T. a. pallasii, first January 31; next and last, Feb. 10; total, 3.

233. Merula migratoria. American Robin. — Abundant migrant; occasionally seen, but not common, in winter.

234. Sialia sialis. Bluebird. — Common migrant and rare summer resident.

Since this list was prepared last winter I am able to record the following birds from this locality, all of which (with the exception of the Ibis) no doubt occur regularly during migration in Bexar County,

- 235. Podilymbus podiceps. PIED-BILLED GREBE.
- 236. Gelochelidon nilotica. GULL-BILLED TERN.
- 237. Aythya marila nearctica. Bluebill. Scaup Duck.
- 238. Erismatura rubida. Ruddy Duck.
- 230. Anser albifrons gambeli. WHITE-FRONTED GOOSE.
- 240. Plegadis guarauna. White-faced Glossy Ibis.
- 241. Macrorhamphus scolopaceus. Long-billed Dowitcher.
- 242. Tringa bairdii. BAIRD'S SANDPIPER.

Summary.—The total number of birds I have myself observed, exclusive of Swans, Grebes, Gulls, Terns and others which have been seen but not identified, is two hundred and forty-two. Of these eighty-four are known to breed within thirty miles of San Antonio. About thirty species may be considered as common residents all the year round. Of the total number about one half occur as regular migrants. It would be a difficult matter to classify the whole, with any degree of satisfaction, as so many of the migrants are also winter or summer residents more or less numerous. Then there are the regular summer residents, which leave in the fall, and are not counted with the transients, though many of them pass on further north. Lastly there are the rare stragglers and occasional visitors which have appeared at different times of the year.

HABITS OF THE HUDSONIAN CURLEW IN MASSACHUSETTS.

BY GEORGE H. MACKAY.

OF THE various shore birds which are visitants to New England during migration the most difficult to take, on account of its extreme vigilance, is the Hudsonian Curlew (Numerius hud-

sonicus). I refer to the adult birds, the young being gentle and tame in comparison. As a consequence comparatively few 'Jacks,' as they are commonly called, are taken in New England; one of the largest receivers of game in Boston informing me that in his opinion not over a hundred, if as many, that have been shot in this vicinity, are annually brought into the market. for Nantucket and Tuckernuck Islands, as far as I am aware, not over fifteen or twenty of these birds a year, on an average, have been shot there during the past seventeen years, and the local saying, that "it does not pay to go after them," is true, they being too shy and too limited in number to make it any object, either for gain or for pleasure. During these seventeen years there have never been more than one hundred birds on an average living on the above islands each year, and for the past few years I have noticed a falling off from this number. Many of them have, I think, passed one or more summers on these islands, for they appear about the same date and in the same numbers, frequenting the identical localities, and flying from place to place in about the same manner. Thirty-five years or more ago there used to be many more than at present, and according to a reliable account there were some fifteen hundred birds, during the summer of 1833, living on the two islands.

They were apparently as shy then as now, for even then it was considered essential in order to take them to mortise a hole in the ground for concealment in the locality which they frequented or passed over, care being taken to remove the soil taken out to some distance in a wagon in order that the place might appear perfectly natural. Stands were dug in the centre of a clump of bushes, as being less noticeable. In times past, on Cape Cod, I have used a hogshead, sunken level with the marsh, from which to shoot them, but even under such conditions I never secured more than nine in one day, and that only once. The Hudsonian Curlew is a very observing bird and perceives at once anything strange and out of harmony with the natural surroundings of any locality which it has been in the habit of frequenting, and in order to get a flock up to the decoys considerable care must be exercised. Single birds or pairs will, however, decoy fairly well if they have not been harassed. These birds have a way of setting their wings stationary and sailing, when headed for the decoys, at a distance of one hundred yards or more, the flock

separating out so that there are scarcely any two birds together, and then hanging, as it were, in the air. During this time they are most carefully listening and scanning the decoys and surroundings. A movement causes them to spring up in the air several feet, and as this is generally when aim is being taken they are apt to be missed by being undershot. In order to get them as near as possible I have frequently set my decoys only a few feet to windward of my stand, as it is customary for them when heading for the decoys to keep falling off to leeward of them. They are not an easy bird to kill, being strong and powerful, and as the distance is usually great at which they are shot at, owing to their vigilance, many go off wounded and are not recovered. Should one or more be wing broken, they frequently commence calling, which causes the remainder of the flock to hover around for a short time, apparently to give encouragement to the wounded ones, and while their attention is thus absorbed they will often afford the sportsman a second shot, if he keeps concealed. Were it not for the satisfaction of getting so shy a bird, for as a rule they are but indifferent eating, there would be little inducement to waste the time necessary to obtain an occasional one. I take a few every year by getting out of my wagon into some place of concealment, when I observe a flock in the distance on the ground, and letting my companion drive around the other side and start them towards me. Long familiarity with the ground enables me to form some idea as to what course they are likely to pursue, and I have obtained more or less in this manner.

They make two notes, one a very clear, penetrating, staccato whistle, repeated four or five times in quick succession, and which is very far-reaching. It is given when flying, also when alarmed, and on taking flight. The other consists of two, low, straight whistles or notes, when a flock is alighting. Flocks also make a rolling note, lasting as long us it would take to count six or seven. The sound is similar to that produced by a boy's lead bird whistle filled with water. It is uttered when the birds approach, and are over a marsh or feeding ground, at an altitude of sixty or seventy yards. I have never heard of its being made by single birds.

The Hudsonian Curlew is a tide bird, frequenting the sand flats near the edge of the water, when they become uncovered, and resorting to the marshes and uplands when driven from the former by the in-coming tide. They feed on fiddler crabs, grasshoppers, and the large gray sand spiders (Lycosa) which live in holes in the sand among the beach grass adjacent to headlands, huckleberries, which they pick from the bushes, and beetles (Lachnosterna, Scarabæidæ), all of which are usually mixed with coarse gravel. When a flock of these birds is on the ground where they have been feeding, they become scattered, twenty-five or thirty birds covering fifteen or twenty yards' space. At such times they do not appear to be particularly active, moving about in a rather slow, stately manner, although I have once in a while seen them run. During such times I have occasionally noticed one or more birds fly away from the flock, although undisturbed. At other times I have seen a single one or a pair pass over the flock which was resting on the ground and neither pay the slightest attention to the other, which seems peculiar as I should expect the ones flying to join those on the ground. I am informed, on what I consider good authority, that by keeping concealed, the whole of a flock of young birds, when on the ground, may be killed by repeated shots without their taking flight; I have never had an opportunity of testing it, but it certainly would be impossible to accomplish such a result with the old birds. These young birds may be distinguished from the adults by their generally younger appearance and lighter colored plumage. Their legs also will bend when the older ones' will break. They are known to the local gunners as 'Blue-legs,' from their legs being lighter colored than those of the adults, and also as 'Foolish Curlew,' the latter on account of their tameness in comparison with the older birds.

When passing to and from their feeding grounds they usually fly at an altitude of about thirty yards, unless it is quite windy, when they keep within a few feet of the ground, or water, if they are passing over it. I have seen them flying only a few feet above the water during their migration south in July. As the season advances the birds frequent the beach grass near the shore, and at such times the young birds can be driven up to with horse and wagon; but rarely, if ever, can the adult birds be so ap proached. The adults appear about the fifteenth of July, the greater portion going south by the end of the month, and it seems to require from three to four weeks before all have passed.

When on migration they fly similarly to Geese and Ducks at such times. The young birds first appear about the end of August, and continue coming until into October. I have never seen these young birds in flocks on Nantucket Island, nor associated with the adults, there usually being not over five or six birds, or even less, together.

Some Hudsonian Curlews migrate along the New England coast in the spring on their way to the north, appearing as early as the fourteenth of May, and I have heard of instances when two were shot on April 20, 1891, on Muskeget Island, and twelve seen on April 23, 1891, standing on Stony Point, Nantucket Island; also one noted on April 10, 1892, at Nantucket Island. These dates are the earliest which have come to my notice. About the twentieth of May is a more probable date to expect them. When noted in the spring it is generally on very fine, warm, and clear mornings. They are seldom seen in stormy weather, but usually before it. That these birds are powerful and enduring fliers is evidenced by their long, pointed wings. It may be of interest if I quote from Mr. Robert O. Cunningham's book ('Notes on the Natural History of the Strait of Magellan,' 1871, Nassau). This gentleman writes (page 334) that he "observed on March 30, 1868, large flocks of small Curlew (Numenius hudsonicus) feeding on the mud flats uncovered by the tide." Again he mentions (page 432) seeing on Nov. 16, 1868, "an enormous flock of the small Curlew seen on former occasions": this was off Punta Arenas, Ancud Bay. From the above the inference is that the Hudsonian Curlew winters to a greater or less extent in Patagonia.

Hudsonian Curlews vary considerably in size, for I have shot specimens nearly as large as some small Long-billed Curlew (*N. longirostris*), and some but little larger than a large Eskimo Curlew (*N. borealis*). Their bills also vary in length.

As it may be of interest to hear something regarding this bird's movements in South Carolina I would add that they arrive in the vicinity of Port Royal on their northern migration, from the fourteenth of April to the middle of May, departing about the twenty-second of May, the height of abundance being about May first. In this locality they always leave the marshes about sunset, unless the tide drives them off earlier, to fly to their roosting place, some sand bank on the coast. At such times they depart in flocks of

twenty-five to three hundred birds, and late every afternoon some five thousand in the aggregate have been seen going to roost, that being about the number living in this vicinity. They come mostly from Broad River.

It may not be out of place to say a few words regarding the occurrence of the Long-billed Curlew (N. longirostris) in Massachusetts. As far as my experience shows, it is a rare bird in New England, and has been for many years. Personally I have seen but three of them taken. One of a pair (a friend shooting the other) I killed at Farmer's Pond, Swampscott, Mass., a number of years ago. A lone bird was shot about five years ago on Nantucket Island, which I saw. These examples were all taken during the summer.

I append the following notes, those from 1858 to 1876 inclusive are for Cape Cod, Mass. They were given to me in 1877 by my old shooting friend Mr. A. Denton. The others are my own, taken, unless otherwise stated, at Nantucket.

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1858, July 20.—First birds shot.
1859, July 20.—First birds shot, most killed July 20 to August 21.
1860, July 20.—First birds shot, most killed July 20 to August 21.
1861.-No birds of any account.
1862 .-- No birds.
1863, July 15 to Aug. 10.—A few shot.
1864.—No birds.
1865.—Birds scarce in July, but nine shot in August.
1866.—No birds.
1867.—Birds very scarce, scarcely any.
1868, July 24.—Shot some birds.
1869.—But few birds, a few shot in August.
1870.—No birds to speak of.
1871.—No birds in July, but some shot in August.
1872.—Birds very scarce.
1873, Aug. 16.—First birds shot.
1874.—No birds in July or August.
1875.—Very few birds in July or August, shot two in September.
1876.—No birds; very dry.
1877, July 18.—Saw several small flocks, Patchogue, Long Island, N. Y.
 " July 19.—Shot five at Patchogue, Long Island, N. Y.
 " July 20.—Shot two, Patchogue, Long Island, N. Y.
 " July 30, Nantucket, Mass.—Saw twelve, shot three.
 " Aug. 23 .-- Saw twelve, shot one.
 " Aug. 25.—Saw ten, shot one.
1878, July 25.—Shot one, saw a flock.
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- 1878, July 26.—Shot two, saw a small flock.
 - " Aug. 26.—Shot two, all I saw.
 - " Aug. 27.-Shot one.
 - " Sept. 20.—Shot one.
- 1880, July 21.-First birds shot (two).
- " July 25.—Shot four; there are two flocks living here (Nantucket), one in the east, and one in the west part of the island.
 - 1880, Aug. 1.-Shot three.
 - 1881, Aug. 6.—First birds shot.
 - " Aug. 8.-Shot one, saw ten.
 - " Aug. 9.-Shot one.
 - " Aug. 11.—Shot two, saw four or five.
 - 1882, July 26.—First birds shot (two), saw twenty.
 - " July 28 .- Shot five, saw thirty.
 - " Aug. 26.-Shot one.
 - 1883.-No record of any.
 - 1884, July 22.—First birds shot, one flock here.
 - 1885, Aug. 16.—Shot three, saw twenty-four.
 - " Aug. 23.-Shot one, saw eight.
 - " Sept. 2.—Shot one.
 - 1886.-No notes.
 - 1887, August.—Shot three, saw eight, no date.
 - 1888, Aug. 11.—Shot two.
 - 1889, Aug. 4.—Saw a flock of about thirty, shot one.
 - " Aug. 25 .- A few, shot one.
 - " Sept. 22.—Saw two and shot both.
 - 1890, July 16.-First birds seen.
 - " July 27.—Saw thirty-three.
 - " Aug. 2.—Saw eighteen, shot one.
 - " Aug. 10 -Shot one.
 - " Aug. 11.—Saw twelve.
 - 1891, April 20.-Two shot at Muskeget Island.
 - " April 23.—Twelve seen on Stony Point, Nantucket.
 - " July 13.—Saw four, the earliest I have known them.
 - " July 31.—Saw twenty, shot one.
- " Aug. 6.—Saw six five miles off Marblehead Neck, Mass., flying south.
 - 1891, Aug. 16.—About thirty living on Tuckernuck Island.
 - " Sept. 14.—Five shot.
 - 1892, April 10 (?).—One seen on or about this date.
- " June 1.—One seen flying towards the east, well up; it whistled twice.
- 1892, June 25 (?).—Seven seen on or about this date, Tuckernuck Island.
- 1892, July 17.—First bird seen, two or three heard to whistle, eastern part of Nantucket; wind west by north.

1892, July 27.—Eight seen at Quay's Point, Nantucket.

- " July 29.—One seen at west end of Nantucket.
- " Aug. 2.-Muskeget Island, Mass., saw twenty-three, shot one.
- "Aug. 3.—Muskeget Island, saw about forty in the afternoon-They come here to roost, arriving from 4 to 7 P. M. in several flocks-They depart in the morning about 4.15 A. M..
 - 1892, Aug. 4.—Sixteen seen, eastern part of Nantucket.
 - " Aug. 6.—One seen high in the air, eastern part of Nantucket.
 - " Aug. 21.—Saw two, shot one.
 - " Aug. 26 .- Saw seven, shot one.
 - " Aug. 28.—Saw one and shot it.

There were about twelve birds living between the Miacomet and Hummuck Ponds during August. They were all adult birds. They left this locality on Sept. 4.

1892, Sept. 7.—One seen and shot at Hummuck Pond.

" Sept. 16.—I heard one today at the south side of Nantucket. I should estimate that in all there had been about seventy birds living around Nantucket, Tuckerpuck and Muskeget Islands this summer.

FURTHER NOTES ON BIRDS OF THE GRAY'S HARBOR REGION, WASHINGTON.

BY R. H. LAWRENCE.

On April 29, 1892, wishing further to study the birds of the Gray's Harbor region, I went by rail to South Aberdeen, taking a steamer that evening to Ocosta, the remaining miles of track not being quite ready for traffic. Most of my time was spent in the partly cleared land back of town and on the marshes about it. I left Ocosta May 5, going to Hoquiam, and next day left the Harbor. The great body of Ducks had migrated six or seven weeks before; but I saw a few flights of Geese,—some winter in the harbor. A few Gulls were seen at a distance. April 30 I noted forty-three kinds of birds, most of them being land birds. Trochilus rufus was very common; I counted over forty that day; it far outnumbers the other Hummers. On May 5 I was quite sure I heard Empidonax difficilis in a tree near the Ocosta pier.