

the primitive purity of its Western fellow. . . . However, they are quite abundant and extremely tame, and being well protected during the greater part of the year by a special law, they are allowed to breed in security, and their ranks are but slightly thinned during the 'off months.'

156. *Another Captive Woodcock.* By H. R. *Ibid.*, XV, p. 426. — A specimen "picked up in the street" in Montreal alive.
157. *Canvas Backs in Rhode Island.* By Fred'k Skinner. *Ibid.*, XV, p. 417. — Two killed at Point Judith early in November.
158. *The Wavy of Winnipeg the Snow Goose.* By H. *Ibid.*, XV, p. 466. — Ross's Goose not known to occur in the Province of Winnipeg.
159. *Domestication of the Ostrich.* By E. B. Biggar. *Ibid.*, XV, pp. 505, 506, xvi, pp. 6, 7. An original account of Ostrich-rearing in South Africa.
160. *Report of the Commissioners of Fisheries and Game, of the State of Maine, for 1880.* Augusta, 1880, 8vo. pp. 1-54. [E. M. Stillwell and Everett Smith, Commissioners.]—Contains ten pages (pp. 33-43) devoted to the game birds of the State, including six pages relating to the introduction of the European Quail.

General Notes.

ABUNDANCE OF THE HERMIT THRUSH IN WINTER NEAR WASHINGTON, D. C.—During the winter of 1879-80, the Hermit Thrush was commonly distributed throughout the woods of the District of Columbia as well as those of Alexandria County, Virginia. As the occurrence of this species in winter is not recorded in the lists of District birds, I, at that time, considered its appearance as exceptional and due to the unusual mildness of the season.

The present winter, however, has been one of remarkable severity in this part of the country, the rivers having frozen in November, while the ground has been covered with snow, from nine to twelve inches deep, since December 20. On the 1st of January, while hunting for birds among the wooded hills which border the Virginia shore of the Potomac, I again met with this species. These hills are very wild and steep, densely covered with a growth of young trees, and intersected by numerous deep ravines, through which streams of water work their way to the river. In these secluded places numbers of birds had sought shelter from the cold, which, during the night, had been intense, the thermometer registering a temperature of fourteen degrees below zero. The first Thrush noticed was shot about ten o'clock in a clump of saplings a few yards from the river's bank. In the course of the day seven other individuals were observed. They frequented the most sheltered and tangled portions of the ravines, principally near the summits of the hills. They were silent and

solitary, and so tame that they frequently permitted an approach to within five or six yards before leaving their perch.

My brother obtained another specimen in the same locality on the 4th and reported them more numerous than on the 1st. I observed three more individuals in the woods bordering on Rock Creek on the 9th, a few hours after a snow storm.—GEORGE SHOEMAKER, *Georgetown, D. C.*

THE HUDSONIAN TITMOUSE IN MASSACHUSETTS.—December 31, 1880, I shot a Hudsonian Titmouse (*Parus hudsonicus*) in my garden at Cambridge. It was very tame and, in company with one Black-capped Titmouse, was hopping about on a low pear-tree when secured. The thermometer had been in the neighborhood of zero for several days and the Black-capped Titmice unusually numerous. This is, I believe, the third appearance of the Hudsonian Titmouse in Massachusetts.—HENRY M. SPELMAN, *Cambridge, Mass.*

ON THE RANGE OF *Lophophanes atrocristatus* IN TEXAS.—In looking over Mr. Sennett's "Notes on the Ornithology of the Lower Rio Grande" I was surprised to find that this species ranged westward up the Rio Grande only to Fort Clark, about three degrees west of Fort Brown. It also recalled to my mind that, so far as my own observations have extended, the longitudinal range of the Black-crested Tit becomes still more contracted as I traced it north, the bird being seen only in a narrow strip of cross timber in Young Co., Texas in about lat. 33° N. From Fort Griffin, which is forty miles west of Graham, in Young County, I traveled westward one hundred miles and did not see a single specimen. To the east of Graham there was a decided strip of neutral land on which I did not observe either *L. atrocristatus* or *L. bicolor*. I estimate approximately the width of this space at thirty miles. This trip was made in October, 1878. The eastern boundary of the range of this species runs from Graham southwest to Austin, Texas. This bird was not seen on the head of the Red River by Lieut. McCauley, but it ranges nearly if not quite to Red River in long. 100° W.—G. H. RAGSDALE, *Gainesville, Texas.*

THE CONNECTICUT WARBLER (*Oporornis agilis*)—A CORRECTION.—In a small collection of birds kindly sent to me for examination, by Mr. George Woolsey, is the specimen recorded as *Oporornis agilis* in Vol. V, p. 117, of this Bulletin. The specimen proves to be a female *Geothlypis philadelphia*. The bird was taken May 12, 1880, and the correction of the error becomes the more important from this fact, since it leaves *Oporornis agilis* without a spring record for southern New England.—J. A. ALLEN, *Cambridge, Mass.*

STRANGE NESTING HABITS OF A PAIR OF CHATS.—I think the following extracts from a letter lately received from Mr. C. W. Beckham of Washington, D. C., may be of interest to the readers of the Bulletin. The locality is near Ilchester, Howard Co., Maryland.

"About the first week in May, 1876, a pair of Chats [*Icteria virens*] began building in a Wren box attached to one of the pillars of the south piazza which partly fronts towards a small ravine. They seemed to be very little disturbed by the occasional presence of members of the family, but appeared to be considerably annoyed by the belligerent attentions of a pair of Wrens (*Troglodytes aedon*) who had taken up their quarters in another box on an adjacent pillar, and who were inclined to be very quarrelsome with their strange neighbors.

"They — the Chats — had been at work nearly a week, when a violent wind-storm blew the box down and thus rudely upset their domestic plans. The box was replaced in hopes that they would try it again, but their perseverance was not equal to the occasion, and they never returned. In view of the generally shy and secretive nature of the Chat, this incident of abnormal nidification seems rather curious."—CHARLES F. BATCHELDER, Cambridge, Mass.

SONG OF THE WHITE-BELLIED SWALLOW (*Iridoprocne bicolor*).—I have seen no account of the song of this species, nor, indeed, was I aware of its musical powers until the past summer. May 24, at an elevation of 8000 feet, I found a little colony just beginning house-keeping in a cottonwood grove on an island in the San Antonio River, Colorado. When at rest they uttered a peculiar chirrupy warble, bearing resemblance to a Sparrow's song in some respects, and strikingly like a Robin's in some of the half whistles.

The species breeds as high as 10,000 feet, and, I believe, always in trees.
—F. M. DREW, Howardsville, Colorado.

THE WHITE-BELLIED SWALLOW (*Tachycineta bicolor*) ON THE NEW JERSEY COAST IN NOVEMBER.—Mr. Gerard R. Hardenbergh of New Brunswick, New Jersey, tells me of the great abundance of the White-bellied Swallow at Squam Beach, New Jersey, on November 16, 1880. The Swallows had been abundant for the previous two days, though the temperature was unusually low for the time of year. They were feeding on the bayberry (*Myrica cerifera*) in such numbers that Mr. Hardenbergh secured fifteen birds at a single shot. The birds were brought to me, and at least three quarters are in immature plumage.—W. E. D. SCOTT, Princeton, New Jersey.

A NEW BIRD (*Plectrophanes pictus*) FOR SOUTH CAROLINA.—In the town of Chester, S. C., while walking, on December 1, 1880, through a stubble field overgrown with short grass, my attention was arrested by the undulating flight and peculiar chirping notes of a small bird, some thirty or forty feet in the air, flying towards me. When within about twenty yards of the place where I stood, it suddenly darted to the ground; and, when approached, ran nimbly off through the grass, stopping occasionally to watch my movements, and, finally, when too closely pressed took wing, continuing its flight, only, however, for a few yards. After being flushed several times, and apparently growing less shy, it allowed me to advance

within five or six feet. As I was without a gun, my only resort was a stone; and, much to my surprise, the bird stood, with parted bill and drooping wings, inquisitively watching my movements, while I deliberately threw the stone and knocked it over. This accidental acquisition thus added a new bird — the Painted Lark Bunting — to the fauna of the Carolinas. — LEVERETT M. LOOMIS, *Chester, S. C.*

THE IPSWICH SPARROW (*Passerculus princeps*) AT SQUAM BEACH, NEW JERSEY. — Mr. Gerard R. Hardenbergh secured on Nov. 16, 1880, a female of this species which he sent to me with other birds. — W. E. D. SCOTT. *Princeton, New Jersey.*

NOTE ON THE FIELD SPARROW (*Spizella pusilla*). — On the morning of the 8th of May, 1880, while gathering wild flowers on the banks of a running brook in a meadow I found a nest of the Field Sparrow (*Spizella pusilla*) containing four eggs. I had almost trodden upon the nest and my first impression of its location was the fluttering at my feet of the female bird as she left her charge at my too near approach. On the morning of the 12th the nest contained six eggs and as one of them was much warmer than the others I presumed it had just been laid. I visited the nest frequently and on the morning of the 19th five birds were hatched and the sixth egg chipped. Supposing the bird to have commenced setting immediately after laying the last egg the period of incubation could not have exceeded seven days — one hundred and sixty-eight hours. Continuing my visits at irregular intervals I noticed the rapidity of growth in the nestlings. The nest was not large enough to contain them all; on the 24th one of the little birds was sitting just outside but close to the nest, and on the afternoon of the 25th I found the nest empty. Reclining on the grass awhile I soon heard a faint chirp somewhat resembling the noise of young crickets, and in a few seconds several of them, and as the parents appeared with food for the little ones a hurried fluttering from various places within the space of a square rod revealed the presence of the family. The next day the young birds could fly two or three rods at a time and procure a portion of their food. Sixteen days from the commencement of incubation the young seemed to be able to take care of themselves. The adult birds appeared to become familiar in some degree with my visits and exhibited less uneasiness towards the close than at the beginning, and the male occasionally sung his richly musical strain, which resembles a combination of some of the notes of the Song Sparrow (*Melospiza melodia*) and the Grass Finch (*Poetes gramineus*).

The mean temperature of the air during incubation week — from May 12 to 19 — was 57.61°; the extremes, 46° on the 14th and 88° on the 17th; rainfall, 0.21 inches on the 13th. The mean temperature from the 19th to the 25th was 68.14°; the extremes, 52° on the 19th and 88° on the 25th; rainfall, 0.23 inches on the 23d. — ELISHA SLADE, *Somerset, Mass.*

BELL'S FINCH (*Poospiza belli nevadensis*) in *New Mexico*. — I have found Bell's Finch to be quite common in the vicinity of San Marcial,

New Mexico, during fall and winter. I met with them in small flocks on the hill-sides bordering the barren plains, where a few stunted bunches of grass, scattered weeds, the tree cactus, and thorny bushes occasionally dotted the ground. The birds were very active, running about with tail steadily erected at an angle of 45° , in an odd, easy, graceful manner which readily attracted attention. When startled they flew to the top of a bush, but quickly dropped again to the ground. I thought, as I saw them running so swiftly, stopping now and then to pick up food or occasionally to scratch the ground, that they were busily engaged in catching a small kind of beetle I had noticed, but in dissecting four that I shot December 2 and 3, 1880, I found in their stomachs only small seeds and coarse gravel. The measurements of the birds shot are as follows:—

♂ Length, 6.20; extent, 9.50; wing, 3.00; tail, 2.60; tarsus, .80; bill, .40.

♂ Length, 6.50; extent, 9.50; wing, 3.00; tail, 3.00; tarsus, .80; bill, .40.

♀ Length, 6.50; extent, 9.75; wing, 3.10; tail, 3.00; tarsus, .80; bill, .40.

♀ Length, 6.00; extent, 9.00; wing, 2.75; tail, 2.65; tarsus, .80; bill, .40.

Iris, dark brown; bill, dusky, the base of the lower mandible pale blue. Legs, dark-reddish brown; feet and claws black. — N. S. Goss, *Neosho Falls, Kansas*.

PECULIAR NIDIFICATION OF THE BOBOLINK. — During the haying season of 1854, I found in a meadow where I was at work a nest of the Bobolink (*Dolichonyx oryzivorus*) occupying the space between four stalks of a growing narrow dock (*Rumex crispus*). This nest was suspended from four points of its circumference, 90° apart, to the four stalks of the plant which grew from the same root. The bottom of the nest was about six inches above the ground. It was constructed entirely of vegetable material and consisted of two distinctly separate parts. A hemispherical cup, in one piece of coarse but neatly woven cloth, very strong and very light, was fastened to the living, growing supports by strong fibres passing around each stalk above and below a joint and firmly woven into the rim of the cup with some of the longer strings interlacing the sides. Loups passed through the bottom of the cup were attached to diagonal supports. The edge or rim of this cup was about half an inch thick at the points of bearing and about one-fourth of an inch in the quadrants. The texture just below the rim was closely woven and strongly wrought, varying from one-eighth to one-sixteenth of an inch in thickness, growing thinner gradually from the edge, and a small space in the lowest part was of open work evidently designed to secure good and certain drainage.

In this hanging basket was an elaborate lining of very soft blades of grass between which and the cup was an elastic padding. The woven cup was about five inches in diameter and five inches deep, the padding about half an inch thick, and the lining about the same thickness. The whole structure, dock and nest, swayed in every passing breeze but the nest was so strongly fastened to the stalks and the plant so securely held by the nest that it would have required a hurricane or tornado to have blown it away.

Twenty-two years afterwards, on the 28th of June, 1876, while mowing in the same meadow I found a similar nest of the Bobolink suspended from four stalks of the same species of plant growing in very nearly the same spot. The two specimens of very unusual and original nidification bore a remarkably strong resemblance and only differed to an appreciable extent in the method of hanging. In the former case—that of 1854—the stalks grew naturally at the angles of a square; in the latter—that of 1876—the stalks naturally grew at the angle of a trapezium and were drawn by the ingenious builders to the angles of a square at the points of fastening. The stalk which had to be drawn the farthest from its natural position was stoutly woven into the side of the cup, the weaving material completely covering two joints and the space between them, while in each of the others only one joint was covered and attached simply to the rim. The bottom of this nest was eight inches above the ground and the leaves of the plant overhung the structure forming a very pretty canopy.

From the fact that these two nests were found in the same field and in very nearly if not precisely the same spot and upon the same species of plant, it is probable that the avian architects of 1876 were lineal descendants of the builders of 1854. In these productions of the skill of Bobolinks we have evidences of systematic, consecutive thought; of plans well laid and equally well executed. — ELISHA SLADE, *Somerset, Mass.*

SOUTHERN RANGE OF THE RAVEN ON THE ATLANTIC COAST OF THE UNITED STATES. — In July, 1880, I found the Raven to be an inhabitant of Cobb's, Bone, and Mockhorn Islands, off the coast of Eastern Virginia, above Cape Charles. Solitary individuals were observed on one or the other of these islands almost every day during my stay of two weeks, at one time teased by Red-winged Blackbirds, at another by Black-headed Gulls, and again by Terns, as the Raven happened to approach their breeding grounds. Neither the Common Crow nor the Fish Crow were seen by me on these islands, though they were abundant along the shore of the mainland. As has been my experience elsewhere, the inhabitants did not distinguish the Raven from its smaller congeners, but by the islanders it was simply known as the "Crow." The species was easily recognized by its characteristic flight and peculiar notes, both of which are quite distinct from those of the Crows. — ROBERT RIDGWAY, *Washington, D. C.*

THE WHITE-NECKED RAVEN (*Corvus cryptoleucus*) IN NEW MEXICO. — Last fall while collecting birds in New Mexico I first noticed a pair of White-necked Ravens at Galisteo; from there on I saw the birds often, but nowhere in numbers until I reached San Marcial (on the Rio Grande, the then terminus of the railroad so rapidly being completed by the A. T. & S. Fe R. R. Co. to Guaymas and El Paso) where I was surprised to find them abundant and, in company with *C. corax*, flocking about the camping grounds of the graders and other workmen to pick up (as soon as the men were away) the scattered grains where the horses were fed, and from the offal around the tents. I counted one morning at sunrise over a hundred, and with them at least thirty Ravens.

These birds, in the dry atmosphere of the sterile plains, take the place of the Vultures, the great scavengers of the lower, more moist, and fertile portions of our country, and are therefore looked upon as friends, and not being hunted or disturbed are quite bold and easy of approach, and I had no difficulty in shooting all the specimens I wanted. I noticed, however, before I left, they began to keep well out of gunshot.

The following are the measurements of a pair of mounted birds in my collection shot at San Marcial, November 28 and 30, 1880.

♂ Length, 21.00; extent, 43.00; wing, 14.25; tail, 8.50; tarsus, 2.35; bill, 2.10.

♀ Length, 19.75; extent, 41.00; wing, 13.60; tail, 8.00; tarsus, 2.30; bill, 2.20.

Iris very dark brown; bill, legs, feet and claws, black.

The males are nearly as large as the females of *C. corax*, but readily distinguishable from that species by their more slender build; and in flight their wings appear less rounded.—N. S. Goss, *Neosho Falls, Kansas*.

REMARKABLE PERSISTENCY IN NESTING OF THE WESTERN YELLOW-BELLIED FLYCATCHER.—A pair of these birds (*Empidonax difficilis*) have been in the habit of nesting every year in the shed covering my tanks, which are in the woods some distance back of my house. The birds appeared as usual about the middle of last April and commenced building about the 28th of the month. On the 15th of May the nest contained four eggs and I took it. The birds lost no time bewailing their loss but immediately commenced another nest, but on a different beam from the first one. By the 28th of the month they had this nest finished and four eggs in it. I took this one also. Next day the birds commenced again, on yet another beam. On the 5th of June this third nest was finished and on the 10th contained five eggs, this being the only time that I ever found five eggs in a nest of these birds. Both for the sake of such an unusual set and to see how long the birds would keep on nesting I took this also. Not a bit discouraged, the birds began a fourth nest, and on the 22nd this nest contained four more eggs. I took these thinking the birds would go somewhere else this time. But, no; they started a fifth nest which, on the 6th of July, had four eggs in it, making five nests and twenty-one eggs by the same pair of birds in a little over two months. On taking this nest the birds left and I do not know whether they built again or not. Probably not, as they generally leave the country about that time.

This same persistency was shown at the same time by a pair of Black Pewees (*Sayornis nigricans*) which built twice under the eaves of the house, once under a bridge close by, and a fourth time under the eaves of the house. This last time they hatched out the brood, as I neglected to take the nest until too late to save the eggs.—JOSEPH MAILLIARD, *Nicasio, Marin Co., Cal.*

NOTES ON THE BLACK-BACKED THREE-TOED WOODPECKER AND CANADA JAY.—On the 9th of May last while crossing the high open pine

plains bordering the Black River, Cheboygan County, my attention was attracted by the peculiar cry of a Woodpecker on a tree near the road, which at a glance I saw was a new bird to me; being secured it proved to be *Picoides arcticus*. Five specimens were taken at this time, two males and three females. Again on the 14th of August, on the pine plains along the Sturgeon River, I shot a female of this species which showed conclusive evidence of having bred in the vicinity. Others were seen at this time but not secured.

August 10, 1880, while encamped on the Sturgeon River, a flock of eight or ten Canada Jays were seen early one morning about camp; one adult male and one young male of the present season were taken. Although I have passed five summers collecting through the northern part of the state, this is the first time I have met with *Perisoreus canadensis*. — CHAS. W. GUNN, *Grand Rapids, Mich.*

CAPTURE OF THE RED-BELLIED WOODPECKER (*Centurus carolinus*) IN EASTERN MASSACHUSETTS. — A female of this species was taken by Mr. William Adair in a chestnut grove in Newton, November 25, 1880. The male was seen and wounded but was not secured. — GORDON PLUMMER, *Boston, Mass.*

NOVEL NESTING-SITES OF WOODPECKERS (*Colaptes auratus* AND *Melanerpes erythrocephalus*). — Having often wondered where the above-named birds breed when seen on the open prairies forty or fifty miles from any timber the whole summer, I promised some farmer boys a suitable reward if they would find their nests anywhere outside of hollow trees and was most agreeably rewarded in being shown two nests of the Golden-winged Woodpecker and one of the Red-headed in rather queer quarters. One nest of the former was in an old wagon hub, about two feet from the ground, and hidden by a rank growth of weeds. The other was in a hollow formed by two large willow-sticks that formed part of a hay roof over a cattle-shed. The nest of the Red-head was in the angle formed by the shares of an upturned plow. In no instance was there any attempt at nest-building, the newly-hatched young ones resting on some dirt and rubbish. — G. S. AGERSBORG, *Vermillion, Dakota.*

AN UNACCOUNTABLE MIGRATION OF THE RED-HEADED WOODPECKER. — Ordinarily this species (*Melanerpes erythrocephalus*) is decidedly the most numerous of the Woodpeckers in Southeastern Illinois, while during the winter season it is often so excessively common in the sheltered bottom-lands as to outnumber all other species together, and, in fact, is voted a decided nuisance by the hunter, sportsman, or collector, on account of its well known habit of following any one carrying a gun, and annoying him by its continued chatter; at intervals sweeping before him and thus diverting attention. Being at this season always semi-gregarious, while they are of all Woodpeckers the most restless and sportive, the annoyance which they thus cause is really no trifling matter.

In the early part of October, 1879, I paid my usual yearly visit to my old home, and scarcely had arrived at the house ere my father informed me, as a bit of news which he was well aware would both interest and surprise me, that the Red-headed Woodpeckers had all migrated; that for a number of nights preceding he had heard overhead their well-known notes as they winged their way to some more or less distant region; in short, that the woods which had been their home "knew them now no more." The following day I began collecting, and though some eight miles of woodland were traversed only three specimens of this species were observed, these being young individuals and in all probability of one brood, since they were sporting together among some large black-gum trees. My stay was prolonged to the end of the month, and though I was in the woods almost every day, my excursions radiating in every direction from the town, these three lingering individuals seen the first day were all that were met with, even the same clump of gums having become entirely deserted.

This wholesale migration of a single species, when all other members of the family remained in their normal abundance, is to me wholly inexplicable. It has never occurred before, to my knowledge, in that particular region; and my father, who has lived there upwards of forty years (he can remember when the Parakeets flew in large flocks, and were a nuisance to the farmer) cannot call to mind another instance. Whether or not they have since returned, I do not know, but in all probability their absence was but temporary.

In connection with this matter, a list of the Woodpeckers found in the vicinity of Mount Carmel, arranged according to their relative abundance, may not be out of place.

1. *Melanerpes erythrocephalus*. "RED-HEAD"; "BLACK WOODPECKER". Usually most numerous in winter, when however, less generally distributed, being mainly confined to the sheltered bottoms.

2. *Centurus carolinus*. "CHECKERED WOODPECKER"; "WOODCHUCK"; "CHUCK."

3. *Colaptes auratus*. "FLICKER"; "YELLOW HAMMER." [In the fall of 1879, I shot upwards of thirty specimens of this species in order to find, if possible, an individual inclining to the "hybridus" style, but succeeded in securing only one which departed in the least from typical *auratus*,* this one having merely a very slight red suffusion at the ends of the black cheek-patches. In addition to these thirty-odd specimens, I have handled probably a hundred and fifty more shot in the same localities

* Two adult males obtained the same day (Oct. 20, are remarkable for very small size and certain peculiarities of coloration, which, however, do not tend in the least towards *mexicanus*. These two specimens compared with two from Florida in my collection measure as follows:—

				Wing.	Tail.	Tarsus.	Bill.
♂ ad.	Gilson Co.	Ind.	Oct. 20, 1879.	5.80	4.35	1.20	1.10
♂ "	"	"	" " "	6.20	4.50	1.25	1.10
♂ "	Miami,	Florida,	Feb. 17, 1877.	5.55	4.45	1.32	1.10
♀ "	"	"	" " "	5.80	4.70	1.30	1.05

(mostly by myself), and have never seen another aberrant specimen. Therefore, I estimate that of every two hundred specimens occurring in that part of the country, about one hundred and ninety-nine would be true *auratus*.]

4. *Picus pubescens*. "LITTLE SAPSUCKER"; "LITTLE GUINEA WOODPECKER."

5. *Picus villosus*. "BIG SAPSUCKER"; "BIG GUINEA WOODPECKER."

6. *Hylotomus pileatus*. "WOODCOCK"; "BLACK WOODCOCK"; "LOGCOCK." In some localities ranks as fourth or fifth in abundance.

7. *Sphyrapicus varius*. "SAPSUCKER." Rarely distinguished by the people, but sometimes, from its note, called "Squealing Sapsucker." This species is unknown in summer, and is the only one of the family that is regularly migratory.—ROBERT RIDGWAY, *Washington, D. C.*

BREEDING OF THE WILD PIGEON IN CONFINEMENT.—Seeing Mr. Deane's note in the last number of the Bulletin, I forward my experience, thinking it may prove of interest. During the spring of 1877, the Society purchased three pairs of trapped birds, which were placed in one of the outer aviaries. Early in March, 1878, I noticed that they were mating, and procuring some twigs, I wove three rough platforms and fastened them up in convenient places; at the same time throwing a further supply of building material on the floor. Within twenty-four hours two of the platforms were selected; the male carrying the material whilst the female busied herself in placing it. A single egg was soon laid in each nest and incubation commenced. On March 16 there was quite a heavy fall of snow, and on the next morning I was unable to see the birds on their nests on account of the accumulation of the snow piled on the platforms around them. Within a couple of days it had all disappeared and for the next four or five nights a self-registering thermometer, hanging in the aviary, marked from 14° to 19°. In spite of these drawbacks both of the eggs were hatched and the young ones reared. They have since continued breeding regularly and now I have twenty birds; having lost one old male and several eggs, from falling through their illy-contrived nests.—FRANK J. THOMPSON, *Zoological Garden, Cincinnati, O.*

LARGE EAGLES.—An immense adult Bald Eagle (*Haliaeetus leucocephalus*) was lately sent from North Carolina to Mr. Newton Dexter of this city, the spread of whose wings measured 8 feet. It is well known that the young Bald Eagle is larger than the adult, and Mr. Dexter and myself were discussing that point only a few days previously while examining a large Golden Eagle which had been sent in to me to mount.

I bought in November last a young female Bald Eagle, shot in New Shoreham, which measured 7 feet 3 inches, the greatest spread of wing of any I ever had. Mr. Dexter has killed dozens of Eagles and says this is the largest he ever saw.—FREDERIC T. JENCKS, *Providence, R. I.*

EAGLES ATTEMPTING THE RESCUE OF A WOUNDED COMPANION.—Having noticed a number of times mention of the fact that Gulls and other

large birds have been known to come to the rescue of a wounded companion, and believing that this same trait has never been noticed in the Eagle, I note the following account as witnessed by Paul Scheuring (Nov. 6, 1880). While hunting on the marshes of Green Bay, he discovered four large Eagles (*Haliaeetus leucocephalus*) circling around not far distant; he immediately paddled towards them and succeeded in wounding one to such an extent that it could not fly, but lay fluttering on the water. Before he could reach it the other three Eagles had flown to the assistance of the fallen bird. Catching hold of its wings the noble birds did their best to carry it off, but not being able to raise it they only managed to drag it a considerable distance, which showed their friendly intentions just as well as if they had succeeded in flying off with it.

After seeing that they could not render their wounded companion any assistance, they flew away with a wild scream, leaving the poor bird to the mercy of Mr. Scheuring, who quickly dispatched it by holding it under the water until it was quite dead. — SAML. W. WILLARD, *West De Pere, Wisc.*

RICHARDSON'S OWL IN RHODE ISLAND.—A specimen of Richardson's Owl (*Nyctale tengmalmi richardsoni*) was obtained this winter near this city. Its capture was ascertained by Mr. Newton Dexter, who saw the bird in the possession of a young lady whose brother shot it.—FREDERIC T. JENCKS, *Providence, R. I.*

THE AVOCET (*Recurvirostra americana*) IN MASSACHUSETTS.—A bird of this interesting species was shot October 19, 1880, near Lake Cochituate in the town of Natick, Middlesex County, by a local gunner. Mr. Paul S. Roberts, in whose possession I first saw it, secured and mounted the specimen. The plumage is immature, being that of "*R. occidentalis*," of authors (figured in Vigor's *Zoöl. Voy. of Blossom*, pl. xii; Gray's *Gen. of Birds*, III, pl. civ; Cassin's *Ill.*, pl. xl). My record is the third authentic one for New England, and the first for Massachusetts.*

We are indebted to Mr. E. J. Smith of Natick for knowledge of this capture, he writing the fact to Mr. C. J. Maynard, who kindly gave me the information. — H. A. PURDIE, *Newton, Mass.*

THE WHISTLING SWAN IN MASSACHUSETTS.—On the morning of the 16th of October, 1880, about 8 A.M., I observed a flock of Swans (*Cygnus americanus*, Sharp.) on their autumnal migration. The flock contained five individuals and probably belonged to one family. They were flying in a nearly due south course, in the typical triangle of 60°, at an elevation of about one third of a mile and with a velocity of about fifty miles per hour. They did not pass directly overhead but a little to the west of my place of observation; and for a few seconds their position was such that the downward motion of the left wing of each bird cast a shadow upon the

* See Merriam, *Trans. Conn. Acad.*, Vol. IV, 1877, p. 103; Brown, *Bull. N. O. C.*, IV, 1879, p. 108; Boardman, *Ibid.*, V, 1880, p. 241.

lower part of the body. The alternate shade and light thus produced upon the pure white of the breast and abdomen seen against the October blue of the sky presented a remarkably interesting view of a living panorama. Occasionally the clear, shrill whistle of the leader was sounded, and in the quiet air of the morning was heard at a distance of more than a mile.—ELISHA SLADE, *Somerset, Mass.*

THE HARLEQUIN DUCK AND THE GLOSSY AND WOOD IBISES IN SOUTHERN ILLINOIS.—In looking over the additions I made last year to my collection of birds, I find there are three that may be of interest to the readers of the Bulletin. The first I will mention is the Harlequin Duck (*Histrionicus torquatus*), a specimen of which was shot by Mr. Sybold, in a small lake in Illinois (Marion County), seven miles from St. Louis. The bird was in company with a flock of the Lesser Scaup Duck (*Fuligula affinis*).

The second species is the Glossy Ibis (*Plegadis falcinellus*), a fine male of which was shot by Mr. Sybold, February 27, 1880, at the small lake already mentioned. It was shot from a flock of three, flying northward, two of which fell but only one was secured.

The other species is the Wood Ibis (*Tantalus loculator*), which was very plentiful here last year. I counted about fifty of these birds at one place, namely, on an island in the lake already alluded to. They were resting on some high sycamores and could be seen at a long distance. About noon they circled about high in the air. They remained here throughout the month of August, but all disappeared about the 5th of September.—JULIUS HURTER, *St. Louis, Mo.*

THE WHITE-WINGED GULL (*Larus leucopterus*) IN MASSACHUSETTS.—Although this species has been included in various local lists of our birds as a rare winter visitor, there appears to be no very explicit record of its capture in this State, or at least no recent one. It may therefore be of interest to state that we procured an immature specimen off the Boston Milldam on the 31st of January, 1880. It was in company with another of the same species and from twenty to thirty Herring Gulls.—E. A. AND O. BANGS, *Boston, Mass.*

THE CASPIAN TERN IN CALIFORNIA.—The National Museum possesses two specimens of this bird from California. One of these was shot at Stockton, in December, 1880, by Mr. L. Belding, and is in immature plumage; the other came from Woodward's Gardens, San Francisco, and was obtained in exchange from another party. The label was inscribed "*Sterna regia*. Shore of California." This is also a winter specimen, but is in adult livery.—ROBERT RIDGWAY, *Washington, D. C.*

THE SHORT-TAILED TERN (*Hydrochelidon nigra*) IN NEW ENGLAND.—In former numbers of this Bulletin I have repeatedly insisted that the Short-tailed Tern is a much commoner New England species than writers have been willing to admit. This opinion has been greatly strengthened by the experiences of the past season (1880), for, in addition to a number of specimens which were received by the Boston taxidermists from various points along

the Massachusetts seaboard, I have the following specific reports from Nantucket and Rye Beach, N. H. At the former place Mr. H. S. Sweet saw no less than fifty individuals on August 22. They were flying over Miacomet Pond, and as they passed his point of observation on their way seaward, were accurately counted.

A flock seen at Rye Beach by my friend Mr. H. M. Spelman, on August 24, was nearly as large, the number of birds being estimated at about forty. They appeared on a small sheet of brackish water locally known as the "Eel Pond," where they stayed several days. They were very shy but Mr. Spelman succeeded in killing four specimens.

While it is not unlikely that their appearance in such large numbers is exceptional, there can no longer be any question that the Black Tern is of regular and not uncommon occurrence during August and September at most suitable points on the New England coast south of Portland, Maine. — WILLIAM BREWSTER, *Cambridge, Mass.*

NOTES ON LEACH'S PETREL (*Cymochorea leucorrhœa*). — Under date of July 29, 1880, Mr. Manly Hardy of Brewer, Maine, gives me the following notes on Leach's Petrel. The facts regarding incubation, are I think, new, and go to show that, as with the Phalaropes, the female Petrels have strongly imbibed the spirit of the nineteenth century.

"I have lately had quite a number of Leach's Petrels taken on the nests and find some things which are not mentioned in such books as I have access to. In the first place, the males do most, if not all, of the incubating. In a number received the 1st of June, five out of six were males. Thinking that, like Pigeons, the males might perhaps all sit at the same time, I had another lot sent me about June 15, and again, of twelve specimens seven proved to be males. A careful examination showed that while the under plumage of the females was in every case perfect, each male had on the lower part of the breast a bare spot large enough to cover the egg.

"Some writers mention their ejecting oil when *irritated*. I find that either sex can eject at least one-eighth their bulk of very pure reddish oil, and that it is given forth equally freely when the bird is killed by chloroform. I think that it is probably intended to serve as food for the young." — WILLIAM BREWSTER, *Cambridge, Mass.*

BIRDS AND WINDOWS. — The library building of the Rochester University — across the street from us — has very clear windows opposite one another, and during the year, especially in the spring and autumn, many birds are killed by flying against them. The greater part are found on the north side. Most of the birds are small; but lately two Robins and one Golden-winged Woodpecker were found among them. Curiously enough there are no English Sparrows among the slain, they probably being sufficiently acquainted with windows to avoid them. — FREDERIC A. LUCAS, *Rochester, N. Y.*

NOTES ON BIRDS RARE OR ACCIDENTAL ON LONG ISLAND, N. Y. —
1. *Mimus polyglottus*. MOCKINGBIRD. Two specimens taken: a young bird, on October 1, 1880; an adult on October 2, 1880; both captured at Fort Hamilton.

2. *Poliophtila cærulea*. BLUE-GRAY GNATCATCHER.—I shot a young bird, October 11, 1879, at Fort Hamilton. It was skipping about in a row of honey-locusts, and was exceedingly active.

3. *Melospiza lincolni*. LINCOLN'S SPARROW.—An adult female was taken October 8, 1880, by my friend Mr. J. Dwight, Jr., while we were collecting at Fort Hamilton.

4. *Zonotrichia leucophrys*. WHITE-CROWNED SPARROW.—Two specimens captured. The first, an adult female, was taken May 19, 1880; the second, a young bird, sex not ascertained, was shot October 19, 1880. Both were captured at Fort Hamilton.

5. *Stelgidopteryx serripennis*. ROUGH-WINGED SWALLOW.—I shot one at New Utrecht, April 19, 1878.

6. *Hylotomus pileatus*. PILEATED WOODPECKER.—Mr. J. Akhurst, of Brooklyn, informs me that at least three individuals of this species have been met with on Long Island. In 1842 or 1843 he saw one at what is now East New York, Kings County. Another was sent to him about thirty years ago from the eastern part of the Island; the third which he obtained two years ago, was captured near Jamaica, Queens County.

7. *Falco gyrfalco obsoletus*. LABRADOR GYRFALCON.—Mr. J. Wallace, of New York, informs me that a fine specimen of this bird, killed in the fall two or three years ago, on the north shore of Long Island in Queen's County, passed through his hands. It is now in the collection of Mr. Geo. A. Boardman.

8. *Nauclerus forficatus*. SWALLOW-TAILED KITE.—Mr. J. Akhurst tells me that about the year 1845, while collecting on the south shore of Long Island, he saw a bird of this species. He spent an entire day in endeavoring to secure it, but was unsuccessful. This I believe is its second and latest Long Island Record, the first being the capture of a specimen at Raynor South, in 1837, as recorded by Giraud in his "Birds of Long Island."

9. *Cathartes atratus*. BLACK VULTURE.—An individual of this species was found dead on Coney Island Beach a few years ago. I have not the exact date, but Mr. Akhurst is my authority.

10. *Tringa maritima*. PURPLE SANDPIPER.—I shot this bird on Swinburn Hospital Island, Lower New York Bay, Nov. 27, 1879. I had been sailing for Ducks, and the wind failing, had landed on the Island, when one of the men told me a Snipe was walking about on the stones of the "crib." It was very tame and evidently engrossed with its search for food, so it was easily secured.

11. *Tryngites rufescens*. BUFF-BREASTED SANDPIPER.—During a collecting visit I made to Montauk Point last summer, a specimen of this bird was shot there by a gentlemen on August 26, and kindly presented to me.—De L. BERIER, *Fort Hamilton, Long Island, N. Y.*

DISTRIBUTION OF BIRDS AS INFLUENCED BY INCREASE OF WATER AREA.—Many of the readers of the Bulletin are doubtless cognizant of the fact that the city of Boston has been engaged for several years past in the construction of extensive works on Sudbury River in Framingham.

for reservoirs to contain an "additional water supply" for the city. These works were completed in 1879, and the three basins were speedily filled, embracing an aggregate area of some 600 acres, with a water line constantly varying with the varying quantities drawn for consumption, as well as from natural causes. This increase of water surface has had a noticeable effect in enlarging the Avi-fauna of the locality. Being favorably situated (rather too favorably, in one respect, one-half of my farm being now under water!) I have watched this accession to our visiting list with considerable interest and diligence, and make the following memoranda as a result.

A. Species that, so far as I can ascertain by enquiry and observation (residence of 27 years), are new to this vicinity.

1. *Anthus ludovicianus*. One obtained by self, Nov., 1879; several by others.
2. *Charadrius virginicus*. One obtained by self, Sept., 1880. Two only seen.
3. *Ægialites semipalmata*. Two obtained by a friend, Oct., 1880.
4. *Ereunetes pusillus*. One obtained by self, Oct., 1880; several by others.
5. *Tringa minutilla*. Several obtained by friend, Aug., 1880.
6. *Tringa fuscicollis*. Three obtained by self, Oct., 1880. Three only seen.
7. *Calidris arenaria*. One obtained by self, Oct., 1880. One only seen.
8. *Totanus flavipes*. Several by a friend, Sept., 1880.
9. *Totanus melanoleucus*. Two obtained by self, June and Oct., 1880.
10. *Nyctiardea grisea nævia*. One obtained by self, Aug., 1880.
11. *Fulica americana*. One obtained by a friend, Sept., 1880.
12. *Fuligula ferina americana*. One obtained by a friend, Oct., 1879.
13. *Fuligula marila affinis*. One obtained by self, Oct., 1880; several by others.
14. *Erismatura rubida*. One obtained by a friend, Oct., 1879.

B. Species that have appeared in notably increased numbers.

1. *Siurus nævius*. Ratio of increase, say 3.
2. *Ceryle alcyon*. Ratio of increase, say 3.
3. *Totanus solitarius*. Ratio of increase, say 5.
4. *Tringoides macularius*. Ratio of increase, say 10.
5. *Ardea virescens*. Ratio of increase, say 3.
6. *Ardea herodias*. Ratio of increase, say 2.
7. *Querquedula discors*. Ratio of increase, say 2.
8. *Querquedula carolinensis*. Ratio of increase, say 2.
9. *Podilymbus podiceps*. Ratio of increase, say 2.

NOTE. Several individuals of a species of *Larus* (*argentatus* without doubt) have been reported at sundry times to be about the basins; none were shot, and I have never seen them, but the authority is good. As *Larus* never appeared here "before the Flood," it has a fair claim for a place in List A. The omission is on the "strict construction" principle, because the examples were seen only.—F. C. BROWNE, Framingham, Mass.

SUPPLEMENTARY LIST OF BIRDS OF THE ISLAND OF SANTA LUCIA, W. I.—A few months since I gave in this Bulletin (Vol. V, pp. 163-169) a list of the birds of Santa Lucia, numbering 56 species. Recently the Museum of Comparative Zoölogy has received another considerable lot, collected, as were the previous sendings, by Mr. John Semper. This last collection adds 12 species to the number previously recorded from the island, besides embracing quite large suites of the rarer species, including, among others, 10 examples of *Chrysotis bouqueti* and 8 of Mr. Lawrence's recently described *Chætura dominicana*. The additions to the previously published list are the following:

1. *Siurus nævius* (Bodd.).
2. *Chætura dominicana*, Lawr.
3. *Pandion haliaetus* (Linn.).
4. *Porzana carolina* (Linn.).
5. *Symphemia semipalmata* (Gm.).
6. *Numenius hudsonicus*, Lath.
7. *Querquedula discors* (Linn.).
8. *Fulix affinis* (Eyt.).
9. *Chroicocephalus atricilla* (Linn.).
10. *Sterna anglica*, Mont.
11. *Sterna fuliginosa*, Gm.
12. *Anous stolidus* (Linn.).

The collection also embraces *Tringa fuscicollis*, one of the two species previously given on Dr. Sclater's authority. — J. A. ALLEN, Cambridge, Mass.

WINTER BIRDS OF FORT WALLA WALLA, W. T. — Recent letters from Captain Charles Bendire, U. S. A., now at Fort Walla Walla, contain notes of interest on various species of birds observed during the past winter at that post, which I have his permission to make public.

While Fort Walla Walla corresponds in latitude (about 46° N.) with Northern Maine, its winter bird fauna seems to be comparable with that of Southern New Jersey. Captain Bendire enumerates as among the regular winter residents such species as the Meadow Lark (*Sturnella magna neglecta*), the Red-shafted Flicker (*Colaptes auratus mexicanus*), Brewer's Blackbird (*Scolecophagus cyanocephalus*), the Western Red-wing (*Agelaius phoeniceus gubernator*), the Western White-crowned Sparrow (*Zonotrichia leucophrys intermedia*), the Oregon Snowbird (*Junco oregonus*), the Cinereous Song Sparrow (*Melospiza fuscata guttata*), etc., besides other species less distinctively southern in character.

Captain Bendire also refers to the capture of a Snowy Owl (*Nyctea nivea*) about December 1 (1880), which, he says, is the only "instance of its capture on this coast south of Alaska" known to him. He has also taken several examples of *Scops asio kennicotti*, and finds "*Asalon suchleyi* and *richardsoni*" of not uncommon occurrence. In alluding to the predominance of the females, he says that out of ten specimens of these two forms taken only one proved on dissection to be a male. He also notes a similar prevalence of females among the Sharp-tailed Grouse. — J. A. ALLEN, Cambridge, Mass.

