## ACADIAN CHICKADEES (PENTHESTES HUDSONICUS LITTORALIS) IN BOSTON AND VICINITY IN THE FALL OF 1913.

## BY HORACE W. WRIGHT.

An unprecedented incursion of Acadian Chickadees into the territory about Boston and in Eastern Massachusetts began to be observed on October 29, and their presence has been recorded in various localities throughout the month of November and to the period of midwinter, 1914. On the date above named three individuals were seen in South Sudbury not far from the Wayside Inn at a roadside bordered with a considerable extent of white pine growth. Their characteristic tones in calling at once made identification easy. This occurrence in itself was unusual, for I knew of no previous record of even three birds of this species having been seen together in Eastern Massachusetts. In November, 1904. I had seen four birds in as many different localities between the 4th and 25th days (Auk, XXII, Jan., 1905, p. 87). The records of other observers, which are within my knowledge by publication. are of a single individual, or in one instance two birds, and of but one bird, rarely two, in a season, in years rather widely separated.

It was with increased interest, therefore, that two days later, October 31, I met two more Acadian Chickadees, one in the Lawrence woods at West Medford in growth of red cedar, and the second near the western shore of Spot Pond in Middlesex Fells, Stoneham, in white pine and oak growth. On the following day, November 1, three more birds were found in cedar-grown pastures in Belmont, two being seen together moving from one red cedar to another in company with Black-capped Chickadees, and the third bird a quarter of a mile farther on in similar growth. Upon visiting the Public Garden on the next day, November 2, within a few minutes of my entrance, the voice of hudsonicus was heard, and the bird was presently seen in an English hawthorn, calling sufficiently often to reveal its movement from this tree to others, all deciduous, for there are no permanent evergreens within the Garden. Two Brown Creepers were this bird's nearest companions.

Two hours later the voice of hudsonicus was heard at Charlesgate, proceeding from a bird closely pursued by a House Sparrow along the embankment bordering the Charles River Basin. On a visit to the Melrose section of the Fells on the following day, November 3, three more birds were seen, two feeding upon stalks of golden rod at the border of woodland, and the third a mile distant in the Medford section in young white pines.

Up to this time thirteen individuals had been seen in a period of six days in nine different localities. On November 6 in a walk through Wavland into the border of East Sudbury the voice, now come to be not infrequently heard, revealed a bird once again in red cedar growth, among Golden-crowned Kinglets and Blackcapped Chickadees, with Fox Sparrows scratching on the ground and a Winter Wren occasionally scolding and appearing among the stones of the pasture wall. A week later, November 13, four birds were seen in the Belmont pastures feeding together on stalks of golden rod, patches of which stood among the not thickly growing red cedars. The four were observed at one and the same view several times as they successively moved from one patch to another. When occasionally they flew into the cedars, it was but to return presently to the golden rod. They called scarcely at all, but fed silently. No Black-capped Chickadees were in the immediate vicinity, but Goldcrests flitted among the cedars. November 18 a bird, apparently alone, was seen at the extreme northern end of the Fells in the Winchester section in cedar and pitch pine growth; and a mile distant on Bear Hill the voice of another was heard among the cedars.

On November 22 I again very leisurely traversed the cedarjuniper-grown pastures of Belmont, which constitute an area of half a square mile or more, with the definite intent of scoring as far as possible the exact representation of hudsonicus within its range. The result was nine birds, namely, 2+2+1+2+1+1. These were all moving from one cedar to another, or feeding upon stalks of weeds, or picking seeds on the ground. In the locality where the four birds had been feeding together on the 13th, no hudsonicus was noted, but among the Golden-crowned Kinglets was an Orange-crowned Warbler well revealed on a barberry bush, and among the rocks in the glen was a Winter Wren. In a trip to North Scituate on November 25 with Mr. Richard M. Marble three birds were seen in an extensive growth of red cedar about a mile inland from the beach. These were actively moving with Black-capped Chickadees. Across the highway in thick growth of horse-briar a Carolina Wren had just been seen, and below the cedars in a swampy deciduous wood we disturbed a Black-crowned Night Heron roost, sixteen birds taking flight. On November 26 the call was heard in the Arnold Arboretum in its northern section.

These several records indicate that at least twenty-five different individuals were noted within the period of October 29 to November 26 inclusive, and, perhaps, five others should be added as not having been already enumerated. In most instances the calls were but little heard. The birds have been much less inclined to voice themselves than is the Black-capped Chickadee. No song note has been heard on any occasion. Cedar growth proves to be especially attractive to them. One bird, watched for a time at North Scituate, was seen to be picking at the green undeveloped berries of a red cedar. They have mostly been found in trees of low growth, whether pine or red cedar, and usually at a range below the eye, not infrequently on stalks of golden rod, and sometimes on the ground.

To my own records I am able to add the records of other observers who have coöperated to adequately emphasize the extent of this Acadian incursion into this vicinity. They are:

Three birds seen by Mr. William Brewster on his place at Concord, October 27, and observed at intervals up to November 4.

Eight or ten birds seen or heard by Mr. James L. Peters at Harvard and vicinity. The first bird noted was in his father's orchard in company with Blackcaps on October 27, 28, and 29, appearing successively at almost the same hour in the afternoon on the three consecutive days. On November 2, Mr. Peters states, he was awakened by the notes of an Acadian Chickadee under his window, perhaps the same bird. On November 4 and 7 two birds were seen in the orchard regarded as newly arrived. In each of five other localities, within or near the town of Harvard, Mr. Peters saw a single bird on dates between October 30 and November 11. One of these was collected by him, and was identified by Mr. Outram Bangs as P. h. littoralis.

One bird seen by Miss Anna K. Barry on a farm in Gleasondale,

October 30, "near the edge of a pasture, feeding on the seeds of golden rod, in company with two Black-capped Chickadees."

Three birds, or more, seen by Mr. Outram Bangs in Wenham-Hamilton on October 30 or 31.

One bird seen by Mr. and Mrs. C. A. Robbins of Onset at Sagamore Beach on November 2.

Two birds seen by Mr. Richard M. Marble in Harvard Forest, Petersham, November 4, and on the 15th day "one more."

Six birds seen by Dr. Walter Faxon and Dr. Winsor M. Tyler on the Belmont lands, November 6; five again seen on the 8th. Dr. Tyler writes, "The five and six birds kept together in a loose flock, and we thought they were associated with Kinglets rather than with *P. atricapillus*. We watched the chickadees from within three feet and once a bird perched six inches from Mr. Faxon at the height of his knee." It is very probable that in my own accounting most of these individuals have been enumerated. On November 20 Dr. Tyler collected one from a flock of four, again seen in Belmont, for the Harvard University Museum. He states, "This bird was identified by Mr. Bangs as an extremely small specimen of *P. hudsonicus littoralis*," thus deciding the question whether our rare visitants were *P. h. hudsonicus* or *P. h. littoralis*.

Four birds seen together by Mr. G. B. Wellman on Bear Hill in the Middlesex Fells, Stoneham, on November 8. Mr. Wellman writes, "After about one hour spent looking around I at length heard the voice of *hudsonicus* on the north side of the hill....and came upon four birds, all of them in most beautiful plumage and as tame as they always are in the mountains. All four were at times but three feet from my hand. Their sides, it seemed to me, were of a deeper rufous color than in the summer." At a distance from these Mr. Wellman heard the call of a fifth bird.

Five birds seen by Dr. Glover M. Allen with Mrs. Allen in the Arnold Arboretum on November 22. Dr. Allen states, "The flock of five was with one Golden-crowned Kinglet among the spruces at sunset, calling and twittering softly a good deal. Two went to drink at the little brook, hopping down from a birch to the water. They kept to the inside of thick spruces rather low down, but one or two moved out to the ends of the boughs to show themselves." Dr. Allen had seen one bird in the Arboretum on

November 15, "following," he states, "a flock of four or five Black-capped Chickadees and half a dozen Golden-crowned Kinglets. It was the last to leave Hemlock Hill, crossing the road to the north, and quickly flitted into a low evergreen silently, then for an instant into a large white oak, and then quickly darted into another low evergreen, whence I once heard his characteristic note."

One bird seen by Miss Annie W. Cobb in Arlington on November 22. Miss Cobb states that the bird was in a pine grove off Forest St., was first heard in the tall pines and later was seen feeding in low bushes at the edge of the grove, and that Black-capped Chickadees and Kinglets were its companions.

Two birds seen by Dr. Walter Faxon on Granny Hill in Lexington, November 24; one seen by Dr. Faxon and Dr. Tyler on the following day; and two birds again seen by both observers on the 26th. Dr. Tyler states that these three records represent probably only two birds. He further writes, "We have found the Acadian Chickadees, as you have, associated with P. atricapillus and Regulus satrapa, frequenting cedar pastures and pine woods; oftenest, perhaps, feeding in barberry bushes, golden rod, and small gray birch growth; often too on the ground."

One bird seen by Mr. F. S. Dane in Lexington in a distant part of the town from the locality of the other records on November 29.

A bird, on the testimony of Dr. John B. May, brought in to his sister, a teacher at Gloucester, in a disabled condition, which after a time revived and was able to fly away, on a day about the last of November.

Two birds seen by Dr. G. M. Allen by Jamaica Pond on November 30, moving through the elms; no companions with them. Probably these same two birds were seen by me on December 9 in planted hemlocks near the pond, and one of them by Mr. H. L. Barrett on January 7 in the same growth.

On December 10 eight of the company of Belmont birds were again found by me in a careful search through the juniper-red cedar-grown pastures. They were either feeding on juniper or on the ground about it, there being no snow on the surface.

Four birds seen by Mrs. Edmund Bridge in Cohasset, December 9, among growth of cedar and feeding on golden rod stalks.

Three birds seen by Mrs. Bridge and companions on Castle Hill,

Ipswich, December 27, feeding in the conifers, and again observed on January 10. The same three birds, undoubtedly, were seen by Dr. Charles W. Townsend and Mr. Francis H. Allen, on January 11, gleaning on the larch trees on Castle Hill.

In early February these Acadian Chickadees in the vicinity of Boston were no longer in evidence. None could be found in the Arboretum, Olmsted Park, Belmont, Harvard, Lexington, or other places as far as heard from. The latest record furnished me was of the Arboretum birds, seen by Dr. G. M. Allen on January 23 among the same conifers in which they had previously been ob-Some were picking on the ground under the thick spruces, others were in the trees, Dr. Allen states. They were very quiet. giving only the slight single call-note, not characteristic. Five or six inches of snow lay upon the surface, but the ground was bare under the spruces. On the tenth of February a careful search by Mr. Barrett and myself failed in finding them. On February 2 I had searched the Belmont pastures also without finding any. Mr. Peters at Harvard saw none after the middle of November. Dr. Faxon and Dr. Tyler at Lexington none after the first of De-They seem to have disappeared with the Golden-crowned Kinglets, with whom they were the closest companions. usually pass mostly out of evidence by early January in the vicinity of Boston.

Whether the Eastern Massachusetts birds moved farther south or had begun a return migration northward is an interesting point remaining undetermined. 'Bird-Lore' of February, 1914, page 52, furnishes evidence that the migration in November extended as far southward as Hartford, Connecticut, two birds having appeared at the feeding-tray of Miss K. C. Robbins in Wethersfield on or about November 13 and continuing for some time to make almost daily visits to her hospitable board. Two other birds were seen at West Hartford by Mr. George F. Griswold on November 27. Mr. Arthur G. Powers in his Hartford bird-census of December 25 states that he was unable to find a pair of Acadian Chickadees on that day, although they had been seen only a few days before and had been seen frequently for a month previous. These Connecticut records with a single exception are the first for the state, as shown by the official publication, 'The Birds of Connecticut'

by John Hall Sage and Louis Bennett Bishop, M. D., the previous occurrence having been that of a single bird collected by Mr. Robert Morris, while shooting in a wooded ravine a few miles from New Haven on November 13, 1875. Warwick, R. I., reported one bird seen on December 25, "the second record for Rhode Island," on the statement of Mr. H. S. Hathaway; and Rhinebeck, N. Y., reported two birds in the 'Bird-Lore' Christmas census.

In September, 1913, the southward movement of Acadian Chickadees was observed at Jefferson, N. H., where on the mountains the species breeds, but is only occasionally noted on the hillsides and in the valleys. Beginning with the fifth day one, two, or three birds were observed almost daily in various localities throughout the month and into early October, some in our immediate neighborhood on the Highland and three on our place, September 29 and 30. Their presence indicated an unusual movement, for in no previous season had the species been as much in evidence among the southward moving migrants.

The records furnished me present an aggregate of over forty individuals which have been noted by the several observers in fifteen different towns or distinct localities. These records with my own aggregate seventy or more individuals; thirty-five of these have been seen in Boston and its immediate vicinity. The number recorded, it would seem probable, must be but a fraction of those which entered the eastern part of the state, so few localities have been reported, while others which afford equal attractions to the species have not been heard from and probably have lacked observers. The incursion, therefore, so far as all previous records show, has been unprecedented, beginning in late October, attaining its maximum in early November, continuing into December and January, and apparently ending before February.

One suggestion has been offered tentatively as an explanation of this remarkable flight, namely, that an insect pest, the spruce-bud worm, a tortricid moth (*Tortrix fumiferana*), having destroyed the season's new growth over extensive areas of spruce and pine forest in New Brunswick and Maine last summer, these forests were rendered unattractive to, and perhaps incapable of supporting their natural quota of, Acadian Chickadees, and hence the southward migration reaching to southern New England.