

blotched and spotted, especially about the larger end, with clove and sepia brown, and lighter shades of drab and olive gray. They bear no resemblance to the known eggs of any of our Warblers. They measure .65 by .49, .65 by .49, .65 by .48, and 63 by .48 inches.

A CONTRIBUTION TO THE LIFE HISTORY OF
PORZANA CINEREICEPS LAWRENCE, WITH
CRITICAL NOTES ON SOME
OF ITS ALLIES.

BY CHARLES W. RICHMOND.

DURING a year's rambling in Nicaragua after natural history specimens in general, and birds in particular, I had many opportunities for observing this trim and neatly attired little bird in its home surroundings, not only through its abundance and perfect fearlessness, but also because the conditions favorable to its daily life existed on all sides. Upon landing at Greytown, our party cast about for lodgings convenient to the woods, and shortly decided upon a small house at the edge of town, where we spent the remainder of the day unpacking and arranging our extensive outfit. Next morning, February 1, 1892, the various members of the party sauntered forth to learn something of the surrounding country, and incidentally to collect anything of interest. My walk led me along a narrow, sandy roadway, flanked by impenetrable bushy thickets, with occasional open spaces and marshy spots, and branch paths leading to neighboring haciendas.

My first impressions of tropical bird-life were anything but satisfactory. There was no dearth of birds, but the thickets were so dense that without a machete it would have been impossible to reach them. With a single exception all the birds seen on this occasion belonged to families represented in North America by from six to nearly one hundred species. This scarcity of purely tropical forms was due mainly to the fact that

closely acquainted with the bird, I found the approach of any strange object, or sudden movement, or unusual noise was sufficient to call forth this rattling cry. It was apparently not only an alarm note, but one of communication as well. The birds did not appear to inhabit extensive swamps to any great degree, but preferred to follow the margins of the various water-courses, where ample shelter and food supply prevailed. On several occasions in December, I explored a large swamp in the rear of one of the banana plantations on the Escondido River, but did not see any of these birds, although one was heard on one of these excursions, and two old nests were found. To reach this swamp it was necessary to wade through mud knee deep for about three hundred yards, then, after crossing a short interval of water, to plunge at once into the tall grass and among the silico palms and mangroves (or mangrove-like trees), where the water was up to one's shoulders. It was easier in some places to scramble about on the roots of the mangroves above water, but more than enough for comfort, the dead roots would break, and with a tangling of trousers let a bare leg project down into the darkness below — a splendid target for tabobas and alligators. Imagine a collector floundering about in such a swamp, with tall grass and other plant forms rising several feet above the water, obscuring the surrounding country; a dense carpet of dead and decaying vegetable matter covering the surface, making progress in any direction next to impossible, especially with a gun, and withal, a hot, glaring, tropical sun beating down over everything. To these discomforts is to be added another: the sharp-pointed seeds of the grass overhead hanging down in large panicles, ready to drop at the least jar, and during the collector's progress falling in large quantities down his neck and back, causing much irritation. In the interests of truth I must add that neither tabobas nor other snakes were seen on these excursions; nor alligators, although there were said to be many of them inhabiting the place. If any Rails had been lurking in the vicinity at the times of my visits, they would undoubtedly have announced their presence under the influence of the disturbance created.

This species was pretty generally distributed along the water-courses visited by me, and was found to be particularly abundant

on the Escondido River in the vicinity of the 'I. P.' Company's plantation, its supposed greater abundance at this place being due, probably, to the fact that eight months' almost continuous collecting was carried on at this place. It was one of the characteristic birds here, but of course more frequently heard than seen. To take a canoe trip up the river or creek without seeing or hearing several would be a very unusual occurrence. It is possessed of considerable curiosity, and to this failing on its part I owe my series of over twenty specimens. Many more might have been obtained had I known at the time of its rarity in collections. Those collected were obtained more by chance than by systematic search. My plan was, usually, to take them on the return trip. Upon hearing a call from one of these birds, the boat would be allowed to drift slowly down stream, and the time employed in imitating the call, or in squeaking like a young bird, when almost invariably the Rail would appear in plain sight from its retreat in the fringe of grass close to the water's edge. If shot at and missed, the bird would not repeat its call, but 'chip' similar to the birds of the breeding season. Although their search for food usually led them through the thick grass, they were occasionally noted in full view on bare mud banks, within easy reach of shelter, however. One morning in the wet season, during an unusually heavy shower, we heard the call of a *Porzana* above the din produced by the rain falling on the corrugated iron roof of our dwelling, and from a window saw the little fellow running unconcernedly about on the planks constituting our wharf, occasionally hopping up on the gunwales of the dorys moored there, either to satisfy his curiosity or look for something to eat.

This bird rarely takes to flight, and but two or three times in my experience with it did I see it on the wing. It does not always attempt to escape capture by flight, even if hard pressed. One of the Spanish laborers on the plantation brought in a perfectly sound and healthy adult alive, which he had caught in the grass; two days later he caught another, and also a *Porzana exilis vagans* Ridgw., all of which were secured while endeavoring to escape through the grass. The single specimen obtained by Prof. Nutting at Los Sábalos¹, on the San Juan River, was taken

¹ Proc. U. S. Nat. Mus., VI, 1883, p. 408.

in the same manner. Specimens were occasionally found in traps set for small mammals along the river banks. These traps were baited with pieces of almost ripe banana, and unquestionably this fruit enters to some extent into its bill of fare, as it does into that of so many other species frequenting the plantations.

As the birds were found almost exclusively in the rank growth of tall grass on the banks of running streams, it was quite natural to think they should nest in the same places, but this did not prove to be the case.

My first nest was found May 15, and this date, I believe, marks about the commencement of the nesting season for this species. I had gone ashore early in the morning to inspect some traps set the evening before, and was returning through an open space, when a quivering of the grass in front attracted my eye. A short search revealed a globular, rather compactly made nest with an entrance in the side. It contained three eggs, apparently quite fresh. The nest was about a foot and a half from the ground, almost as high as the dense grass supporting it, and was constructed entirely of these grasses, and lined with broad leaves of the same material. The entrance was at the side, and, in this case, facing the river. The location of this nest was a grassy knoll on the edge of a lemon grove, about twenty yards from the river, and was the highest point in the neighborhood, being about forty or fifty feet above the river level. The identity of the proprietor of this nest with the little Rail did not occur to me at the time. I rather had in mind the new Meadowlark described by Mr. Ridgway a few years ago, from the eastern part of Honduras (not so very many miles away), and the resemblance of the eggs to those of a Meadowlark was quite striking. After marking the spot I withdrew, intending to return later for the eggs and get the parent bird if possible. The rainy season had begun about the first of May, and the weather was not all that a collector could desire. However, there was a period of fair weather late in the afternoon, so I went ashore again to look about, visiting a neighboring banana plantation and the lemon grove before mentioned. On this trip I found another nest similar to the one discovered in the morning. It was fully three hundred yards from the river, but adjacent to a ditch which had now become quite a respectable creek. This

nest contained no eggs, but had the appearance of a new one. Two Rails were seen in the vicinity of this nest and I then suspected they might be the proprietors. One of these birds was flushed by a dog which had followed me from a neighboring house, and flew a short distance just above the grass but soon dropped out of sight again. On my return to the river the first nest was again visited, but notwithstanding my cautious approach, a rustling of the grass told of the bird's escape. Early the following morning I approached the nest from the river side in order to command a view of the entrance, and was this time enabled to see the bird make its hasty exit and drop into the grass. There were still only three eggs in the nest, but supposing the bird to be as prolific as other members of its family in the north I left them undisturbed, hoping to return for them later. That afternoon we sailed up the river to the 'I. P.' plantation, where, in the course of several months a number of additional nests were found. Here the birds were very common, especially so along a large creek which followed a tortuous path through the plantation and entered the river at this point.

May 30 a nest was found containing five well incubated eggs. It was a grassy affair shaped like that of a Marsh Wren, but slightly larger, and lined with bits of broad-leaved grass. It was inhabited by a colony of stinging ants and was not saved. This nest was situated in a neglected, grass-grown part of the plantation, where the bananas had been to a large extent choked out. I did not see the bird leave the nest, but its 'chip' of disapproval was heard from the grass close by, and the eggs had evidently just been deserted. Thinking it might return to the nest I withdrew a short distance and stood for fully twenty minutes or more, but during this time the bird showed no disposition to revisit the nest. The 'chip' was repeated at short intervals, and from the indication of the sounds it appeared that the bird was moving about in various directions.

On July 18, after an all-day rain, I embraced the opportunity to take a short tramp through the plantation, late in the afternoon. On this occasion I found a nest of the *Porzana* close to a decaying log. It was, as usual, about a foot from the ground, but in the grass among the banana plants, differing in this last respect from

those found previously, which were in the open. I came upon this nest so suddenly that I was enabled to see the bird, as it hastily took its departure, run under the log. A few short squeaks on my part sufficed to bring the bird (or its mate, possibly,) out into plain sight. After shooting this one, which proved to be a male, another bird was heard chipping in the same place, but the most earnest squeaking failed to draw it out of hiding. The nest contained five eggs within a day or two of hatching. The last nest found by me was on August 26. This contained three somewhat incubated eggs. In construction and location it agreed very well with the others.

It did not occur to me at first why these birds located their nests on the higher ground, away from their usual haunts, but in July, at the height of the rainy season, we became accustomed to almost weekly floods in the river, the water sometimes rising fifteen or more feet in a single night. The Rails had learned the lesson of the floods and had placed their nests on high ground. Nests of the 'Red-rump' or 'Soldier-bird' (*Ramphocelus passerinii*) were occasionally found in the tall grass near the water, and these nests must necessarily have been destroyed by the first flood, but, while the Rails lived on the water's edge and knew the limit of high water, the Soldier-birds passed their time in the plantations and were less experienced in this respect. In flood time it was not unusual to find, some morning, that the quiet river of the night before had become a raging torrent, carrying uprooted trees, banana plants, huge mahogany logs, fugitive canoes, and everything that happened to be in its path, on to the sea. The current carried an unbroken string of smaller debris, composed of vines, bark, sticks, thousands of 'sea beans,' and other products of the forests, while each floating mass contained its freight of ants, spiders, tree frogs, and other forms of life.

The first immature bird seen was on June 22, when a full grown one was taken. Two days later a young one in the down was secured, and from this date on until September the young and immature birds were seen quite frequently. On the morning of July 20 while paddling up the creek, a 'chip' which I had learned to associate with the breeding birds attracted my attention, and on the bank close by saw an old bird accompanied by four downy

young only a few days old. The birds were walking gingerly about over a mat of dead grass and drift that had become lodged in a bend of the creek. With my advent upon the scene the parent manifested some little concern and sought shelter in a dense growth of bamboo close at hand from whence it tried to persuade the young to follow, but before they had fully made up their minds to do so I secured two of them, and might have obtained all had not the refractory nature of my dory prevented. These young birds uttered a subdued peeping note, similiar to that of a young chicken. Both the adult and the young had a habit of thrusting the head and neck in various directions, after the manner of a Pigeon, as if to obtain a better view of their surroundings.

The eggs of this species resemble very much in color those of the Virginia Rail (*Rallus virginianus*). They are pale creamy or buffy white with a slight gloss, spotted rather sparingly, but more thickly at the large end, with cinnamon-rufus and lavender. The longest egg in a series of twelve is 1.13 by 0.82 inches, the shortest 1.07 by 0.82 inches; the average is 1.09 by 0.83 inches. The nests are placed in the grass, about one foot from the ground, and are situated on ground above the normal high water mark. The breeding season extends from May to September, or during the rainy season, as far as my observations go. The full complement of eggs is from three to five.

The following note¹ on the egg of *Porzana albigularis*, a closely allied species, may be of interest: "Pale buff-white, sparsely spotted with small red spots, axis 1.1, diam. .9"; followed by a note by the collector, T. K. Salmon: "The nest is made of grass stalks and bents, and is round, with a side entrance, and placed amongst high grass and bushes in low swampy places, about two feet above the ground or water.—T. K. S."

In addition to the above notes on the habits, nests, and eggs of *Porzana cinereiceps*, the following descriptions and synonymy are added, with critical notes on other related species, and those of doubtful status.

An adult male (U. S. National Museum, No. 126286, Greytown,

¹ Sci. and Salv., P. Z. S., 1879, p. 546.

Nicaragua, Feb. 1, 1892, C. W. R.) agrees with the subjoined description:—

Back, scapulars, and wing-coverts, light bistre, passing gradually into clove brown on the rump and upper tail-coverts; tail and tertials almost black; primaries and secondaries similar to the back but slightly darker; under wing-coverts and axillars white, spotted somewhat obscurely with dusky, most pronounced at bend of wing and on under primary coverts. Top of head, including lores, cheeks, and malar region, slate gray; the brown of the back encroaching on the gray of the nape, and extending forward on the crown to a point almost between the eyes; throat dull white, varied on sides with pale vinaceous-cinnamon; breast vinaceous-cinnamon along median line, passing laterally into deep chestnut, darkest on sides of lower breast and on sides of neck, this color almost continuous over back of neck, there being only a narrow and indistinct dorsal line of bistre separating it; rest of lower parts white, barred with black, these black bars broadest and most conspicuous on the sides bordering the chestnut of the breast, becoming narrower towards the median line, and below on the flanks and under tail-coverts; tibia with still narrower blackish bars; some feathers of the under tail-coverts faintly tinged with chestnut; abdomen along median line white, without bars. Culmen, .70; wing, 2.82; tarsus, 1.10 inches. Iris, carmine; feet and legs, olive; bill, with a triangular apple green spot at base.

The above description will answer in a measure for all adults of this species, but individual variation is exhibited to a considerable degree, and it may be well to mention the chief differences. The most striking variation, perhaps, is in the amount of unmarked white on the breast and abdomen. In some examples this is very conspicuous, the white extending uninterruptedly from the throat to the lower tail-coverts, including the tibia. This feature appears to be due to age, and is to be noticed in specimens that have recently assumed the adult plumage. The type of *Porzana leucogastra* Ridgw. is one of this class. The several variations here mentioned, while to some extent to be accounted for by age, sex or season, are largely individual. A male bird shot July 18 is unusually white below. The head is dull gray, and there are traces of chestnut spots on one wing. It was one of the parents of a nest and five eggs.

The gray of the head is another character apparently dependent on the age of the bird, and is clearest and of greatest extent in the oldest birds. One apparently old adult, however, is without the gray on the head, this color being replaced by the umber

brown of more immature birds. In the younger adults the gray of the forehead, ear coverts, etc., is usually dull and much restricted, and sometimes entirely absent. The barring of the underparts varies considerably in different individuals, both in the width of the white interspaces and in the intensity of the black bars, but this is largely due to the condition of the plumage — whether fresh, or worn and faded — and is of little value for purposes of comparison. *Porzana alfari* Ridgw. is a specimen in fresh plumage without any line of unmarked white on the abdomen, but with deep black bars and narrow white interspaces. Two specimens of *P. albigularis* (Lawr.) in the National Museum Collection are, on the other hand, barred with dull brownish black, and at first sight appear to be quite distinct from the above specimen. A third example of *P. albigularis* from Frijole Station, Panama R. R., is heavily barred below with deep black, but the white interspaces are wider than in the specimen of *P. alfari*, otherwise it matches the latter very closely.

As to markings or bars on the wings, these may be due to sex; at any rate, in *P. cinereiceps* the two most strongly barred ones examined by me are females. These two birds have the lesser and middle wing-coverts well barred with white; some of the feathers have two bars, others only one; the feathers thus barred are almost black, and give the bird the appearance of having a black shoulder, barred with white. In a male of this species there are traces of white bars edged with chestnut on one wing, but no signs of bars on the other. Two other males have distinct spots of chestnut on the lesser and middle coverts. Of four specimens of *P. albigularis*, one has a few chestnut spots on each wing; one has slight chestnut spots on both sides, and a trace of white bars on one side; the third and fourth have both white and chestnut bars, without spots. In one of the latter examples (sex unknown), the barred feathers are not darker than usual. The specimen of *P. alfari* is entirely without bars of white, or chestnut spots.

A specimen of *P. melanophaia* (Vieill.) from Bahia has white bars on each wing. In a note on *Porzana albigularis* Messrs. Sclater and Salvin¹ write: "In these figures it will be noticed

¹ Exotic Ornithology, VII, 1868, p. 109, pl. lv.

that the wings are wholly unspotted, but it should be stated that one of the Panama skins shows black and white bars on the greater and lesser wing-coverts, and that a second has some traces of the same character. These markings would, however, probably disappear in the adult bird." In the birds examined by me it appears that immaturity cannot account for the presence of the wing bars, and two immature males before me are without any trace of them. It is probable, therefore, that age has nothing to do with this marking.

The under tail-coverts of *P. cinereiceps* are sometimes slightly tinged with rufous, thus showing its close relation to *P. melanophaia* of Brazil. One of the National Museum skins of *P. albigularis* also shows a trace of rufous on the under tail-coverts.

There is a slight difference in size between the sexes of *Porzana cinereiceps* which may be seen from the following table:—

<i>Males:</i>	Culmen.	Wing.	Tarsus.
	.70	2.82	1.10
	.73	2.90	1.26
	.71	2.85	1.21
	.71	2.83	1.17
	.71	2.95	1.19
	.65	2.75	1.10
	.70	2.95	1.19
	.70	—	1.15
	.75	2.83	1.19
	.70	2.75	1.20

Longest culmen, .75; longest wing, 2.95; longest tarsus, 1.26.

Shortest culmen, .65; shortest wing, 2.75; shortest tarsus, 1.10.

Average culmen, .70; average wing, 2.85; average tarsus, 1.17.

<i>Females:</i>	Culmen.	Wing.	Tarsus.
	.63	2.90	1.12
	.63	2.67	1.02
	.70	2.80	1.11
	.70	2.87	1.16
	.66	2.84	1.15
	.64	2.92	1.15
	.65	—	1.11

Longest culmen, .70; longest wing, 2.92; longest tarsus, 1.16.

Shortest culmen, .63; shortest wing, 2.67; shortest tarsus, 1.02.

Average culmen, .66; average wing, 2.83; average tarsus, 1.12.

The immature *P. cinereiceps* may be described as follows :—

(♂ im., U. S. National Museum, No. 128392, Escondido R., Nicaragua, Sept. 2, 1892, C. W. R.) Back, clove brown; rump, upper tail-coverts and tail, black; cervix, bistre, indistinctly edged with clove brown; pileum, smoke gray, edged with clove brown; cheeks, supra-auricular region, lores and sides of neck, light gray, rather broadly edged with a darker shade, giving to these parts a somewhat checkered appearance; throat, white, with the feathers of the sides narrowly tipped with dusky gray; breast dull grayish white, darker smoke gray on sides, the feathers with blackish tips, and an occasional chestnut feather; sides of neck similar, with individual chestnut feathers here and there; wings, similar to those of the adult but slightly darker; abdomen, white along median line, indistinctly barred with dusky black; sides, dull brownish black, narrowly barred with dull white, these bars nearly obsolete on flanks; tibia, smoke gray, with almost obsolete light bars; under tail-coverts dusky black with white bars. Wing, 2.90; culmen, .68; tail, 1.20; tarsus, 1.20 inches. Iris dark brown.

A young bird just leaving the downy stage (U. S. National Museum, No. 127052, ♀ juv., Escondido R., Nicaragua, June 24, 1892, C. W. R.) is shiny greenish black, duller below, with a grayish tinge on the abdomen. Feathers of the immature plumage are making their appearance in patches in various places. In this stage the breast is gray, the feathers broadly edged with dull black; abdomen similar, with a buffy wash; tibia drab gray; no white bars apparent anywhere on the under parts.

I am unable to say how long the birds remain in immature plumage before donning that of the adult, but as no immature birds were noted during the early spring months, it seems reasonable to suppose that they make the change sometime during the winter.

Moulting appears to take place slowly. Two specimens taken September 8 possess half-grown new primaries, and pin feathers occur on various parts of the body. Other birds in moulting condition were taken May 20, July 18, etc., showing it to extend over several months. It is probable that, in common with most other species of this region, the moult takes place during the rainy season, — from May to December.

As to the status of *Porzana leucogastra* Ridgw., and *P. alfari* Ridgw., I think there can be no doubt that the former should be placed under *P. cinereiceps*. As to *P. alfari*, it is very difficult to attempt a satisfactory disposition of the single specimen. Its brown head would indicate a position under *P. albigularis*, but

there are slight traces of gray on the lores, auriculars, and under the eyes, so that it may be after all only a *P. cinereiceps* without the normal amount of gray on the head. The locality of its capture, Las Trojas, Costa Rica, is, as I am informed by Mr. Geo. K. Cherrie, near San Mateo, in the neighborhood of the Gulf of Nicoya, on the Pacific coast. It is, then, nearer (if not actually within) the habitat of *P. cinereiceps* than of *P. albigularis*. An examination of the bird without reference to its locality would lead one to place it with *P. albigularis*, from its apparently adult plumage (*i. e.*, brown head combined with heavy black-barred underparts), rather than with *P. cinereiceps*, although, as before stated, some apparently old adults of the latter species have very little gray on the head, while as a rule the younger ones combine this character with very light underparts.

In the synonymy at the end of this paper I have placed the references to this bird under *P. cinereiceps*.

Dr. R. Bowdler Sharpe¹ considers *Porzana cinereiceps* to be only a subspecies of *P. albigularis*, and so it may finally prove to be, but before this point can be settled, it will be necessary to examine birds from the region between Panama and Costa Rica, and such material is not at present to be had. It may be said here that the type of *P. cinereiceps*, collected by Prof. W. M. Gabb, and said to be from Talamanca, Costa Rica, is identical with some specimens from the Escondido River, Nicaragua, and is, in fact, *typical* of *P. cinereiceps*, although Talamanca is not so very far from Chiriqui and Veragua, where the other species or intermediates might be expected to occur.

The synonymy of *Porzana cinereiceps* is so mixed up with that of *P. albigularis* that it may be well to give a tolerably complete list of references to each, which will be found below.

Porzana albigularis (Lawr.).

Corethrura albigularis LAWR. Ann. Lyc. N. Y. VII, 1861, p. 302 [Panama].—SCL. & SALV. P. Z. S. 1864, p. 372 (part).

Porzana albigularis SCL. & SALV. Ex. Orn. 1868, p. 109, pl. 55 (part); P. Z. S. 1868, p. 454 (part); N. Av. Neotrop. 1873, p. 140 (part); P. Z. S.

¹ Cat. Bds. B. M., XXIII, 1894, p. 337.

1879, p. 546 [*Remedios, Colombia*].—RIDGW. Proc. U. S. Nat. Mus. IV, 1881, p. 201 (part); *ibid.*, VI, 1883, p. 409 (note); *ibid.*, X, 1887, p. 111.

Aramides (Laterallus) albigularis G. R. GRAY, Hand-List Bds. 1871, p. 61, no. 10,442 (part).

Creciscus albigularis SHARPE, Cat. Bds. B. M. XXIII, 1894, p. 140 (part).

Porzana cinereiceps Lawr.

Corethrura albigularis SCL. & SALV. P. Z. S. 1864, p. 372 (part).

Porzana albigularis SCL. & SALV. P. Z. S. 1867, p. 280 [*Bluefields River, Nic.*]; Ex. Orn. 1868, p. 109 (part); P. Z. S. 1868, p. 454 (part).—LAWR. Ann. Lyc. N. Y. 1868, p. 142 [*Gulf Nicoya, C. R.*].—SCL. & SALV. N. Av. Neotrop. 1873, p. 140 (part).—RIDGW. Proc. U. S. Nat. Mus. IV, 1881, p. 201 (part).—ZELEDON, Proc. U. S. Nat. Mus. VIII, 1885, p. 114; An. Mus. Nac. C. R. I, 1887, p. 131.

Aramides (Laterallus) albigularis G. R. GRAY, Hand-List Bds. 1871, p. 61, no. 10,442 (part).

Creciscus albigularis SHARPE, Cat. Bds. B. M. XXIII, 1894, p. 140, (part).

Porzana cinereiceps LAW. Ann. Lyc. N. Y. XI, 1875, p. 90 [*Talamanca, C. R.*].—RIDGW. Proc. U. S. Nat. Mus. I, 1878, p. 252; *ibid.*, VI, 1883, p. 409; *ibid.*, X, 1887, p. 111.—ZELEDON, Proc. U. S. Nat. Mus. VIII, 1885, p. 114; An. Mus. Nac. C. R. I, 1887, p. 131 [*Pacuare, C. R.*].—RICHM. Proc. U. S. Nat. Mus. XVI, 1893, p. 528 [*Rio Frio, C. R.*; *Greytown, and Esccondido R., Nic.*].

Creciscus cinereiceps SHARPE, Cat. Bds. B. M. XXIII, 1894, p. 141 (note), p. 337.

Porzana leucogastra RIDGW. Proc. U. S. Nat. Mus. VI, 1883, p. 408 [*Los Sábalo, Nic.*]; *ibid.*, X, 1887, p. 111.

Creciscus leucogaster SHARPE, Cat. Bds. B. M. XXIII, 1894, p. 140 (note).

Porzana alfari RIDGW. Proc. U. S. Nat. Mus. X, 1887, p. 111 [*Las Trojas, C. R.*].—ZELEDON, An. Mus. Nac. C. R. I, 1887, p. 131.

Creciscus alfara SHARPE, Cat. Bds. B. M. XXIII, 1894, p. 141 (note).

THE TERNS OF MUSKEGET ISLAND, MASSACHUSETTS.

BY GEORGE H. MACKAY.

MUSKEGET ISLAND lies south of Cape Cod, and is situated in the southern portion of Nantucket Sound. It is about five miles southeast of Martha's Vineyard, and forms the westernmost of the