5, 1878, three specimens were obtained on Cape Cod. This is the last visit recorded to date.

The confusion in regard to the Glossy Ibises of the United States, as partially indicated above, has been cleared up only at a comparatively recent date. *I. falcinellus* (now *Plegadis autumnalis*) is the species occurring from Florida northward along the Atlantic coast and in the West Indies, and is identical with the Old World bird. *I. guarauna* (now *Plegadis guarauna*) is the southwestern and western species; and the supposed new species, *thalassinus*, has proved to be the latter in immature plumage.

*Note*.—References not given in the above may all be found in Stearns and Coues's 'N. E. Bird Life,' II, p. 255 et seq.

## A LIST OF THE SUMMER BIRDS OF THE PRESIDENTIAL RANGE OF THE WHITE MOUNTAINS, N. H.

#### BY ARTHUR P. CHADBOURNE.

The following list of the summer birds found in the Presidential Range of the White Mountains, New Hampshire, is based on numerous trips of from one to three days made during the summer of 1884, and on two weeks spent in the 'Great Gulf' early in July, 1886. The number of species observed is very small, but the mere fact that so few were found is of interest, and the absence of many birds which are abundant in the country below makes the summer fauna of the mountains stand out in much stronger contrast. The eastern and northern slopes of Mt. Washington itself were the most carefully worked up, though one or two trips were made to the 'Northern Peaks' (Mt. Madison, Mt. Adams, etc.) in September, 1884. The southern and western slopes were not visited, excepting a small part of the old 'Crawford Bridle Path.'

Mr. William Brewster, who was with me on two occasions in 1884, and Messrs. C. R. Lamb and J. L. Goodale, who camped with me in Great Gulf in 1886, have generously placed their notes

at my disposal, and to them I am indebted for much valuable information.

The Presidential Range consists of Mt. Washington (altitude, 6293 feet) "the highest peak east of the Rocky Mountains, and north of the Carolinas," and of a number of lesser summits directly connected with it. As a rule these are only more or less exaggerated spurs of the great mountain itself, but on the northern side there is a lofty ridge, which is everywhere more than 4900 feet in altitude, and connects the high summits of Mt. Madison (5365 feet), Mt. Adams (5794 feet), Mt. Jefferson (5714 feet), and Mt. Clay (5553 feet) with each other, and also with Mt. Washington. At first this ridge runs almost north, then turning towards the east, it forms the northern and western walls of a huge gorge, called the Great Gulf, the southern wall of which is Mt. Washington itself. It was on this southern wall that we camped in 1886, having followed the bed of a mountain stream from a point a little above the fourth mile-post of the carriage-road down to an altitude of 3140 feet, which was the highest point at which we could find timber large enough to peel for bark. The carriage-road from the Glen ascends along the southern edge of the Great Gulf, but is entirely shut in by forest until within a few rods of the Half-way House (altitude, 3840 feet). Above this it passes through a tract of low matted spruce before it reaches the bare rocks and the region of hardy alpine plants and grasses, which extend to the summit of the mountain.

Tuckerman's Ravine, much smaller than the Great Gulf, is on the eastern side of Mt. Washington. At an altitude of about 4200 feet it is divided into two distinct parts by a rocky wall, only broken at one place where the stream from the 'Snow Arch' above passes through. The broad lower portion is covered with spruce and fir forest and contains two small ponds, the largest of these, called Hermit Lake, is at an altitude of 4100 feet. The upper part is surrounded on three sides by precipitous cliffs, in some places said to be one thousand feet high, and in their crevices grow a few alder bushes and many interesting plants and grasses. Under these cliffs the snow remains at the head of the Ravine until late in August; and early in July, 1886, it reached so far down that many of the alders were still almost covered with it and were as bare as in midwinter; while still lower they were in full flower and the grass and early spring plants were just beginning

to appear. A stream runs under this bank of snow, and cutting a deep cavern on its way, called the 'Snow Arch,' continues through the Ravine to join the Ellis River at the base of the mountain. Along the banks of this stream from the end of the Snow Arch to the spruce and fir forest below are dense alder thickets, which extend several rods back on each side, and are still farther prolonged by a dense growth of scrub spruce and fir nowhere over six feet high. This was a capital place for such birds as Black-polled Warblers, Juncos, and White-throated Sparrows, and they were more abundant here than at any other point visited, with the possible exception of the low forest opposite the Half-way House.

The changes in the fauna cannot be better seen than by walking up the carriage road from the Glen to the summit. For the first mile or two the forest is largely fine old growth hemlocks, spruces (Abies nigra), and birches, with cornels, elders, spiræas, and hazels along the roadside, and here such birds as the Hermit Thrush, Black-throated Blue Warbler, Black-throated Green Warbler, Canadian Warbler, and Red-eyed Vireo occur. there is a change, the fine old trees gradually give place to more and more stunted growth, the firs and spruces become more plenty, and at last almost entirely replace the hard wood trees, except on some slide or clearing where there is a dense growth of young birches and poplars; the cornels, elders, etc., disappear, and low birches, alders, and moose wood (Viburnum lantanoides) take their place. At the beginning of the fourth mile there are frequent patches of Labrador tea and mountain blueberries, while an occasional painted cup or alpine sandwort show that the lowest limit of an alpine fauna has been reached. There is a similar change in the birds. Olive-backed Thrushes still occur, but the harsh note of the Bicknell's Thrush is also heard, Black-poll Warblers begin to sing along the roadside, and the Hudson's Bay Chickadee becomes more common than the Black-capped.

About four miles by the carriage road from the base of the mountain the forest practically ceases and a dense growth of dwarf spruce begins. The trees are from two to six feet high and have their branches so matted and interlaced, that one is forced to walk over them if they are low, or to crawl under them if they are high, for it is impossible to force a way through.

Above the timber line this growth extends for a varying distance up the mountain enclosing rocky islands and promentories, where all of the common alpine plants are abundant.

The only birds found here are Juncos, Black-poll Warblers, and a few Yellow-rumped Warblers, Bicknell's Thrushes, and White-throated Sparrows; while on the bare lichen-covered rocks above nothing grows except the hardy alpine plants, shrubs, and grasses, and the common Junco is the only bird found, unless a solitary Black-poll Warbler or White-throated Sparrow has strayed up from the dwarf spruces below. From the timber line to the very top of the mountain the Junco continues in only slightly diminished numbers and for the last quarter of the road is usually the only bird seen.

The following birds are found from the base to the timber line and vary but little in abundance with an increase of altitude, if the surroundings are equally favorable: Ruffed Grouse (Yellow-bellied Flycatcher?), Blue Jay, Canada Jay, White-throated Sparrow, Purple Finch, Yellow-rumped Warbler, Bay-breasted Warbler, Blackburnian Warbler, Winter Wren, and Goldencrowned Kinglet.

- 1. Actitis macularia. Spotted Sandpiper.—One was seen on July 8, 1886, in the Great Gulf on the West Branch of the Peabody River. It was only a short distance below our camp and at an altitude of about 3100 feet.
- 2. Dendragapus canadensis. Canada Grouse.—On July 3, 1886, one ran across the carriage road just in front of J. L. Goodale as he was walking up from the base of the mountain. Altitude about 3500 feet. No others seen.
- 3. Bonasa umbellus. RUFFED GROUSE.—Extends from the country at the base of the range to the tree limit. A female and brood of young found in the stunted birches near the Half-way House (altitude, 3840 feet) on July 26, 1884; and another brood was seen near the timber line on Mt. Adams on Sept. 2, 1884. Strange to say, none were seen by any of the party in 1886.
- 4. Accipiter velox, Sharp-shinned Hawk.—One was seen on July 24, 1884, sailing over the Half-way House.
- 5. Accipiter cooperi. Cooper's Hawk.—On July 12, 1884, a pair were seen, and one of them shot, on the path from Tuckerman's Ravine to the carriage road up the mountain; and almost in the same spot another was seen on July 7, 1886. Altitude, 2640 feet.
- 6. Falco columbarius. PIGEON HAWK.—One was seen a little below our camp in the Great Gulf on July 8, 1886.
- 7. Falco sparverius. Sparrow Hawk.—On Sept. 2, 1884, two flew over the summit of Mt. Clay within a few feet of us as we sat there; and

the next day another came sailing down from above and disappeared in Tuckerman's Ravine, just as we began the descent.

- 8. Pandion haliaëtus carolinensis. American Osprey.—As we were descending the cone of Mt. Jefferson on Sept. 2, 1884, an Osprey flew slowly over a few yards above our heads. Altitude, approximately 5500 feet.
- 9. Dryobates villosus. HAIRY WOODPECKER.—One shot on July 11, 1884, about two miles by carriage road from the base of the mountain. Another was killed near the same place on July 26, 1884.
- 10. Dryobates pubescens. Downy Woodpecker.—One killed almost at the base of the mountain on Aug. 12, 1884.
- 11. Picoides americanus. American Three-toed Woodpecker.—In August, 1884, an adult female and a young bird were shot below Hermit Lake, in Tuckerman's Ravine (altitude, 3960 feet). Another was seen but not killed at our camp in the Great Gulf on July 5, 1886.
- 12. Ceophlœus pileatus. PILEATED WOODPECKER.—This bird was not met with, but an old dead spruce full of its large and deep 'peck-holes' was found near our camp (altitude, 3140 feet). The holes were newly made and the chips and pieces of broken wood perfectly fresh.
- 13. Chætura pelasgica. Chimney Swift.—On July 3, 1886, one was given to me that had been caught alive in an unused chimney of the Half-way House (altitude, 3840 feet). The men at the house had never before seen any bird like it, and during our stay we saw no more; still one or two pairs might have nested there and yet have escaped notice.
- 14. Empidonax flaviventris. YELLOW-BELLIED FLYCATCHER.—Three were seen in rather open forest nearly opposite the Half-way House in July, 1884. (Altitude, about 3800 feet.)
- 15. Cyanocitta cristata. BLUE JAY.—On July 26, 1884, a small flock was seen opposite the Half-way House (altitude, 3800 feet), and on July 11-12 others were seen farther down the Mountain. It probably breeds from the base to the timber line, but is far from plenty everywhere. None were seen in 1886.
- 16. Perisoreus canadensis. Canada Jay.—Much more common than the Blue Jay, though nowhere plenty. Small flocks of half a dozen were seen on three or four occasions, but usually there was only one or at most two. We found them early in July from near the base of the mountain to the limit of the spruce and fir forest, a little above the Half-way House (altitude, 3850 feet). A short distance below it, at the limit of good sized spruce and fir trees, they were more plenty than anywhere else.
- 17. Corvus americanus. American Crow.—Not seen in 1884, except about the base, where it was common. Two were seen at an altitude of 2650 feet, on July 7, 1886, near which it is not improbable that they breed; but two others seen on the bare rocks at an altitude of 535c feet had evidently flown up from below.
- 18. Pinicola enucleator. PINE GROSBEAK.—Two specimens seen, both of them in the low spruce and fir timber opposite the Half-way House (altitude, 3800 feet). One was a fine adult male in full song, seen July 12, 1884; the other an immature bird, seen July 13, 1886.

- 19. Carpodacus purpureus. Purple Finch.—Extremely abundant at the base of the mountain, and found in all but the thickest woods as high as the timber line.
- 20. Loxia curvirostra minor. AMERICAN CROSSBILL.—Not common, though small flocks were occasionally seen in 1886 near the timber line. I am told that in the country below (no one knows about the mountain itself) they are often entirely absent in summer, and in 1884 we failed to find them. They probably range through the whole of this region, however, though less abundant during the past summer than in some seasons.
- 21. Spinus tristis.—American Goldfinch.—One was seen by J. L. Goodale on July 8, 1886. It was on the West Branch of the Peabody River at an altitude of about 3050 feet.
- 22. Spinus pinus. PINE SISKIN.—A few were heard in the woods near the Half-way House on July 12, and again on July 26, 1884; and one was seen in August of the same year near Hermit Lake (altitude, 4100 feet). Not found in 1886.
- 23. Zonotrichia albicollis. WHITE-THROATED SPARROW.—Extremely abundant at the base of the mountain, and very common at all altitudes up to the limit of shrubs, and on quiet days one was occasionally heard on the bare rocks above. The highest point at which it was noted was 5300 feet.
- 24. Junco hyemalis. Slate-colored Junco.—Very common from the base to the bare rocky summits of the highest peaks. It occurs not only on the summit of Mt. Washington, where it can find plenty of food about the stables, but on the tops of Mt. Adams, Mt. Jefferson, and other peaks, where there are only bare lichen-covered boulders without even the hardy alpine plants found but a short distance below. In such places the Junco must breed, for early in July old birds were feeding newly fledged young with insects, of which they seemed to find large numbers. Two females shot on July 12 had ovaries nearly ready for a second clutch of eggs, and one was seen with its bill full of horse-hair.
- 25. Melospiza fasciata. Song Sparrow.—Found a single specimen of this bird on the bare rocks at an altitude of 5340 feet on Mt. Washington. As this was early in the season (July 6, 1886), and there had been no storm for two weeks to carry it from its usual habitat to such a height, it may have nested somewhere near. It is abundant throughout the country at the base, but the above was the only one seen on the mountain itself.
- 26. Ampelis cedrorum. CEDAR WAX-WING. Several flew over us near the fifth mile post of the carriage road on July 11, 1884. Others were heard opposite the Half-way House on July 26. Not seen in 1886.
- 27. Vireo olivaceus. Red-Eyed Vireo.—Heard for the first mile or two of the carriage road, but was not common. A Vireo heard about a mile below Hermit Lake may have been *V. philadelphicus*, but I could not get near enough to shoot it.
- 28. Helminthophila ruficapilla. NASHVILLE WARBLER—On July 11, 1884, one was heard singing on the third mile by carriage road from the base, and another was seen on the bare mountain side on the fifth mile. Not positively identified in 1886.

- 29. Helminthophila peregrina. TENNESSEE WARBLER. One found on Mt. Adams, at an altitude of 4000 feet, on Sept. 2, 1884.
- 30. Dendroica cærulescens. BLACK-THROATED BLUE WARBLER. Not uncommon at the base, and as high as the second mile post of the carriage road. Was not found above this.
- 31. Dendroica coronata. Yellow-Rumped Warbler.—Is common through the country at the base of the mountain, and specimens were seen at an altitude of 4240 feet in Tuckerman's Ravine on July 6, 1886.

It seems about equally plenty from the base to the tree limit, but the few found on the low matted spruces higher up may have been only stragglers in search of food.

- 32. Dendroica castanea. BAY-BREASTED WARBLER.—One was killed at our camp in the Great Gulf early in July, 1886, and two broods of young just out of the nest were found about two miles by carriage road from the base.
- 33. Dendroica striata. BLACK-POLL WARBLER.—Common about our camp in the Great Gulf (altitude, 3140 feet), but did not occur far below it. From the altitude of our camp as far as the shrubs extended it outnumbered the common Junco. It was very abundant through the shrubs and low matted spruces above the timber limit, but owing to lack of proper shelter did not extend higher. I saw a single specimen, at an altitude of 4800 feet, in some stunted birches (Betula papyracea minor) and dwarf willows (Salix cutleri).

Young birds were heard on July 10 apparently just out of the nest, but some young killed on July 26 had already begun to change into fall plumage. The males were in full song on July 26, but on August 11 both old and young birds had disappeared.

- 34. Dendroica blackburniæ. BLACKBURNIAN WARBLER.—Occurs at the base of the mountain; one was heard on July 11, above the second mile post of the carriage road, and another seen at 3800 feet altitude on July 8, 1886.
- 35. Dendroica virens. BLACK-THROATED GREEN WARBLER.—Common about the base, but soon becomes rare, and was not seen above 2590 feet.
- [36. Geothlypis agilis, or G. philadelphia. On July 7, 1886, I saw a bird in a damp thicket, by the side of the carriage road, at an elevation of 2640 feet, that was undoubtedly either a Connecticut or a Mourning Warbler. In its slow, listless motions and peculiar way of flirting its tail, it reminded me most of the former as seen in Massachusetts in autumn, but the latter would seem to be far more likely to occur.]
- 37. Sylvania canadensis. Canadian Warbler.—One was seen on the second mile, by carriage road, from the base of the mountain, on July 26, 1884.
- 38. Troglodytes hiemalis. WINTER WREN.—Common from base to timber limit, wherever it can find suitable damp mossy woods. The highest point at which it was seen was on the brook which runs from the Snow Arch in Tuckerman's Ravine. Altitude, 4100 feet.
  - 39. Certhia familiaris americana. Brown Creeper.—Not common

anywhere. The lowest point at which it was seen on the mountain was 3140 feet, and the highest near the tree limit in Tuckerman's Ravine, at an elevation of 4100 feet.

- 40. Sitta canadensis. Red-breasted Nuthatch.—Common at the base of the mountain, but more plenty at a higher altitude, and most abundant in the low spruce and fir forest near the limit of timber. Young birds in first plumage were killed on July 12, opposite the Half-way House. On September 2, 1884, I saw one running over the bare rocks on the summit of Mt. Clay.
- 41. Parus atricapillus. CHICKADEE.—Extends from the base to the limit of timber. None were seen in the dwarf spruces or low matted growth, and above 3000 feet it was less plenty than *P. hudsonicus*. The latter seems to replace it almost entirely in Tuckerman's Ravine above 4100 feet, and also around the Half-way House (3800 feet).
- 42. Parus hudsonicus. Hudsonian Chickadee.—The lowest point at which this bird was seen was a short distance below our camp in the Great Gulf (altitude, 3050 feet). It was rare there, however, and during our two weeks' stay we saw only five. About the Half-way House in Tuckerman's Ravine, and on the path from there to the carriage road, it was comparatively plenty, as low as 3300 feet, though nowhere an abundant bird. On September 2, 1884, a small flock was seen in the 'saddle' between Mt. Jefferson and Mt. Adams, though the dwarf spruces were not over two feet high.
- 43. Regulus satrapa. Golden-Crowned Kinglet.—Common from base to tree limit. None seen above the timber line, and everywhere equally plenty.
- 44. Turdus aliciæ bicknelli. BICKNELL'S THRUSH.—Found from an altitude of 3000 feet to the limit of stunted spruces about four feet high, 4340 feet in Tuckerman's Ravine being the highest point at which it was noted. In the neighborhood of our camp in the Great Gulf (3140 feet) it was less plenty than *T. ustulatus swainsonii*, though not to any great extent; but at 4100 feet in Tuckerman's Ravine it outnumbered it nearly three to one. Bicknell's Thrush was most abundant, however, in the woods opposite the Half-way House and for about half a mile below it. A young bird in full first plumage was taken on July 12, 1884.
- 45. Turdus ustulatus swainsonii. OLIVE-BACKED THRUSH. Occurs throughout the country at the base of the mountain, but is there outnumbered by T. aonalaschkæ pallasii; the latter soon becomes rare as a higher altitude is reached, but its place is then taken by T. aliciæ bicknelli; there is, however, an intermediate tract where T. u. swainsonii is the most abundant of the Thrushes. In short, Swainson's is the only Thrush that extends uninterruptedly from base to shrub limit, though in the highest part of its range it is less plenty than Bicknell's, and near the base not as common as the Hermit. In the intervale land along the river, T. a. pallasii takes the place held by T. u. swainsonii, and is there outnumbered by T. fuscescens. So that there are in all four distinct areas of distribution:
- i. The intervale woods and thickets along the Androscoggin River, where T. fuscescens is abundant, T. u. pallasii less so.

- 2. From the low intervale lands nearly to the second mile of the carriage road T. a. pallasii outnumbers T. u. swainsonii.
- 3. From the last point to 3000 feet altitude T. u. swainsonii was the only one seen in any numbers.
- 4. From 3500 feet to the limit of stunted firs and spruces, T. a. bicknelli is the most abundant.
- 46. Turdus aonalaschkæ pallasii. HERMIT THRUSH.—Saw nothing of the bird except on the way up the mountain by the carriage road. It was common as far as the second mile post, but none were seen beyond with the exception of a single specimen seen at an elevation of 3300 feet.
- 47. Merula migratoria. American Robin.—On July 12, 1886, a pair were seen at an altitude of 5080 fect on the Crawford Bridle Path. They may have been stragglers from the valley below, but as it was not during the migration, and there had been no storm for several weeks, it seems more likely that they had nested in some stunted firs and spruces on a southern slope near by. No others were seen.

# THE BIRDS OF THE WEST INDIES, INCLUDING THE BAHAMA ISLANDS, THE GREATER AND THE LESSER ANTILLES, EXCEPTING THE ISLANDS OF TOBAGO AND TRINIDAD.

BY CHARLES B. CORY.

[Continued from p. 51.]

### FAMILY COLUMBIDAE.

#### Genus Columba Linn.

Columba Linnæus, Syst. Nat. 1735, and Syst. Nat. ed. 10, p. 162 (1758).

### Columba leucocephala Linn.

Columba leucocephala Linn. Syst. Nat. I, p. 164 (1758).—Nutt. Man. Orn. I, p. 625 (1832).—Gosse, Bds. Jam. p. 299 (1847).—Sallé, P. Z. S. 1857, p. 235.—March, Pr. Acad. Nat. Sci. Phila. 1863, p. 301.—Bryant, Pr. Bost. Soc. Nat. Hist. XI, p. 96 (1866).—Sundev. Oefv. K. Vet. Akad. För. 1869, pp. 585, 600.—Scl. & Salv. Nom. Avium Neotr. p. 132 (1873).—Bd. Bwr. & Ridgw. Hist. N. Am. Bds. III, p. 363 (1874).—Lawr. Pr. U. S. Nat. Mus. I, p. 487 (1878).