BIRDS OF FROST VALLEY, SLIDE MOUNTAIN REGION, SOUTHERN CATSKILLS.

BY MARY WOOD DALEY

In 1884, Eugene P. Bicknell wrote of the birds of Slide Mountain and near vicinity in the Catskills (Transactions Linnaean Society New York, Vol. 1–3, 1882–84). Ever since I found his valuable and interesting papers, I have been eager to add my small contribution to the bird knowledge of the same region. I have had an unusual opportunity for observation, have kept careful bird lists and, in recent years, detailed nature notes. The observations have been made from early June to middle or late September from 1908, until this year, 1920, omitting only the summer of 1914. The last three years have been devoted to very careful study.

Frost Valley is the name given by the natives to a sheltered valley extending south-westerly from Slide Mountain, the highest mountain in the Catskill group. This mountain is part of the Hudson-Delaware watershed. The Esopus flows into the Hudson, the Neversink into the Delaware, and each has its main spring sources on the slopes of Slide. The Neversink originates in two small streams called the East Branch and the West Branch, and it is the valley of the West Branch that is called Frost Valley. About four miles south-west of Slide Mountain, along this valley, stands our cabin.

We have called it "Tree Tops," and it is in the region near it that I have made my most careful bird records. Our latitude is a few seconds below the parallel of 42° North; our longitude approximately 74° 31′ West. The altitude is about 2100 feet above sea level. Wildcat Mountain rises to a height of 3268 feet immediately in front of us, and nearly due south (U. S. Geological Survey; Topographic maps; Slide Mountain Quadrangle).

The nearest village, formerly a center of the tanning industry, is Claryville in Sullivan County. It is nine miles by road west and south of us. The nearest railroad station is Big Indian in Ulster County on the Ulster and Delaware Railroad between Kingston and Oneonta, about thirteen miles to the north. To reach it we have to drive over a high spur of Slide Mountain.

I have been assisted in my observations by my brother, C. S. Daley and my sisters, Alice Wood and Marjorie C. Daley.

The region studied includes the state trail to Slide Mountain summit, and all of the valley extending in a general south-westerly direction for about eight miles from Slide. For convenience, I am dividing the notes under two heads, one on Slide Mountain birds, another on Frost Valley observations.

The climate for the whole region is usually cold in June, cool in July and August, cold in September. We have seen black frosts in June and September and frosts in early July and late August. It is difficult to raise any but early corn, and very nearly impossible to grow ripe tomatoes. We seldom have strong winds, or weather that is uncomfortably warm or humid. The general geological history of the region is well known. The Catskill Mountains, so-called, are the eroded and dissected remains of an ancient Devonian plateau. The rocks are sedimentary, mostly non-fossiliferous sandstone, contemporary with the Chemung deposits of the western and central portion of New York State. There are a great many loose rocks and boulders all through the valley, in woods and clearings alike. All that I have found are the characteristic sandstone.

Formerly this valley boasted many large hemlock trees, but forty or fifty years ago they were cut down, and the bark used for tanning purposes. The great moss-covered logs of these trees are a characteristic part of much of the portion of this region. There are some hemlocks still, and many firs, but the predominant trees are deciduous, mostly beech, yellow birch and four species of maple. Besides these, in much smaller numbers, we find bass-wood, mountain ash, hornbeam, black cherry (C. serotina), "fire" cherry and quaking asp. Shadbush (Amelanchier) is common and the berries are a favorite food of thrushes.

Dotted along the roadside as it follows the West Branch stream through the valley, are more or less frequent clearings, varying from rough pastures to fairly good meadows and gardens patches. When we came here in 1908, there were fourteen native homes, with families varying from two to ten people, interesting, helpful mountain folk, the best of neighbors. There was one large estate which was sold in 1916 and the present owner has increased the

estate, buying up nearly all the "native farms." The people have gone away, several clearings once occupied, especially near "Tree Tops," are deserted and neglected, and the woods are taking back their own. I speak of this because in the "Tree Tops" vicinity it has meant a change in the abundance of certain species of birds.

ANNOTATED LIST OF BIRDS.

I. SLIDE MOUNTAIN.

Altitude 4204 feet. Observations from the Winnisook Club (altitude 2800 feet) up the state trail to the summit; seven or eight trips to the top and back, in June, July and August. At the summit the characteristic growth consists largely of weatherworn firs. This past June we found a few canoe birches. The woods are dry above 3000 feet.

Bonasa umbellus umbellus. Ruffed Grouse; Partridge.—It is quite usual to surprise a covey of partridge near the trail.

Empidonax minimus. Chebec; Least Flycatcher.—One record. Zonotrichia albicollis. White-throated Sparrow.—On every journey to the summit of Slide I have been refreshed by the song of the White-throated Sparrow. I have seen it only on or near the summit. Recorded in June, July, and August always in song. I have found the sparrow nesting in the Tannersville region of the Catskills, but in Frost Valley I have found it only in migration in May and late September.

Junco hyemalis hyemalis. Junco.—This bird has been seen on every trip up Slide at any part of the trail and on the summit. On July 25, 1919, I found a nest with four eggs. One of the parent birds was flushed from the nest which was tucked away in a moss-covered ledge cavity about halfway up the mountain.

Vireosylva olivacea. Red-Eyed Vireo.—Common.

Mniotilta varia. Black and White Warbler.—August 9, 1920.

Dendroica caerulescens caerulescens. Black-throated Blue Warbler.—Several records.

Dendroica magnolia. Magnolia Warbler.—Several records. One in June, 1920.

Dendroica pensylvanica. Chestnut-sided Warbler.—Common. Dendroica fusca. Blackburnian Warbler.—Heard June 27, 1920.

Dendroica virens. Black-throated Green Warbler.—Usual. Seiurus aurocapillus. Oven-bird.—Heard frequently, seen several

Wilsonia canadensis. Canada Warbler.—Usual.

Setophaga ruticilla. Redstart.—August 9, 1920.

Nannus hyemalis hyemalis. WINTER WREN.—Pair seen July 25, 1919. They had worms in their mouths and much alarm was shown. Song heard June 27, 1920.

Certhia familiaris americana. Brown Creeper.—July 25, 1919, only record.

Penthestes atricapillus atricapillus. Black-capped Chickadee —Common.

Hylocichla aliciae bicknelli. Bicknelli's Thrush.—Seen several times and heard. On July 25, 1919, saw a pair much disturbed, worm in mouth of one bird; evidently nesting.

Hylocichia ustulata swainsoni. Olive-Backed Thrush.

Hylocichla guttata pallasi. Hermit Thrush.—Seen and heard several times. Usual.

A Nuthatch was heard August 9, 1920. Species uncertain. I searched in vain for the Philadelphia Vireo, Black-poll Warbler, Myrtle Warbler and Red Crossbill. The last three were reported by Mr. Bicknell. A pair of Hawks, either Sharp-shinned or Cooper's, were seen flying overhead August 9, 1920.

II. FROST VALLEY.

In this valley are two kinds of bird environment—the cultivated, sparsely inhabited clearings and homestead lands, specially concentrated and continuous about five miles from Slide by road, and a mile west of "Tree Tops;" and the wooded rather wild districts along the mountain streams, and on the slopes of the ridges. They mingle and overlap, so there is no sharp distinction to be drawn. However, I find in the cultivated areas about dwellings that the predominant birds are, as is to be expected, Bluebirds, Robins, House Wrens, Barn Swallows, Cliff Swallows, Goldfinches, Song and Vesper Sparrows, while in the wooded portions and neglected wild clearings, like our own at "Tree Tops," the common birds are warblers and thrushes. The altitude varies from 1800 feet above sea level to 2800 feet. Most observations were taken at our cabin, 2100 feet above the sea.

Botaurus lentiginosus. Bittern.—One record, West Branch stream above small mill dam, July 22, 1911.

Butorides virescens virescens. Green Heron.—Two records, exact dates lost.

Helodromas solitarius solitarius. Solitary Sandpiper.—Usual along streams. Earliest record July 7, 1912. July 13, 1920, many August records. The natives call this bird the "tip up" because of its

habit of teetering as it walks along the edge of streams, or on the mud beaches of pools.

Bonasa umbellus umbellus. Ruffed Grouse. Partridge.—Common summer resident. Several records each season. The drumming of the male is one of the favorite sounds of our woods. We hear them frequently in June and again in September. It is not at all unusual throughout this region to surprise a covey of partridges, an anxious mother and several young.

Zenaidura macrour acarolinensis. Mourning Dove.—Seen in migration, late August or early September, in large flocks flying eastward up the valley, 1909, 1910, 1911 and 1918. No reason known for missing them in other years.

Circus hudsonius. Marsh Hawk.—Three records, August 9, 1918, August 1919, and August 14, 1920. Rare.

Accipiter velox. Sharp-shinned Hawk.—Not abundant. Six records.

Buteo borealis borealis. Red-tailed Hawk.

Buteo lineatus lineatus. Red-shouldered Hawk.—Both these hawks are usual throughout the season, but not abundant, *B. borealis* being the more common.

Haliaeetus leucocephalus leucocephalus. Bald Eagle.—Somewhat doubtful record, because seen only in flight, twice, July 1920. The bird was flying westward down the valley; size conspicuous, white head and tail projected against mountain.

Strix varia varia. BARRED OWL.

Bubo virginianus virginianus. Great Horned Owl.—Heard only, every season frequently. The natives call both of these "hoot owl."

Coccyzus erythrophthalmus. Black-billed Cuckoo.—Two nests and eggs, 1910. Seen and heard many times in our clearing, 1918, 1919 1920. Not abundant.

Ceryle alcyon alcyon. Belted Kingfisher.—Common summer resident. Usual along streams throughout the valley.

Dryobates villosus villosus. Harry Woodpecker.—Three certain records before 1920. On June 29, 1920, and for two weeks following, often seen in the clearing.

Dryobates pubescens medianus. Downy Woodpecker.—Common summer resident.

Sphyrapicus varius varius. Yellow-bellied Sapsucker.—Usual each year. Earliest record July 2, 1919. Seen in each month. The apple trees in our clearing are marked with the regular ring of round holes in the bark due to the raids of this woodpecker.

Phloeotomus pileatus abieticola. Northern Pileated Wood-PECKER.—One record; exact date lost (1909 or 1910).

Colaptes auratus luteus. Northern Flicker.-Usual, some-

times common summer resident, every month each year, throughout this region.

Antrostomus vociferus. Whip-poor-will.—One seen and call heard the same evening in September, 1917.

Chordeiles virginianus virginianus. Nighthawk.—For seven seasons these birds have been seen in migration in large straggling flocks, feeding as they fly. Dates vary from August 22, 1912, to September 2 (the latter date is recorded in 1911, 1917, and 1919). They always fly eastward up the valley and can be seen for four or five hours continuously, at least fifteen to twenty-five birds in sight at a time.

Chaetura pelagica. Chimney Swift.—Every year. A common resident. Nearly every June when we open "Tree Tops" cabin, we find one or two dessicated Chimney Swifts inside. Apparently they are caught in the fall and do not find the chimney road out. This season a Swift became caught in our kitchen range. Fortunately there were only a few dying embers in the stove and I was able to rescue him before he was injured.

Archilochus colubris. Ruby-throated Hummingbird.—Abundant summer resident. Often they are very familiar. I have seen one fly in the kitchen window, pass to each nasturtium on the table and fly out again. They come to bee balm (Monarda didyma) close to our porch. I have often seen them go to a child's bright hair-ribbon, or come within an inch of my chin, attracted by the bright red corner of the blanket on my outdoor couch.

Tyrannus tyrannus. Kingbird.—An occasional visitant to our woodsy clearing, but a usual summer resident in cultivated regions to the west of us.

Sayornis phoebe. Phoebe.—Common, though not abundant summer resident. Nest frequently found, one under the ledge of our back porch, several on ledges of barns or under eaves; one inside a deserted house over the kitchen door; four, rather unexpectedly, in a rocky ledge cavity on cliffs; two near High Falls, nearly a mile from any human dwelling in deep woods; two on cliffs on the road to Claryville.

Myiochanes virens. Wood Pewee.—Usual summer resident. Not abundant.

Empidonax flaviventris. Yellow-bellied Flycatcher.—Seen frequently in 1918, 1919 and 1920 with flocks of warblers in August. August 13 earliest record (1918 and 1920). Evidently a migrant.

Empidonax minimus. Least Flycatcher.—Usual summer resident.

Cyanocitta cristata cristata. Blue Jay.—Occasional and irregular visitant. Earliest record July 21, 1920. Seen and heard nearly every season, but never for long at a time or often.

Corvus brachyrhynchos brachyrhynchos. Crow.—Usual summer resident in small flocks. Not abundant.

Agelaius phoeniceus phoeniceus. Red-winged Blackbird.—Rare. One record in 1910 or 1911, and two pairs seen July 17, 1920, in a small meadow swamp in an open cultivated region.

Icterus galbula. Baltimore Oriole.—Never seen in the upper valley or wooded sections, but in a cultivated area near former Frost Valley P. O. we have noted a pair nearly every season. I have seen them fairly often near Woodstock and in Big Indian. On August 11, 1920, we watched a handsome male oriole bathing in the edge of the Esopus Creek.

Carpodacus purpureus purpureus. Purple Finch.—Seen 1910, 1911, 1917, 1918, 1919, and 1920. The last three years they have been in full song each day in our clearing in June. Usual but not abundant.

Passer domesticus. House Sparrow.—Fortunately we are entirely free from this bird at "Tree Tops". I have seen a few pairs each year about the barns a few miles west of us.

Astragalinus tristis tristis. Goldfinch.—Common, often abundant, summer resident, especially in open homestead areas.

Poocetes gramineus gramineus. Vesper Sparrow.—Common summer resident below 2000 feet altitude, and in open cultivated districts west of us, along the road to Claryville. Never seen in our clearing or east of us toward Slide Mountain.

Zonotrichia leucophrys leucophrys. White-crowned Sparrow.— Flock reported in spring migration one year during May by C. S. Daley.

Zonotrichia albicollis. White-throated Sparrow.—Seen only in migration in Frost Valley (several seasons in May by C. S. Daley), once late September 1917 in fall migration.

Spizella passerina passerina. Chipping Sparrow.—Abundant summer resident. Several nests in apple trees near the house. In 1912 a pair of Chipping Sparrows brought their young to our front porch for crumbs of corn bread. It was a great pleasure to watch the helpless young, as large as their parents, hopping around after them, cheeping for food, while the parent picked up the crumbs and stuffed them down the throats of the little birds. The young Chippies became so tame that they came to our hands, and onto our laps and shoulders, searching for crumbs. One lit on my sister's fountain pen as she held it in her hand, writing. Several times they have hopped all over my bed covers in the early morning, often coming within two inches of my face. We have tried in other seasons to attract the sparrows, but chipmunks have prevented corn bread or any other crumbs remaining long enough. This year we have a feeding shelf, protected from chipmunks, but so far it has not found favor with the birds.

Spizella pusilla pusilla. FIELD SPARROW.—Usual, but not abundant; more often in open meadow regions. Mr. Bicknell did not find it above 2000 feet but I have found it nearly every season in clearings above this altitude.

Junco hyemalis hyemalis. Slate-colored Junco.—Common summer resident. Several nests found every year. This bird is a very attractive and characteristic bird personality for the entire region.

Melospiza melodia melodia. Song Sparrow.—Common, often abundant, summer resident. Since the migration of the natives from our valley the number of nesting birds of this species has decreased.

Pipilo erythrophthalmus erythrophthalmus. Towhee; Chewink.—In Mr. Bicknell's experience "the Chewink seems to be a casual visitor." With us, in former years, the Chewink was a usual summer resident. We have records of several pairs in and near our clearing throughout the season, from June to September, every year from 1908 to 1916. Their notes were one of the usual sounds near us. Since 1916 they have left us. We have not heard or seen a single Towhee in this whole region. Their desertion of this valley is coincident with the migration of the natives, but whether there is any causal relation due to increasing wildness of this region, I do not know. We do not find them in the cultivated area west of us and down the valley.

Zamelodia ludoviciana. Rose-breasted Grosbeak.—Usual summer resident; never abundant. For several years we have had one in full song in June, in the woods back of our cabin.

Passerina cyanea. Indigo Bunting.—Common summer resident throughout the valley. Nest found in 1910, in a low sapling near the edge of our clearing.

Piranga erythromelas. Scarlet Tanager.—Usual summer resident throughout the region.

Petrochelidon lunifrons lunifrons. CLIFF SWALLOW.—Usual, but not abundant. Several pairs and nests were observed each season on certain barns in the valley from 1908 to 1917. In 1917, 1918 and 1919 I searched in vain for nests and birds, but this year (1920) they are with us again. Nests, adults and young have been seen many times, in the same region, but not on the same barns. Not seen after August 15.

Hirundo erythrogastra. BARN SWALLOW.—Common summer resident, nearly every barn has at least one nest each year.

Iridoprocne bicolor. TREE SWALLOW.—Flock on wires in the cultivated region west of "Tree Tops." Earliest date July 18, 1910. Usual in August. Records for every year except 1913, 1916 and 1920.

Bombycillia cedrorum. CEDAR WAXWING.—A usual, sometimes fairly abundant summer resident. We have often found their nests. This year in late July, a pair came close to the house for bits of string placed on a tree for them. We watched the nesting and the safe rearing of the young.

Lanius ludovicianus migrans. MIGRANT SHRIKE.—One record of a shrike well seen close to house, and thought to be this species. A Migrant Shrike was certainly identified September 16, 1920, in Big Indian Valley.

Vireosylva olivacea. Red-Eyed Vireo.—Abundant summer resident. Several nests found.

Lanivireo solitarius solitarius. Blue-headed Vireo.—Migrant. Earliest date August 28, 1919. Usually seen in September with flocks of feeding warblers, Red-eyed Vireos and Chickadees.

Lanivireo flavirons. Yellow-throated Vireo.—Rare. Heard several times June 1918. Seen several times in flocks of warblers about the house August 1920. I have seen it in Big Indian and in the Woodstock region. One record in a warbler flock on Round Pond Road by M. C. Daley, August 16, 1920. Heard June 27, 1920, at Winnisook Lodge, Slide Mountain.

Mniotilta varia. Black and White Warbler.—Regular summer resident.

Vermivora chrysoptera. Golden-Winged Warbler.—Migrant. Not known here until 1918. Since then it has been seen here each year in late July and August in flocks of other warblers. In 1920 it was late in arriving (August 23) and very few in numbers.

Vermivora rubricapilla rubricapilla. Nashville Warbler.—In 1918 I identified a Nashville on July 15, in 1919, on June 16 in our clearing in full song. From 1910 to 1915 and in this season (1920) its first appearance was in August, in the warbler flocks that range about each year from July 20 to September 15.

Vermivora peregrina. Tennessee Warbler.—Never identified in this region until July 15, 1918. The following year a Tennessee was in full song in Tree Tops clearing June 15, and seen several times through the following weeks. Adult and immature birds identified later in the season in warbler flocks. Common in migrant flock in August and September 1920.

Compsothlypis americana usneae. Northern Parula Warbler.—Records as follows: August 5, 1915; July 1917; June 17, 1918, and often during that following season; June 23, 1919, and often in weeks following. In July saw adult feeding young. This season (1920) I did not see or hear the Parula until July 29, and only a few times later. There is plenty of the *Usnea barbata* in this region, the lichen so favored by the Parula for nesting material.

Dendroica caerulescens caerulescens. BLACK-THROATED BLUE WARBLER.—Common summer resident. Earliest date, June 14. Adult male, adult female and immature well known.

Dendroica coronata. Myrtle Warbler.—For this bird I have only one record in late September 1917.

Dendroica magnolia. Magnolia Warbler.—Common summer resident.

Dendroica pensylvanica. Chestnut-sided Warbler.—Common summer resident, often abundant. Nest 1910. Male, female and immature birds are very familiar in this region.

Dendroica fusca. Blackburnian Warbler.—Usual in "Tree Tops" clearing in June and July. Sometimes seen in warbler flocks in August and early September.

Dendroica virens. Black-throated Green Warbler.—Common, often abundant, summer resident.

Seiurus aurocapillus. Ovenberd.—Common summer resident, though varying in abundance. We have found several nests. The flight song or ecstasy song of this bird is one of the delights of our woods. This bird has increased in numbers in the vicinity of our clearing in recent years.

Seiurus noveboracensis noveboracensis. Northern Water-Thrush.—One or two records.

Seiurus motacilla. Louisiana Water-Thrush.—This lovely little habitué of mountain streams is never abundant, but hardly a season has passed without one or two records. Nest in 1910. Nesting location discovered in 1919, but nest not found.

Oporornis agilis. Connecticut Warbler.—Rare. September 21, 1917, pair well seen in "Tree Tops" clearing. August 16, 1919, and several dates following at "Tree Tops" and on the road near Parker Brook.

Oporornis philadelphia. Mourning Warbler.—1910, 1911, a pair feeding young often seen in "Tree Tops" clearing. Not identified at all 1912 to 1917, though we looked for it. Pair seen July 18, 1919, and in 1920, this warbler was seen and heard often at "Tree Tops" in June. I have seen the female several times in August 1920, and have several August records for song in the early morning.

Geothlypis trichas trichas. Maryland Yellow-throat.—Common summer resident throughout the valley.

Wilsonia pusilla pusilla. Wilson's Warbler.—Migrant. Records date from August 18 to September 14, 1912 1917, 1918, 1919, 1920.

Wilsonia canadensis. Canada Warbler.—Usual each year. Earliest record June 28, 1912. More abundant in late July and August. Possibly a migrant during most seasons.

Setophaga ruticilla. Redstart.—Common, often abundant, summer resident. I have found them commonly, contrary to Mr. Bicknell's experience, above an altitude of 2000 feet, even on Slide Mountain.

Dumetella carolinensis. Catherd.—This bird used to be a common summer resident before 1916, when the native people left this part of the valley. It is still here but has become scarce. I have seen and heard them each year, but the number of nesting pairs seems greatly reduced. They are really rare about our "Tree Tops" cabin and eastward toward Slide. This is perhaps another illustration of the effect of change of land culture on bird population.

Toxostoma rufum. Brown Thrasher.—Very rare. One record, exact date lost (C. S. Daley).

Troglodytes aedon aedon. House Wren.—Usual, though not abundant, summer resident, especially, as is to be expected, near inhabited houses. Several nests found, one in an old shoe hung on a nail in a half-open wood-shed.

Nannus hiemalis hiemalis. Winter Wren.—Usual, in deep woods back of "Tree Tops" ridge (Valley of the Biscuit Brook); also on Wildcat Mountain and on Slide. This season I have twice seen a single individual of this species in the brush along the roadside in front of our cabin.

Sitta carolinensis carolinensis. White-breasted Nuthatch.—I have but one certain record of this bird in this region in the nesting season (July 6, 1917). This year I have heard it frequently, and seen it once, through July and August. I have frequent records in other years in September, and in deep ravine woods of Fall Brook, August 22, 1919.

Sitta canadensis. Red-breasted Nuthatch.—One record, late September 1917, on the roadside in front of our house.

Penthestes atricapillus atricapillus. Chickadee.—Common summer or permanent resident.

Regulus satrapa satrapa. Golden-Crowned Kinglet.—One record, September 23, 1917.

Regulus calendula calendula. Ruby-crowned Kinglet.—September 24, 1917, and often in the week following.

Hylocichla mustelina. Wood Thrush.—Heard and seen occasionally 1911, 1913 and 1915. In June, 1918 and 1919, a pair nested in woods back of "Tree Tops." Not common, never abundant.

Hylocichla fuscescens fuscescens. Veery.—Usual summer resident. In June 1918 a nest was found in the top of an old tree-stump about three feet from the ground with four eggs. Family of young safely hatched and reared. The song of the Veery in these woods is one of the delights of the season.

Hylocichla ustulata swainsoni. OLIVE-BACKED THRUSH.—Common summer resident every year, increasing in numbers in recent years as the valley has become more wild. The notes of the Olive-backed Thrush are in general in the same musical "family" with those of the Veery. He performs a spiral-like set of notes with ascending scale (contrasting with the descending scale of the Veery), ending in a lovely high warbling trill that is missed by many ears.

Hylocichla guttata pallasi. Hermit Thrush.—Always usual, now a common summer resident. It is the most dominant bird of our clearing in the last five years. We often hear several Hermits at one time. Their favorite hour for song is, as with most other birds, at dawn and at dusk; but it is not unusual to hear a Hermit at any hour of the day, even at noon. A single bird will sit on some favorite perch and sing for one or two hours at a stretch, especially during the second nesting stage in

late July. Nest found June 1918 with three eggs. Parent on nest watched at a distance for several days, then the nest was found to be empty. In the same nest two cold Hermit Thrush eggs were found two years later (1920).

Planesticus migratorius migratorius. Robin.—Common summer resident throughout the valley. Many nests found

Sialia sialis sialis. Bluebird.—In our clearing these birds are only occasional visitants, but in the homestead region west of us they are usual, though never abundant, summer residents.

My list totals 89 species or with the addition of the House Sparrow, 90. These may be grouped as follows:

Migrants seen before June 8 after July 15 only, usually in August or September, 14 species.

Occasional Visitants or rare Summer Residents, 15 species.

Usual Summer Residents, 60 species.

In comparing my observations with those of Mr. Bicknell previously referred to (Transactions Linnaean Society New York, Vol. I–III, 1882–84), it is interesting to note that he mentions in addition to my list for Slide Mountain, the Blackpoll Warbler and the American Crossbill. His report covers a wider Catskill region than I have chosen, even the Hudson Valley near Catskill, N. Y. The birds he mentions, not on any of my records are:

Olive-sided Flycatcher

Screech Owl (Hudson Valley)

Bobolink (Valley pastures)

Red-headed Woodpecker (Hudson Valley)

Cowbird (cites Mr. Burroughs as authority)

Meadowlark (Esopus Fields)

Orchard Oriole (few)

Myrtle Warbler (in June)

Warbling Vireo (Pine Hill and Big Indian)

Wood Duck

Black Duck

Sky Lark (Alauda arvensis) (reported by Burroughs)

Traill's Flycatcher

The birds unrecorded by Mr. Bicknell which I can add to his list for the Catskills are:

Marsh Hawk

Tree Swallow

Golden-winged Warbler Nashville Warbler Tennessee Warbler Connecticut Warbler Wilson's Warbler Ruby-crowned Kinglet White-crowned Sparrow

All of these, except the Nashville and Tennessee Warblers are migrants, therefore would not be found in June, the time of Mr. Bicknell's own observations.

The three most interesting bird events of our experience here are:

- (1) The change in dominant bird population since the decrease in human homesteads and cultivation. Where there were about twenty families scattered in homes through the Valley, the predominant birds in and about "Tree Tops" were Song Sparrows, Towhees, Catbirds and Robins. Since the relative desertion of the Valley by the native population, though the "Tree Tops" clearing itself is unchanged, the characteristic birds about our cabin are warblers, Ovenbirds and thrushes.
- (2) The thrush chorus at sunset and dusk, and again at dawn. For the last five years we have been treated to a feast of thrush song. It is not unusual to hear several of each kind singing at once—Hermits, Olive-backs, Veeries and often a lone Wood Thrush. All through June and until July 29, we have all four species singing, each with his own incomparable notes. After July 20, the Veeries and Wood Thrush notes are silent; after August 1 the Olive-backs stop, while the Hermits sing until August 15 or 22—based on three years' records.
- (3) The mixed flocks of flashing, fascinating, restless warblers, vireos, smaller fly-catchers and chickadees from July 20 till the time of our departure in September. I regret that I am not here during the entire migration season to keep records of all the changes in bird population.

Sleighton Farm; Darling, Delaware Co., Pa.