Scarlet Tanager	May <b>1</b> 7	May 7	May 11
Wood Pewee	May 17	May 16	May 2
Cape May Warbler	May 17	May 6	May 15
Ruby-throated Hummingbird	May 19	May 12	Apr. 25
Bay-breasted Warbler	May 21	May 14	May 13
Black-billed Cuckoo	May 19	May 18	May 16
Yellow-billed Cuckoo	May 21	May 29	May 16
Black-poll Warbler	May 21		May 15
Nighthawk	May 23	May 29	May 17
Northern Parula Warbler	May 24	May 12	May 16
Wilson's Warbler	May 24	May 18	May 15
Canadian Warbler	May 27	May 6	May 11
Connecticut Warbler	May 28		May 17
Mourning Warbler	June 2	May 25	May 24

## BIRD NOTES FROM PINEHURST, NORTH CAROLINA.

## BY C. J. PENNOCK.

Following is a summary of my notes taken at Pinehurst, Moore County, N. C., during a stay there from February 9, to March 17, 1910.

This attractive winter resort settlement is about seventyfive miles south of Raleigh, forty miles from the South Carolina state line, and nearly one hundred miles north-west from Wilmington, at or near the sea coast. The elevation is about 650 feet above sea level and is in the Long Leaf Pine (P. taeda) district. Until within twenty years or so turpentine making was the principal industry of the region. With the building of a railroad the timber has been largely cut off, and later, devastating fires of frequent recurrence have made a most desolate looking country of much of the surrounding region. The aspect is rolling and many small streams are The soil is sandy, and excepting in few instances present. agricultural improvement has made slight progress. Pinus tæda, P. echinata, White Oak (Q. alba), Post Oak (Q. obtusiloba), Black Jack (Q. nigra) on the higher lands, and Sweet-Gum (Liquidambar styraciflua), Black-Gum (Nyssa multiflora and N. uniflora), Magnolia glauce and Tulip-trees

34

(Liriodendron tulipifera) on the lower lands are the most common trees. Along the streams Holly (*Ilex opaca*), Andromeda nitida, and Catbrier (Smilax rotundifolia) abound, and Mistletoe (*Phoradendron flavescens*) is abundant.

There are few large bodies of original-growth timber within five or six miles of Pinehurst. Around Carthage, twelve miles distant, much old pine is still standing, and midway between these two towns is some fine oak woods. The village of Pinehurst is beautifully laid out with roads and walks, many of which are bordered with an abundance of close growing shrubbery, making attractive shelter for several species of birds, notably Mockingbirds and Myrtle Warblers, while Towhees, White-throated Sparrows and Cardinals are seen here frequently. Probably the berry-bearing shrubs had much to do with the abundance of birds in the village, for I saw but one Mockingbird outside of Pinehurst, while they were numerous therein, and a flock of Cedar Waxwings frequented the locality for some time, often alighting on the bushes to feed on berries. The species noted are for the most part what one would expect to find.

I attempted to cover the ground carefully for several miles adjacent to Pinchurst and believe that few winter resident species escaped my observations. The season was an unusually cold one there, as it was throughout eastern United States generally. This no doubt retarded the migration movement, for with the exception of a Nighthawk and a sudden influx of Chipping Sparrows little or no migration movement was noted.

1. Podilymbus podiceps .--- Pied-billed Grebe.

This bird is reported as being frequently seen on McKenzie's pond, two miles from Pinehurst, some times four or five together. I saw one swimming there March 15th and another that had been shot March 1st.

2. Anas platyrhynchos.---Mallard.

One had been wing-tipped at McKenzie's pond. I saw it in the poultry yard at Pinehurst.

3. Philohela minor,-Woodcock,

Said to be rather abundant at times. I shot a male February 23. The only one I saw. It was seemingly close to breeding time.

4. Oxyechus rociferus.—Killdeer.

Three came down on the golf links March 7th and six were there March 16th.

5. Colinus virginianus virginianus.--Bob-white.

Quite abundant, even within the village limits. They are carefully protected, and hawks are trapped and shot to save the quail. Many visitors find good sport hunting them and fair bags are made. 6. Zenaidura macroura carolinensis.—Mourning Dove.

Abundant everywhere. On the rye field near the dairy I usually saw them in groups of eight to twenty. After March 2d some were seen in pairs, as if mated.

7. Cathartes aura.—Turkey Vulture.

An abundant species. Both species seem to be affected by the cold and were seldom a-wing until 9:00 to 10:00 a, m, when the mercury ranged low.

8. Catharista urubu,-Black Vulture.

Numerous, and a striking feature to a northern visitor. By their style of flight, contour, and one might say *general effect*, the two species of Vultures may be distinguished almost as far as they can be seen. My observations would indicate that the two species combined are not so numerous as is the Turkey Vulture in lower Delaware.

9. Accipiter velox.-Sharp-shinned Hawk.

I saw but one. It was after some quarry along a clump of bushes bordering a stream.

10. Accipiter cooperi.-Cooper's Hawk.

But one seen to be positively identified.

11. Buteo borcalis borcalis,-Red-tailed Hawk.

A pair were located one-half mile back of the Dairy along a small stream, and on March 10 I took one egg with incubation begun. Two or three other birds were seen.

12. Buteo lineatus lineatus.—Red-shouldered Hawk.

Two or three seen. All the large hawks are hunted closely, and steel traps are placed on high poles in exposed places. I was told they had formerly caught many "Chicken Hawks" in this way. I saw one Turkey Vulture and one Sparrow Hawk so entrapped.

13. Falco sparverius sparverius.--Sparrow Hawk.

Not very abundant. A lack of food supply no doubt was the reason, there being comparatively little cover for mice. The stomach of one shot contained remains of a White-throated Sparrow.

14. Otus asio asio.—Screech Owl.

For the reason just stated I surmise this is not an abundant

species about Pinehurst. I saw one sunning himself about 8:30 a.m. February 19, in the bright sunshine, the thermometer having marked  $22^\circ$  at 7 a.m.

15. Bubo virginianus virginianus.—Great Horned Owl.

Said to be rather common. One was captive in the park, taken near by in early winter, and others had been taken. They did not live amicably, I was told, and would sometimes fight to the death. 16. Ceryle alcyon.—Belted Kingfisher.

I saw one near the mill and they were reported as being rather common.

17. Dryobates villosus auduboni.-Southern Hairy Woodpecker.

I saw but four or five. I referred all to this form. One shot measured 8.54 inch, wing 4.50 inch.

 Dryobates publiceness publiceness.—Southern Downy Woodpecker. Seemingly more abundant than was the preceding species. Three I shot measured, length, 6.25, 6.00, 6.00 inches; wing, 2.25, 2.62, 2.50.

19. Dryobates borcalis.---Red-cockaded Woodpecker.

Fairly abundant; noted on eight different days, and twenty-one individuals counted. Possibly a few of these were seen twice.

20. Sphyrapicus varius varius.-Yellow-bellied Sapsucker.

Not numerous. I did not see above six of them.

21. Melanerpes crythrocephalus.-Red-headed Woodpecker,

Seen only in the village, where there were two or three, evidently young of the preceding year. By March 13 the head was showing bright red.

22. Centurus carolinus.--Red-bellied Woodpecker,

Saw one only. It was in the oak woods eight miles northeast of Pinehurst, March 4, my only trip to this region. They appeared absent from the pine lands about Pinehurst.

23. Colaptes auratus auratus.—Flicker.

Abundant. Seen about the village and over the country generally. By February 23 they had become quite noisy and were lovemaking on March 2.

24. Chordciles virginianus virginianus.—Nighthawk.

I was surprised to see a single bird on February 22 flying over the village. It was not over fifty yards distant and in full light. On March 14 I heard one of these birds overhead towards evening as I passed through the Park grove, but failed to see it. It has been suggested that this may have been a bird unable to make the southward flight last fall and remained north throughout the winter. Its appearance at the place and time is certainly remarkable 25. Otocoris alpestris practicola.—Prairie Horned Lark. A small flock was on the rye field near the Dairy. I shot one February 12.

26 Cyanocitta cristata cristata.-Blue Jay.

Quite common everywhere. Appeared to be mating March 14. 27. Corvus brachyrhynchos brachyrhynchos.—Crow.

Not abundant; never saw more than six at one time. Usually three or four were together.

28. Molothrus ater.-Cowbird.

A flock of 300 or more appeared March 8 and remained, at least, until we left, March 16. They fed on the open fields and lots in and close to the village, keeping in a compact body on the ground, those from one side flying over the others and alighting on the opposite side close to their companions.

29. Sturnella magna magna.--Meadowlark.

Abundant all through the more open parts of the village, on the golf links, frequently seen in the open woods in flocks of irregular numbers up to thirty, and sometimes a single bird was flushed in seemingly unsheltered localities.

30. Euphagus carolinus.-Rusty Blackbird.

A flock of about 20 remained several weeks along the small stream a quarter of a mile below the power plant. Were still there March 16.

31. Astragalinus tristis tristis.—Goldfinch.

Never seen abundantly. At several times in small numbers.

32. Poæcetes gramineus gramineus.--Vesper 'Sparrow.

Abundant. They were usually seen in flocks. Sometimes 50 to 100 together.

33. Passerculus sandwichensis savanna.—Savannah Sparrow.

Only a few seen.

34. Zonotrichia albicollis.--White-throated Sparrow.

Quite common. Found in shrubbery in the village, and especially in the low borders of streams where cover was abundant. They commenced singing softly March 6.

35. Spizella passerina.—Chipping Sparrow.

First seen March 2, and became abundant on the 8th. Thereafter at times in flocks of twenty or more.

36. Spizella pusilla pusilla.-Field Sparrow.

Abundant. Frequently heard singing after February 27.

37. Junco hyemalis hyemalis.—Junco.

Very abundant. Found almost everywhere, and in flocks of a few to 100 or more.

38. Melospiza melodia melodia.-Song Sparrow.

Commonly distributed.

39. Melospiza georgiana.--Swamp Sparrow.

Not abundant; rarely saw more than one in a half day's tramp. 40. *Passerella iliaca.*—Fox Sparrow.

I found small colonies in a few places.

41. Pipilo erythrophthalmus crythrophthalmus.--Towhee.

Rather common; usually found near the small streams. A few in the shrubbery in the village.

42. Cardinalis cardinalis cardinalis.—Cardinal.

Common wherever there were favorable surroundings.

43. Bombycilla cedrorum.--Cedar Waxwing.

A flock of over 200 appeared February 27 and remained at least until March 16. They were sometimes seen divided in bands of twelve to fifty, two or more of which would occasionally unite and sometimes all appeared to be together. They frequented the trees and shrubbery through the village.

44. Lanius ludovicianus ludovicianus. — Northern Loggerhead Shrike.

There were three or four pairs in the village. I saw none elsewhere. The two shot measured: length, 8.34 and 8.63; wing, 3.75 and 3.63 inches.

45. Dendroica coronata.--Myrtle Warbler.

Abundant everywhere in the village, along streams, and in the small oaks on high sandy ground.

46. Dendroica vigorsi.—Pine Warbler.

First seen and heard singing February 18. After March 4 they were singing frequently.

47. Anthus rubescens.-Pipit.

A flock of 100 or more were on the rye field at the Dairy. First seen February 10, and at intervals to March 16.

48. Mimus polyglottos polyglottos.--Mockingbird.

It was a pleasure to find these birds abundant through the village. I estimated there were twenty pairs of them in about onehalf mile square, and I saw but a single bird elsewhere. The first song was heard February 12, a faint, whispered ripple in the throat. As the weather grew warmer the songs increased in volume and frequence, but a cold windy day checked the singing promptly. At first and for several days the songs were low and sweet, scarcely to be heard beyond a distance of fifty feet, and the bird did not open his bill in thus singing. With warmer days the song came with open bill and poured forth in volume. At times three or four birds could be heard in full chorus, and the various species imitated were almost legion. The first early low, sweet song seemed to contain no mimicry and was extremely pleasing. Great difference was observed in the vocal powers of different individuals. One near the station and another at the post office were notable for continued song and extensive range in mimicry. 49. Dumetella carolinensis.—Catbird.

A few were seen along streams where shelter was abundant.

56. Toxostoma rufum.-Brown Thrasher,

Seen only along streams, and not abundant. I did not hear them singing.

51. Thryothorus Iudovicianus Iudovicianus.—Carolina Wren.

Rather abundant, and usually in pairs.

52. Thryomanes bewicki bewicki.--Bewick's Wren.

The last day of my stay, March 16, the only one noted was seen in the village near the power plant.

53. Sitta carolinensis carolinensis.--White-breasted Nuthatch.

Not abundant. I saw nine birds only.

54. Sitta pusilla.—Brown-headed Nuthatch.

Seemingly more abundant than the preceding. During the latter part of my stay they became quite active and indicated a mating spirit.

55. Bwolophus bicolor .--- Tufted Titmouse.

Abundant.

56. Pernethestes carolinensis carolinensis.—Carolina Chickadee. Quite common.

57. *Regulus satrapa satrapa.*—Golden-crowned Kinglet, Only one positively identified.

58. Regulus calendula calendula.—Ruby-crowned Kinglet. Several seen.

59. Hylocichla gutiata pallasi.-Hermit Thrush.

Frequently seen along the streams and occasionally on high ground.

CO. Planesticus migratorius migratorius.—Robin,

Abundant. Occurred in flocks of five or six to forty or more.

61. Sialia sialis sialis.-Bluebird.

Common. I found them widely distributed and generally two to five or more in company.

The following species, while not seen, are given on sceningly reliable evidence:

1. Gavia immer.—Loon.

The "boys" at McKenzie's mill described this species accurately, even to the cry. One had been on the pond for several days and was finally killed.

2. Lophodytes cucultatus,--Hooded Merganser.

Several immature birds and at least one adult had been seen on McKenzie's mill pond. The description as to size, bill and crest was beyond question. 3. Ardea herodias.-Great Blue Heron.

The residents told me it was occasionally seen on the mill pond. 4. Mcleagris gallopavo silvestris.-Wild Turkey.

Mr. Caddell, an intelligent resident, told me he saw one about February 20, six miles north of Pinehurst. Others told me they were yet sometimes shot in the county.

5. Pandion hiliaëtus carolinensis.-Osprey.

A few come in the spring to the mill pond and are seen plunging for fish.

6. Phlwotomus pileatus pileatus.-Pileated Woodpecker.

Several of the older residents know this bird well and report it as still to be seen in the back districts where larger bodies of timber yet stand. They call it Logcock, Blackcock, and Woodcock.

The following table indicates the number of observations on each species and the total of individuals. In a few instances this is misleading, without some explanation. I made constant effort to avoid a recount on any single trip; when returning over the outward bound route I counted only new species, but of course in starting out each day from the village I frequently recounted some seen on former days. This is true in regards to the Mockingbird, Robin, Junco, Field Sparrow, Cowbird, Cedar Bird, Rusty Grackle, American Pipit, and probably a few others. In general, however, it will indicate comparative abundance much more accurately than would be the case had I used the terms "common," "abundant," or "rare":

Pied-billed Grebe 2	2
Mallard 1	1
Woodcock 1	1
Killdeer 3	12
Bob-white 12	65
Mourning Dove 44	414
Turkey Vulture 45	191
Black Vulture 23	181
Sharp-shinned Hawk 1	1
Cooper's Hawk 1	1
Red-tailed Hawk 4	7
Red-shouldered Hawk	5
Sparrow Hawk 6	7
Screech Owl 1	<sup>1</sup>
Great Horned Owl 1	1
Belted Kingfisher 1	1

Nighthawk	<b>2</b>	2
Hairy Woodpecker	4	4
Downy Woodpecker	12	12
Red-cockaded Woodpecker	9	21
Red-headed Woodpecker	3	3
Red-bellied Woodpecker	1	1
Yellow-bellied Sapsucker	5	5
Flicker	56	89
Prairie Horned Lark	1	16
Blue Jay	22	29
Crow	39	74
Cowbird	4	680
Meadowlark	45	364
Rusty Blackbird	10	91
Goldfinch	7	24
Vesper Sparrow	18	235
Savannah Sparrow	<b>2</b>	11
Chipping Sparrow	15	87
White-throated Sparrow	26	92
Field Sparrow	32	209
Junco	85	1714
Song Sparrow	54	110
Swamp Sparrow	6	8
Fox Sparrow	9	25
Towhee	18	20
Cardinal	37	50
Cedarbird	16	1196
Loggerhead Shrike	9	11
Myrtle Warbler	49	142
Pine Warbler	21	22
Pipit	8	331
Mockingbird	84	112
Catbird	3	3
Brown Thrasher	7	7
Carolina Wren	33	35
Bewick's Wren	1	1
White-breasted Nuthatch	<b>6</b>	9
Brown-headed Nuthatch	12	23
Tufted Titmouse	38	49
Carolina Chickadee	23	38
Golden-crowned Kinglet	1	1
Ruby-crowned Kinglet	6	6
Hermit Thrush	26	27
Robin	37	318
Bluebird	75	117