofty aisle of green gloom over amber water. At intervals the sun broke through, sinking wells of light from the tree-tops to the bottom of the clear pools. Up stream a few yards from the nest there was an open space where the sun made its way down to the hemlock roots in early morning and late afternoon, but at other hours no sunlight reached the nest to dry the dampness everywhere about. On the far side of the Buck Hill, rhododendrons lifted pale crowns of bloom high among the hemlocks; the little stream flowed from under a very tunnel of rhododendron. Just above the nest the boulders and pebbles were bare of moss, the sand caught by the little pool telling how the scouring had been accomplished. The brown of the hemlock trunks everywhere about warmed the green gloom their branches made, blending in with the weathered reds and grays of the rocks and the grays of the pebbles and sand to make the wood-floor a gray-brown monotone save where the water slid along, wimpled amber, or tossed up in white spray. A little to each side green predominated. Trees and boulders were lichened, the stones in the bed of the little stream were heavily tressed with water-moss, and the trunks of fallen hemlocks were damp and sodden and green with decay. Seemingly everything about was damp but the five young birds sitting closely in the nest in the hemlock roots.

Glad indeed I was to see them, for it was an hour and a half since the anxious cries of the old birds and their full mouths had halted me in my walk up stream with the surety that the

nest was near. I found the nest only when there was no other hand-space in an area thirty feet square to look in. Just a foot from my feet in the spot where I first stopped was the nest, but so still were the birds and so like their color and that of the leaves and fibres out of which the nest was moulded to that of the debris in the neighborhood that my eye had failed to spot them. There they sat packed in closely, three on the floor of the nest and two back of and half on top of their fellows. All were facing my way, but by not so much as an eyelid's quiver did they indicate their presence, when I stopped within touching distance of them. I had seen the parents the day before a little down stream from their home and watched them running along the sides of the stream and out into the shallows which extended far into the stream, owing to the very gradual dip of the rock that was here the stream's bottom. Beautiful I had then thought them, their chocolate-brown* backs and spotted breasts and clear buff throats standing out distinctly against the red shale of the shallows. Then I had noticed their habit of flying up stream a certain distance, then hunting down stream, and then flying up to begin the hunt down over the same ground again, just like the European "water thrush" or dipper that I had first seen in Keimanagh Pass in Kerry. I did not then notice them and I have never noticed them run under water like the dipper, but they chase gnats out into water two inches deep and gather larvae from the stones in midstream, flying out to them and then hunting around them if the water is not too deep or too swift.

Now I had a still better chance to view them, for the longer I searched for the nest the more anxious they became, since all the while the young were going hungry. Both old birds walked about nervously, tilting their tails up like the Solitary Sandpiper. Worm in mouth as they were, they could utter their complaining "tswit" as sharply as ever. I sat still for a long time and they finally came close to me, tilting themselves about on rocks and logs not ten feet away. The female—as I took it to be because it was the more worried of the two—came the

* In this light there was none of the "olive" the books speak of on their backs.

closer, and one time when I had seen the male dart into a cranny of the drift pile and had followed him there in the hope of finding the nest, she got to the nest without my seeing her. I heard the young birds then for the first time, but she was out and walking off some six feet from where I later found the nest before I got my eye on her again. This was the only time the young were fed in an hour and a half. Except for the one time she fed them the female for all the ninety minutes never relinquished the worm she had for them, but the male three times ate his. He would scold around close to his mate, the two often walking the same log or stone, worm in mouth, but after twenty minutes or so the strain or temptation would become too great and he would pound his worm tender on stone or twig and then swallow it. He sang several times after so yielding, but he was quickly away again and back with a worm in a few minutes. Once he mounted singing in the air like an Ovenbird, ending his upward rush by catching a flimsy, big-winged, greenish insect, which he promptly swallowed on his return to the ground. But the restraint of the young seemed to me more wonderful than that of the parents. Time after time in my search I was almost touching them, but they were true to their instinct to keep still. The parents, of course, were in no greater agitation after I had found the nest than while I was hunting for it, for I was as often near it then as now, when I could see it. I did not disturb the young, but when I returned in the afternoon there were but four birds in the nest. The next morning all were gone. I found them less than a hundred yards up the smaller stream hidden in a dense rhododendron thicket. There they remained for three days longer and then I saw them no more, or rather after that I could not identify any Louisiana Water Thrushes I saw as this particular family.

I met Water Thrushes along the stream on and off after that until August (the young in the nest I found flew on June 25), both Louisiana Water Thrushes and Northern Water Thrushes. A month later (July 21) after I had been lazing about a half hour on a large rock just below the nest, watching trout in the stream and warblers in the hemlocks, a Louisiana Water Thrush darted out of the brush just alongside of me, his departure

arousing a teetering as of young in the brush. They had evidently been there all that time, taking perhaps their midday rest, for it was now well on towards five o'clock in the afternoon. You could see no more than a few feet into the rhododendrons, and as they were practically impenetrable, I could not find how many young were there. After hunting on the stream for a few minutes the bird that had flown out of the brush flew back into it, and that was the last I saw of him. Even as late as August I usually came upon Water Thrushes by the Buck Hill if I went there early in the morning, but after the first week in July I never saw one there from ten to four o'clock. They sang on until July 20, late in the evening and early in the morning.

I am not sure I heard the song of the Northern Water Thrush on the Buck Hill for I never saw one singing, but I got to know well the song of the larger species and other less fine but unmistakably Water Thrush songs I put down to the northern bird, and several times I saw this species just after hearing the song I had attributed to it. The place in which the bird sings lends largely to the charm of its song, but the song in itself is the finest warbler song I know. In June I heard it at midday flung out above the dappled amber pools under the hemlocks, the purring and slucking of the water about the stones muffling its sharpness so that the notes as they reached my ear were clear and pure. Recall the more musical part of the Ovenbird's flight-song and you will have something of its quality. In late July I heard it at the hour when moonset and sunrise are one. It could not compare with the song of the Veery heard at the same time, and doubly precious so late in the season, but I shall always associate it with that song, and with the dawnlight over the mountains, and with the moon riding down westward behind the pines. But it was even more memorable to hear it at night. I never heard it at moonlit midnight as I have so often heard the song of the Ovenbird, but perhaps I could have heard it then had I been in the Buck Hill gorge at the proper hour. There one evening in early July, I did hear the Louisiana Water Thrush sing with an ecstasy and abandon I had not heard from it before. Under a high bluff and just far enough

below the falls for their roar to be pleasantly dulled, the Water Thrush sang. Down here in the hemlocks it was darker than twilight, although it was not quite eight o'clock. Perhaps the bluff acted as a sounding-board, perhaps the soft thunder of the falls made a vibration of the air that added intensity to the song. Whatever the cause it rose above the rhododendrons with unwonted volume, still far from a powerful song, but so sweet and appealing that I could not but listen though a glorious-voiced Wood Thrush was singing not far away.

Two birds I saw but once during the summer were near the Water Thrushes' nest. In one of the hemlocks just above it I watched, on July 16, three Crossbills, which after clambering about on the topmost boughs for about a quarter of an hour flew off towards the Tobyhanna barrens; and a little further up stream, where a field comes down to the creek, I came upon, earlier in July, a White-eyed Vireo, a bird strangely out of place in the rhododendrons. When we arrived at Buck Hill Pewees were nesting along the creek, probably for the second time. I could not help wondering if these were not the same birds that had raised broods earlier underneath the porch roof of the cottages of the settlement or under the cottages themselves. There were none on the mountain-top in the middle of June and I saw none there later. They could hardly have been driven away by the cottagers, for not half of them were there at that time and few at all had come before June 1. One of these late stream-side nests was almost reached by the spray of the falls in its situation under an overhanging cliff; another in a damp spot the sun never reached on the cliffs above the swimming hole, very different locations from the dry sites about the cottages but probably just as comfortable in this warmer season. In the former nest the brood was successfully hatched and launched into the world. The fortunes of the second nest I neglected to follow.

Around this swimming-hole there were Veeries two years ago but now they have been driven further up-stream where they sang on past July 20 and one even until the twenty-third. Now the Wood Thrushes were *the* thrushes about Glen Mere and glorious-voiced thrushes they were, too. They sang on into the

thick dusk, until eight o'clock, but higher up the mountain, although there the light lingers later, they generally cease their song a half-hour earlier. These higher, dryer woods were inhabited chiefly by Tanagers, of which there are more at Buck Hill than I have seen elsewhere, Vireos, and the omnipresent Ovenbird and Whip-poor-will. Here too, were a few Flickers and Hairy Woodpeckers. I saw no Downy Woodpeckers until September 13 and then only one, evidently a migrant. Two years before I had seen many Red-breasted Nuthatches hereabouts in their September migration but last September I saw none.

The Kingfishers sometimes came up-stream from the open country but they were oftener found where meadows run down to the stream. Everywhere, along the streams, along the roads, about the houses, in the deep woods, were Humming-birds—they were among the commonest birds of the locality.

Beyond the Buck Hill, between it and the Middle Branch was farming country—bottoms where you found the Yellow Warbler and Catbirds; orchards busy with Cedarbirds and Kingbirds and Wrens and Bluebirds and Baltimore Orioles, and barns swallow-haunted, with Barn Swallows within and Eave Swallows without. The Eave Swallows had several large colonies both here in the valleys and high up the hills, but you found them on every third barn in the lowlands and only on every fifth barn in the uplands. One lowland barn boasted fifty-one nests, forty-four on the southern side and seven on the northern. There were young in some nests on June 16 and two months later I still found a few young not yet flown. On August 17 there were hundreds of them on the telegraph wires and ridge-poles. After August 20 I saw none. Every barn and wagon-shed in the country seemed to have its pair or two of Barn Swallows and I think there must have been as many of them all told as of the Eave Swallows, although of course, you never saw them in any one place in such numbers.

In bush-lined fields in the valleys were Field Sparrows and Indigo Buntings and Grasshopper Sparrows, but these birds like the Robins and Redeyes and Cowbirds could not be said to be more numerous in one kind of country than another. With the

Grasshopper Sparrows I spent a good deal of time. One place from which I could always flush two pairs early in the summer was a barren field of sparse grass below a Moravian grave-yard. They were frequently in the grave-yard, where I saw my solitary Cuckoo, a Yellowbill, of the summer, and would sing from the tomb-stones and from the fence-posts. But their favorite singing stations were the tops of dried mullein stalks in the barren field. One windy June morning I lay here under the lee of a stone wall for an hour watching them. I sought in vain for their nests. All the places they dropped down into were apparently only feeding-spots. They scratched up the small stones in the field, presumably to get at some sort of insect life as well as for grass-seeds, leaving decided traces of their energetic leg-work. Every few minutes they would mount to the mullein-tops with their curious fluttering flight as of young birds and sing, sometimes the grasshopper note and sometimes a fuller song that I can best represent by "tweedle-tee, tweedle-tee, tweedle-tweedle-tweedle-tee."

Climbing the Dutch Hill road that leads from the bottom to the upland between Middle Branch and Levis Branch, you pass a thistle-patch where Yellowbirds were always to be seen in late summer, but all summer long wherever I went I heard them singing in the air as they dropped over. Further up this road I saw on several days between August 8 when I saw it first, and August 16 when I saw it last, a Shrike. Which shrike it was I do not pretend to know, but very interesting it was to watch.* For minutes at a time it would sit motionless on the top of the single second-growth chestnut left where the wood-lot was cut off; then spying some insect it would swoop down upon it, to return with labored flycatcher-like flight to its chosen station. Sometimes it must have missed its strike or found the prey so small that it could gulp it down without dismembering it, for it would relight on its tower and take up the watch again, without any sign of feeding. At other times I could see it carrying back the insect. These times it would deftly insert the insect under its foot and pressing it down to the limb tear it to pieces hawk-

* In all probability *Lanius ludovicianus migrans*, the Migrant Shrike.—Ed.

fashion with its bill. It caught no bird during the several hours I watched it, but I noticed that no small birds were about while it was perched aloft there, though the neighborhood earlier in the season had been thick with Indigo-birds, Song Sparrows and Field Sparrows, and though later many sorts of sparrows were gathered here in large flocks.

Further up Dutch Hill where the narrow stony road runs between stone walls shoulder-high are buckwheat fields and bare pastures. There were always Vesper Sparrows, Field Sparrows and Grasshopper Sparrows on the ground and walls, and in the air Swallows swooping in great circles about the cattle. Toward the middle of August great flocks of Bluebirds loitered here on their way to and from the huckleberry barrens northward, filling the air with such gurgling music as I had never heard even in spring. And here on August 18 I came upon my surprise of the summer. I was coming down hill across lots when I heard behind me low calls of "wee, wee, wee," about like those of Horned Larks in winter, I thought, and turning I saw scudding close to the ground like sandpipers over water a flock of small birds with yellowish breasts marked with black. As they passed me I saw that their backs were grayish and that there was white on their tails. They lit, some on the ground, some on a stone wall, and walked. I was innocent of the knowledge that Prairie Horned Larks are sometimes seen in northeastern Pennsylvania until I got home to the books and I was utterly unable to identify the birds. The owner of the lot, lifting great boulders out of the ground with a great tripod and lever arrangement, was appealed to. He said, "Only some kind of sparrows," and when I pointed out to him that they walked instead of hopping, he looked at me rather pityingly and said, "Don't sparrows walk?" But I was no nearer an identification than he, although had they not walked I would have thought him not so far from the truth, and guessed Dickcissels, for they seemed something like descriptions of these birds I carried in memory, and I had always been hoping that Dickcissels might come my way.

At Levis Falls, beyond Dutch Hill, and at Gravel's Swamp under Wismer were Solitary Sandpipers, for whose nests I

looked diligently in June on drift heaps on the margin and on the trees that had rotted off and fallen when the dam-breast was in repair and the dam full of water. It was not until Mr. Stone came up for a day in August that I learned that the Solitary Sandpiper nested in old birds' nests in trees* and that by my ignorance I had possibly missed a rare find. What a walk I had with Stone on August 11! It was a day of soaking drizzle but that did not matter, for Stone's taking me bogging would have gotten me almost as wet on a rainless day. In the swamp to which he took me, way up under the edge of the huckleberry barrens, we made a rare find. The swamp was full of birds, Swamp Sparrows and others not uncommon in such places in the region, but a number of small flycatchers bothered us. Neither of us had ever seen Alder Flycatchers in the field, but here were small flycatchers that were not Acadian Flycatchers or Chebecs and that answered very nearly to descriptions and looked like skins of Alder Flycatchers. They were not wild at first, and we got several good looks at them. A distinguishing feature was the disclosure of grayish-white as they flew. I had been in this swamp several times before in June and July and I had not seen the flycatchers there nor did I see others like them afterwards. We had seen them in alder bushes too.

There were interesting birds other than the Solitary Sandpiper in Gravel's Swamp. Scores of the water-killed trees still stood and in their rotting trunks scores of Woodpeckers had drilled out their nests. I was disappointed at not finding the Pileated Woodpecker here, for I had seen one at Buck Hill in September, 1903, and I thought this swamp was near enough to the large timber northward to make it possible for the logcocks to come here. The only two woodpeckers I found nesting in the swamp were the Flicker and the Hairy Woodpecker. But in old woodpeckers' holes I found Bluebirds and Wrens nesting, three pairs of Bluebirds and two pairs of Wrens. I suppose it was in such places they nested before Europeans came here to tempt them by boxes and gourds to the homeyard. Here in the swamp were many Song Sparrows and Swamp Sparrows, and along its

* Cf. Raine, *Ottawa Nat.*, XVIII., p. 135.

shores some Veeries and Pewees, and often in the burnt woods above I heard the Chickadees, who, by the by, sang their "phoebe" song the whole three months of my stay in Barrett township; and here, too, was seen an occasional Crow and Bluejay. I was surprised by the comparative rareness of these birds and I was disappointed in not seeing a raven all summer long. The nearest I got to a record was the statement that there had been caught up in Newfoundland in Pike County seven years before in the winter "a big crow with heavy feathers on his neck that some said was a raven." This bird was kept in captivity a long while in "a big chicken-wire cage." It was not known what had become of him, but "he was not about any more."

In Gravel's Swamp the White-bellied Swallow nested, too, in the old Woodpeckers' holes. They stayed in the neighborhood later than either of the other Swallows, and as late as September 6 I saw six of them hawking about high over the tannery dams at Mountain Home. Here, too, in Gravel's Swamp were Redwings, and at Price's Pond a mile away, but there were few in all. Here, too, came Great Blue Herons to fish, but they nested elsewhere, and here, too, I saw one of the only two Green Herons I came upon all summer. In a grassy swamp a half mile below Gravel's Swamp I sometimes saw the Redwings, and in the fields nearby a pair of Meadowlarks. There were only three places in Barrett township in which I saw Meadowlarks, and in only one of these places did I ever see more than two. There were no Grackles here, but at Stroudsburg, seventeen miles southeastward, at a lower altitude, and at Tobyhanna, eleven miles westward, at a higher altitude, I saw them. The Cowbirds were the only orioles at all plenty near Buck Hill.

The huckleberry barrens were very interesting to me. I visited them frequently from the beginning of my stay, flushing Grouse* from those parts of them that had a chance to grow up more than knee-high, and always finding on them Chewinks and Redeyes and Bluebirds and Flickers and Robins—the last

* Ruffed Grouse, *Bonasa umbellus*.

These same barrens were one of the last resorts of the Heath Hen, *Tympanuchus cupido*, which was last seen here about 1869.—ED.

three species attracted there no doubt by the berries. On September 13, after I had not seen a Wood Thrush or a Hermit Thrush for three weeks, and had concluded they had all worked down to the river valleys as the theory is, I found one individual of each species on the barrens. A few days earlier I had come upon flocks of Chewinks and Bluebirds and many Flickers and several Tanagers—these latter all in green plumage—on the barrens, and in the second week in September on an automobile ride up the Delaware to Milford and back I had seen few birds of any kind, save Crows and Bluejays. Indeed, during the first two weeks in September the barrens were fairly alive with birds, while in the woods at Buck Hill, 500 feet lower than the barrens' 2,000 feet, there were very few birds. There were occasional Brown Thrashers to be met with on the barrens, but everywhere about Buck Hill they were scarce.

The bird that drew me most often to the barrens was a small Thrush, whose only possible identification would seem to be as Bicknell's Thrush. I know the songs of the Wood Thrush, Veery, Hermit Thrush and Olive-backed Thrush, and the song of this bird was not the song of any of these. Either I never heard it close at hand or else it is a song of poor carrying quality, for it always seemed as if I but half heard it. I had only one look at the bird at close quarters, but several times I flushed it in the scrub only to have it dive into the thick growth and elude me. I started out several times before daylight and reached the barrens by sunrise, but I was not rewarded by seeing the bird as it sang or even by getting another satisfactory look at it. I mention the bird only because Mr. Carter and Mr. Baily have seen Thrushes they take to be Bicknell's Thrush in the southwestern Poconos.*

The two hard winters of 1903-04 and 1904-05 probably explain why I never came across a Quail, but I cannot explain so easily why I never saw the sign of an Owl. It was not their noisy season when I was there, but that I heard not a hoot or the startled beating of wings as I came through brush after nightfall or that I discovered no tragedies of the nests to be

* Cf. CASSINIA, 1904, p. 35.

attributed to Owls, struck me as surprising. Hawks were not plenty until late in August, nor as plenty then as I had expected. I identified only three. A Red-tail, nailed to a barn door, had noticeably been there long enough to have been a migrant; a pair of Broadwings added to their family by at least one during the summer; and these were Sharp-shins, of which I saw a good many all summer, but more towards its close. I saw several other kinds I could not identify, one a very long-tailed large hawk that soared very high, and now and then hung quivering in the air for what seemed minutes.

Towards the end of August came great flights of Night-hawks, but in early and midsummer I never saw more than two at a time. Their cry was not a typical sound of the night—you would hear it only about once a week. Toward the end of August, too, the Doves began to collect in little bunches, but I never saw more than half a dozen together, and it was generally two or three. They were only fairly common.

A refreshing experience was to find familiar birds with songs differing in quality and even in notation from their songs at home. The characteristic Robin song of the Buck Hill woods, for instance, was very much more subdued than the characteristic Robin song of Germantown. The bird was much less noisy and self-assertive, and since there were no lawns for him to run over, his habits of hunting were different. He ran about on the leaves of the wood-floor, upturning one now and again with his bill, and at times even scratching as noisily as a Chewink. He came under the shack windows for the boiled barley we threw out, as did, curiously, the White-bellied Nuthatches that were about us daily after the middle of July. The Wood Thrushes' songs were of more varying quality among themselves than our home Wood Thrushes' songs. One particular Thrush's song had an extra grace-note in its second part and the whole song was of so rich a quality that you would think it some new Thrush song, and be sure of it for a while if you heard first its second part. The Field Sparrows' songs were unusually fresh and full, and the Indigo Buntings' songs of more body than I had heard before.

After July came in the evenings and mornings were not

nearly so loud with song as were June's. The Whip-poor-wills were much quieter, and after the middle of the month they were but infrequently heard. After the middle of August I heard no "Whip-poor-will" until there came a springlike night in early September, a night of south wind and soft rain, and then again the Whip-poor-wills called and an Ovenbird sang its "teacher" song and its flight-song as if it were May. The Great-crested Flycatchers disappeared to a bird with June, and I saw none afterwards the whole summer. The Chebecs were abundant and noisy after July 1, though less and less noisy as the month wore on, until about the fifteenth they disappeared as the Great-crested Flycatcher had disappeared two weeks before. However, I saw a Chebec and heard him on August 2, and two days later a pair with three young came about our shack. These young were barely able to fly, so they must have come only a little distance from the nest. I suppose some accident had befallen a previous nesting, and the old birds had begun over again late in the season. But if, as I think, they had nested somewhere nearby they must have been very quiet, which is anything but after their custom. The Pewees and Wood Pewees and Kingbirds were still about when we left, fewer Kingbirds than Pewees and Wood Pewees, though for that matter there were fewer all season.

Seventy-three species identified is the total of my list, a list that might have been added to considerably by one who knows more birds than I, and who had more time to give to observation. My chief disappointment was in finding so few Hermit Thrushes and so few Veeries. I found that the Veeries went higher in this immediate neighborhood than the Hermit Thrushes. Both species were much scarcer than they are in the southern Berkshires (Mt. Washington town), a county whose avifauna is much like this of the northern Poconos, but, as you would expect, a little more northern, though scarcely more northern than that of the Tobyhanna district just above Buck Hill. These upper branches of Broadhead's Creek rise in a country that sixty years ago was Canadian in its fauna, and flowing from two to six miles, reach Barrett township, a country then Alleghanian in its fauna, but now that the original

forest is almost all gone, largely Carolinian. This forest-cutting began about 1840, and went on steadily until practically all the marketable lumber was exhausted about 1880. So about Buck Hill you find a few stragglers from the Canadian fauna, the survivors of the old Alleghanian fauna and many intruders from the Carolinian. The country was most interesting to me ornithologically in that it gave me the chance to know better three birds I had scarcely known at all, and of a charm that I had not been led to expect—the Eave Swallow, the Louisiana Water Thrush and the Blue-headed Vireo—the last, one of our really notable American singers.