

FURTHER NOTES ON NEW BRUNSWICK BIRDS.

BY P. B. PHILIPP AND B. S. BOWDISH.

Plates V-VI.

RENEWED field work by the authors during the summers of 1917 and 1918, in the same region of northern New Brunswick as that dealt with in previous papers,¹ has resulted in the securing of certain additional data concerning the bird life of that region, that would seem to justify publication.

Since in our previous papers definite locality was not given, it may be here stated that all records, in previous papers as well as the present one, refer to Northumberland County. A large part of this region is wild and undeveloped. Township boundaries are difficult to locate, and it is therefore impracticable to attempt more detailed locality references.

In 1917 the authors were in the field from May 16 to July 2. Mr. T. F. Wilcox was a member of the party from June 15 to 30, and Messrs. George H. Stuart, 3d, and Samuel Scoville, Jr., from June 18 to 25. Earlier arrival in the field was undertaken for the purpose of studying breeding habits of the early nesting species, but the season here, as elsewhere, was extremely backward, and nesting dates by no means normal. Snow banks lay everywhere in the woods, often to a depth of five and six feet, at the time of our arrival, and lingering snow was seen in the woods as late as June 5.

Field work for 1918 occupied the period between June 11 and July 1. The season was apparently a little earlier than normal. Mr. George H. Stuart, 3rd, was again a member of the party from June 15 to 24, and Dr. Henry F. Merriam from June 16 to 29.

Additional Birds Noted.

The last two seasons' work has added twenty-three species to our previous list of birds observed, as follows:

Rissa tridactyla tridactyla. KITTIWAKE.—A flock of about twenty of these birds was observed on a point of beach, June 2, 1917.

¹ The Tennessee Warbler in New Brunswick, Auk, January, 1916, pp. 1-8; Some Summer Birds of Northern New Brunswick, Auk, July, 1917, pp. 265-275.



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1. NEST OF THE CAPE MAY WARBLER.
2. WILSON'S SNIPE ON ITS NEST.

***Sula bassana*.** GANNET.— Considerable numbers noted off the beaches, June 2, 1917.

***Clangula clangula americana*.** GOLDEN-EYE.— On our arrival, June 11, 1918, a nest containing ten eggs, mostly pipped and about hatching, was shown to us by a young man living near by. The eggs reposed in a beautiful and profuse bed of down, at the bottom of a hollow about two feet deep and eight inches in diameter, in the broken top of a yellow birch, dead, save for a thin, live outer shell, standing on a fence line between woods and an open field.

***Oidemia deglandi*.** WHITE-WINGED SCOTER.— Two noted May 17, 1917.

***Branta canadensis canadensis*.** CANADA GOOSE.— Three noted, May 16, 1917, and a few thereafter, two being seen as late as May 28.

***Nycticorax nycticorax naevius*.** BLACK-CROWNED NIGHT HERON.— Two birds noted June 22, 1918, and on several subsequent dates. Doubtless breeds sparingly.

***Philohela minor*.** WOODCOCK.— The omission of the Woodcock from our previous list of birds noted was an oversight, as one of these birds was observed June 6, 1916. One was also noted June 14, 1917. Both records were made at the same place, a muddy island, covered with willow and alder bushes, and this was the only locality where Woodcocks were seen.

***Pisobia minutilla*.** LEAST SANDPIPER.

***Ereunetes pusillus*.** SEMIPALMATED SANDPIPER.— One or both of these sandpipers, in a flock numbering some thirty individuals, were observed, May 20, 1917, and on other occasions, up to May 27.

***Totanus flavipes*.** YELLOW-LEGS.— Two noted, May 17, 1917.

***Canachites canadensis canace*.** CANADA SPRUCE PARTRIDGE.— A brood of half grown young noted, June 21, 1917. Reported as formerly abundant, this bird appears to be now rather scarce in this region.

***Zenaidura macroura carolinensis*.** MOURNING DOVE.— One secured, in scant scrub brush, on beach, May 17, 1917.

***Circus hudsonicus*.** MARSH HAWK.— One noted, May 18, 1917, and on one or two subsequent occasions.

***Falco columbarius columbarius*.** PIGEON HAWK.— One observed, May 16, 1917.

***Falco sparverius sparverius*.** SPARROW HAWK.— Several noted during 1917 visit. One observed entering old Flicker excavation, May 18, 1917, was doubtless nesting there.

***Archilochus colubris*.** RUBY-THROATED HUMMINGBIRD.— A nest containing two fresh eggs was found on June 23, 1917, built on a drooping dead limb of a spruce about twenty feet from the ground, in open woods, and another, in similar situation, on June 25. We met with Hummingbirds quite commonly, both in 1917 and 1918.

***Empidonax trailli alnorum*.** ALDER FLYCATCHER.— Common on some of the mud flats and islands where suitable alder growth occurs. Doubtless breeds.

Empidonax minimus. LEAST FLYCATCHER.— Found breeding quite commonly on mud flats and islands, among willow and alder growth. Two nests, each containing four fresh eggs, were found, on June 15, 1918.

Loxia curvirostra minor. CROSSBILL.— A flock of twenty or thirty birds noted, on June 25, 1917, and a similar flock on June 18, 1918.

Plectrophenax nivalis nivalis. SNOW BUNTING.— Several noted, May 16, 1917.

Spizella monticola monticola. TREE SPARROW.— Two were seen on May 16, 1917, and a few on May 28.

Vireosylva olivacea. RED-EYED VIREO.— Quite common in suitable localities in 1917 and 1918, where, for some reason, it had not been previously noted.

Dendroica tigrina. CAPE MAY WARBLER.— Two males and a female were noted on June 3, 1917, and birds of this species were observed not uncommonly thereafter throughout that season. In 1918 they were found quite common and well distributed in all suitable localities. Four nests were located, position and general conditions being remarkably uniform, and agreeing also, in the main, with the nest found at Lake Edward, Quebec, by Dr. Merriam, in 1916.¹ They were in rather high spruce trees, within two or three feet of the extreme top, usually as near the top as suitable site and cover could be secured. All were built in very thick foliage, against the main stem of the tree, resting lightly on twigs and foliage, but fairly secured thereto by webs, and were entirely invisible from the ground, in every case.

On June 22 the first nest held six eggs, two of which were without incubation, the other four being fairly well incubated. The female sat closely until the climber was within two or three feet of the nest, when she dropped almost perpendicularly to the ground. No pounding, jarring or shaking of the tree served to cause her to leave the nest, even for a moment. This nest measured $4\frac{1}{2}$ by $3\frac{3}{4}$ inches outside diameter, and $2\frac{1}{4}$ inches inside diameter; $2\frac{1}{2}$ inches outside depth, and $1\frac{1}{2}$ inches inside depth. Exteriously it was composed of green moss from dry woods ground, interwoven with fine spruce twigs, dry grasses, a few bits of club moss and vegetable down; interiorly of fine dead grass, with a thick lining of hair, feathers and a little fur, the neat and smooth felting of the lining forming a conspicuous feature of differentiation from nests of Blackpoll and Myrtle Warblers. This nest was about thirty-five feet up, in a thick foliated spruce tree, standing in a semicircular opening in the woods, beside a public road, from which, save for the thick foliage in which it was situated, the nest would have been plainly visible. The six eggs measured: $.65 \times .49$, $.66 \times .48$, $.66 \times .50$, $.65 \times .47$, $.66 \times .47$, $.56 \times .42$. They were white in ground color, well marked with blotches, spots and specks of reddish-brown, and a few fine dots of very dark purple or black.

On June 26, the second nest, about thirty-five feet up in a thick, medium-

¹ Nesting of Cape May Warbler at Lake Edward, Quebec, Auk, October, 1917, pp. 410-413.

sized spruce, standing on the border of woods and clearing, contained six fresh eggs. Both nest and eggs were very much like those described by Dr. Merriam.

On June 29, the third nest held five eggs, which seemed to be the complete laying. This nest was about forty feet up, in a thick spruce, in a fairly open spot in the woods, near a trail. Nest and eggs were much like the second.

The fourth nest held six fresh eggs on June 29. It was about forty feet up, in a thick spruce, in fairly open woods. The material was the same as in the first, with the addition of several dead pine needles in the exterior. It measured $3\frac{3}{4}$ by $3\frac{1}{4}$ inches, outside diameter, 2 inches inside diameter, 2 inches outside depth, by $1\frac{3}{4}$ inches inside depth. The eggs measured $.67 \times .53$, $.65 \times .52$, $.68 \times .53$, $.66 \times .53$, $.67 \times .53$, $.67 \times .52$. In color they were much like the second and third sets, and the one described by Dr. Merriam.

It appears to be characteristic of many of these birds that the nest tree selected is fairly openly situated, at least as to one side, although this is not always the case, since other pairs watched were very evidently nesting in trees where it was much more difficult to detect them. The extent to which our experience in the case of the four nests located in 1918 agreed with that of Dr. Merriam in 1916, tends to suggest that nesting conditions as he found and described them are more typical of the Cape May Warbler than those previously described, at least in the localities where we studied them.

Dendroica aestiva aestiva. YELLOW WARBLER.—One seen, June 13, 1917.

Supplementary Notes.

Notes on species treated in our previous paper are amplified by the results of the past two seasons' work as follows:

Gallinago delicata. WILSON'S SNIPE.—A nest with four eggs, well advanced in incubation, was found on June 16, 1917, and with some difficulty the bird was photographed from a crude and very imperfect blind of cedar branches, despite almost continuous showers. Another nest with four eggs, incubation one half or more, was found in the same bog, June 12, 1918. Only the single pair of birds was positively ascertained to inhabit this bog, and none were observed elsewhere in the region.

Ægialitis meloda. PIPING PLOVER.—In 1917 nesting had commenced by May 28, when one nest with one egg and another with two eggs were found. A total of twelve nests with full complements of four eggs each were observed during the season. Nesting was already well under way when we reached the locality on June 11, 1918, four nests with four eggs each being observed that day, and twelve more with complete layings, four eggs each, some well incubated, on June 13. A total of eighteen nests with complete sets of eggs was noted during the season.

Asio flammeus. SHORT-EARED OWL.—A nest containing six well incubated eggs was found, June 11, 1918, on the same beach where the two nests with young were located on June 19, 1915, and within a few feet of the site of one of the earlier nests.

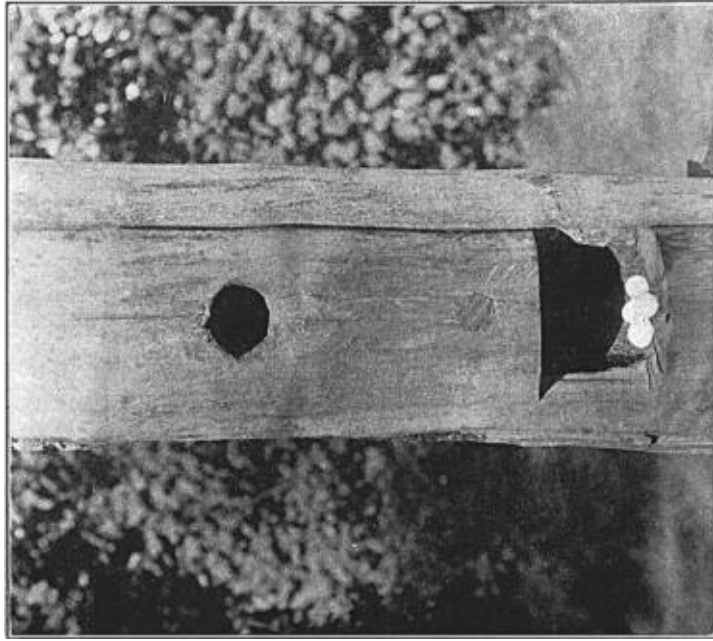
Dryobates villosus leucomelas. NORTHERN HAIRY WOODPECKER.—A nest with young was found in a dead maple stub in a burnt barren, on May 29, 1917. On May 30 of the same year another nest about fifteen feet up in a dead maple stub in a similar situation, contained four eggs, very slightly incubated. On June 9, 1917, a third nest in a cedar telephone pole beside a public road was examined. It was at a height of about nine feet; cavity 14½ inches deep; entrance 2½ inches in height by 2¼ inches in width. This nest contained four nearly fresh eggs.

Picoides arcticus. ARCTIC THREE-TOED WOODPECKER.—One of the objects of the early visit to New Brunswick in 1917 was further investigation of the nesting of this species. These woodpeckers, however, appeared to be markedly affected by the general lateness of the season, and at the time of our arrival it is evident that some of them had not commenced digging nest excavations. On May 22 a nest hole was located in a dead maple stub, near the edge of a large burnt barren, and a short distance from the edge of mixed woods. The male was in the cavity at the time of this visit, and the female came to the stub during the time of our stay. On the following day we again visited the nest stub, and with a large auger bit "tapped" the nest hole, finding that no eggs had yet been laid. The male was again in the hole and remained in it until tapping operations were well under way. The tap hole was carefully plugged, and plug and surrounding surface rubbed with soft, rotten wood. This nest was again visited on May 30, on which occasion the male was found sitting on four eggs, incubation having just commenced. The eggs having been removed, the plug was replaced, and while we were still close to the stub the male re-entered and had not emerged when we lost sight of the stub, as we left the locality. During this visit the female was not seen. It may be surmised that when she returned and discovered the condition of affairs, her worthy spouse had some explaining to do.

On June 19 we again visited this nest and found the male looking out of the entrance, as we approached. The nest was found to contain five well incubated eggs. The birds did not again use the nest, although the plug was replaced.

On May 25 we succeeded in "lining" the various flights of a watched female bird, to where a nest excavation was well under way in a live balsam with dead heart, some two hundred feet into the mixed woods, from the edge of a clearing covered with stubs and small second growth. This excavation was at a height of only about four feet.

On June 6 the female bird was found sitting on three slightly incubated eggs. No difficulty was experienced in getting all the photographs desired of this bird about the nest entrance and looking out of it: in fact it was much more difficult to prevent her entering too quickly, even while



ARCTIC THREE-TOED WOODPECKER AND NEST.

we were operating at a distance of ten feet, it often being necessary for one to stand beside the tree, and even tap on it, to detain her.

The nest located on May 22 was at a height of about ten feet. The cavity measured $10\frac{1}{2}$ inches from the lower edge of entrance to bottom. The entrance measured $1\frac{3}{8}$ inches in height and $1\frac{1}{4}$ inches in width. The first set of four eggs measured: $.99 \times .77$, $1.01 \times .79$, $.99 \times .79$, $1.00 \times .76$; the second set of five eggs measured: $.99 \times .80$, $.97 \times .77$, $.98 \times .80$, $.95 \times .76$, $.97 \times .80$.

Within some five hundred feet of the nest that was located on May 25, there was a nest hole of the year before, quite possibly having belonged to the same pair of birds. It was also in a live balsam with a dead heart, at a height of about eight feet. One old nest hole, which quite evidently belonged to this species, was only about two feet from the ground. On June 6 a nest hole about one half completed, was found in a live balsam with dead heart, in open, mixed woods. For some reason this had been abandoned. Some four or five additional pairs of these birds were observed during the first two weeks of June, but further nests were not located.

The somewhat limited data secured seem to give prominence to several facts in the nesting of this woodpecker in the region under consideration. Apparently nest sites are selected indiscriminately, in dead stubs in open cleared ground or burnt barrens, and in the woods, where nests are often in dead-hearted live trees. The birds have a remarkably strong attachment for their nests, as evidenced by re-laying in nest holes from which eggs had been removed, and their disregard of the immediate presence of intruders. The male evidently performs his full share of the work of incubation, as well as care of young. New nest holes are apparently dug each year, and these may not be in the immediate vicinity of nests of the previous year. The site selected tends to be low, only one nest having been noted at a height of over ten feet, while one, as noted, was as low as two feet. Entrances to nest holes are strongly beveled at the lower edge, forming a sort of "door-step," and more or less at sides and even top. While this is true in some cases with the Northern Hairy and some other woodpecker excavations which we have examined, it has not proved so frequent or pronounced. With experience, one can usually identify the nest hole of this species with comparative certainty, by this one feature.

Tyrannus tyrannus. KINGBIRD.—At least one pair noted each year. A nest containing a full complement of three eggs on July 1, 1918, was built in a dead spruce on a fence line.

Nuttallornis borealis. OLIVE-SIDED FLYCATCHER.—A nest found partly built, on a horizontal branch of a balsam, about thirty-five feet from the ground, in open woods, on June 19, 1918, contained two eggs on June 26. As no more eggs had been laid by June 29, it appeared that this was the full set.

Empidonax flaviventris. YELLOW-BELLIED FLYCATCHER.—Additional nests were found, one on June 21 and two on June 27, 1918, each containing four eggs, one of the two latter sets being well incubated, the others fresh.

Euphagus carolinus. RUSTY BLACKBIRD.— A nest with five young, two or three days old, was found June 13, 1917. It was built about four feet from the ground, in a scrubby spruce, in scanty growth of spruce and tamarack, in boggy ground. Exteriorly it was composed of scrubby spruce twigs, with a little usnea moss in the foundation, and lined with dry grass, some of which retained green color. The female was brooding when the nest was found, and remained on the nest until approached within three feet. It was evident that several pairs of birds were breeding in the general vicinity, as was also the case in 1918.

Spinus pinus. PINE SISKIN.— Nesting was just commencing at the close of our 1918 visit. One nest contained three eggs on July 1, and two others were just being completed.

Melospiza lincolni lincolni. LINCOLN'S SPARROW.— More common than our earlier experience indicated. In 1917 six nests with four eggs each were located, June 14, 16, 18, 19, 20 and 27. In 1918 a nest with four and another with five eggs were located, June 11, and another with five eggs, June 12.

Vireosylva philadelphica. PHILADELPHIA VIREO.— In the abnormal season of 1917, no signs of nesting by these birds were noted on a visit on June 14, to the locality where they were found in 1916, though two or three of the birds were observed. In 1918, however, six additional nests, five containing four eggs each, and the sixth three (which was apparently the full laying), were located. These corresponded closely with the nests found in 1916, as to locality, situation and material, the dates, however, averaging a little later, two nests containing fresh eggs as late as June 27.

Vermivora peregrina. TENNESSEE WARBLER.— The seasons of 1917 and 1918 considerably amplified our experience with the breeding of these birds. In 1917 nine nests with complete layings of eggs were examined, as follows: June 23, five eggs; June 25, six eggs; June 27, two nests with six eggs each; June 29, two nests with six eggs each; June 30, five eggs, seven eggs; July 2, six eggs. The first nest found in 1918 was June 16, six slightly incubated eggs, another on the same date containing five. Nests with partially incubated eggs were found as late as June 30, on which date, also, the second nest containing young was noted, eggs previously found having hatched by June 29. In 1918 no less than thirty-four nests were found. Of these three were either deserted or not visited later; one contained only three eggs, which the bird assiduously incubated; one contained four eggs; eight contained five eggs each; eighteen contained six eggs each; three contained seven eggs each.

The experience of the past two years has demonstrated that while the boggy ground nesting, previously described, is the really typical and by far the most common form, not a few of these birds nest on higher and dryer ground. One such nest, found June 24, 1918, was well up on a steep hillside, in rather open woods, on fairly dry ground, utterly devoid of moss and grass cover. It was built among a thick growth of dwarf dogwood, and under a tiny, crooked stemmed maple sapling, very well concealed,

and was rather more substantially built than the average nest of this species. In the light of much added experience, our earlier statement that the usual number of eggs is five is subject to correction, since it appears that more full layings of six eggs are to be found than of five. In most respects, however, data acquired in the past two years substantiate that secured in 1915 and 1916, and previously recorded.

Compsothlypis americana usneæ. NORTHERN PARULA WARBLER.—While no nest was located, birds were seen on various occasions, both in 1917 and 1918, and in the latter year a male in full song was always to be found about a particular group of trees, where the abundance of usnea moss afforded innumerable ideal nesting sites.

Dendroica castanea. BAY-BREASTED WARBLER.—This species appeared to be much more abundant during the past two summers than in either of the two preceding. Notwithstanding this abundance, in 1917 only five nests with complete layings were found, two of five, two of six, and one of seven eggs. The earliest was not complete until June 29, and it is probable that many nests were still unbuilt at the time we left. In 1918 we examined a total of thirty-eight occupied nests, complete layings being about equally divided between five and six eggs, with one exception, in which case a bird was incubating three eggs. The first nests, with five and six eggs, were found on June 15, and nests were still being built when we left on July 2. No nests with seven eggs were found this year.

Dendroica virens. BLACK-THROATED GREEN WARBLER.—A nest containing *five* well incubated eggs was found in a little cedar, about four feet from the ground, June 20, 1918.

Dendroica palmarum hypochrysea. YELLOW PALM WARBLER.—In 1917 a total of seven nests was found; June 19, four eggs; June 20, four eggs; June 21, four eggs, five eggs; June 23, four eggs; June 25, four eggs; July 1, five eggs. Lateness of season was more apparent in the nesting of this species than, perhaps, any other. In 1918 the birds appeared less numerous than in previous years, and the only nest located was one containing five newly hatched young, June 12. By the 19th these birds had left the nest.

Setophaga ruticilla. REDSTART.—Two nests with *five* eggs each were observed in 1918, June 19 and 24.

Penthestes hudsonicus littoralis. ACADIAN CHICKADEE.—On June 5, 1917, a nest was found, nearly or quite completed, in a natural cavity in a cedar stump, about two feet from the ground. On June 16 the bird was sitting hard on five eggs, and was persuaded to come out only with great difficulty. As she laid no more, this was apparently her full laying. On June 24 a nest containing seven quite small young was found in a knot hole in a small live spruce. On June 13, 1918, another nest with young was found in a cavity in the top of a dead and rotten stub, about ten feet from the ground. This nest was very near the site of the 1917 nest with young, very possibly belonging to the same pair of birds.

SPRING ARRIVALS.

Field work in 1917 was commenced at a sufficiently early date to permit of the noting of the arrival of a number of species, and it was further possible to obtain from an experienced guide, who has been with us in all of our field work in this section, closely approximate arrival dates for a number of additional species which had preceded us. While this information is incomplete, migration data from the region in question are not so ample as to preclude a certain amount of value attaching to the publication of the records we thus obtained.

Dates prior to May 16 were, of course, obtained from the guide, and while not exactly accurate, are very nearly so. Figures following dates indicate the number of birds noted on the date of arrival.

- Great Black-backed Gull, June 2 (2).
- Kittiwake, June 2 (considerable numbers).
- Common Tern, May 28 (6).
- American Bittern, May 19 (1).
- Great Blue Heron, June 2 (2).
- Least or Semipalmated Sandpiper or both, May 20 (20) (?)
- Spotted Sandpiper, May 20 (2).
- Black-bellied Plover, May 26 (30-40).
- Chimney Swift, June 6 (10).
- Kingbird, June 16 (2).
- Olive-sided Flycatcher, May 29 (1)
- Bronzed Grackle, about May 7.
- Purple Finch, May 25 (considerable numbers).
- Pine Siskin, June 13 (6).
- Lincoln's Sparrow, May 27 (2).
- Chipping Sparrow, May 21 (1).
- Junco, about May 4.
- Scarlet Tanager, June 6 (1 male).
- Cliff Swallow, May 31 (6).
- Tree Swallow, May 16 (3).
- Bank Swallow, June 2 (6).
- Blue-headed Vireo, May 27 (2).
- Black and White Warbler, May 27 (1).

Nashville Warbler, June 7 (5).
Tennessee Warbler, June 1 (3).
Northern Parula Warbler, June 18 (3).
Cape May Warbler, June 3 (3—2 males, 1 female).
Yellow Warbler, June 13 (1).
Myrtle Warbler, May 18 (1).
Black-throated Blue Warbler, May 31 (1).
Magnolia Warbler, May 27 (3).
Bay-breasted Warbler, June 5 (1 male).
Black-poll Warbler, May 27 (1).
Blackburnian Warbler, May 31 (1 male).
Black-throated Green Warbler, June 5 (2).
Yellow Palm Warbler, May 18 (2).
Ovenbird, May 31 (3).
Wilson's Warbler, June 10 (6).
Canadian Warbler, June 11 (1 female).
Redstart, June 3 (1).
Red-breasted Nuthatch, May 31 (2).
Olive-backed Thrush, May 18 (1).
Hermit Thrush, May 18 (1).
Robin, about May 4.

WINTER BIRDS OF EAST GOOSE CREEK, FLORIDA.

BY R. W. WILLIAMS.

FROM November 16 to 24, 1917, I was a guest at the hospitable house of my friend, George E. Lewis of Tallahassee, Florida, at East Goose Creek, Wakulla County, in that State. We were there for a few days' duck hunt and to enjoy the pleasures and recreations of the sea coast. I took advantage of the opportunity to make some observations on the birds there as well as in the woodlands, prairies, and occasional small fields within two miles.

East Goose Creek is the designation of a small portion of the shore and salt marsh of a quiet bit of more or less land-locked and