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PURPLE MARTINS AT ST. MARKS, FLORIDA

BY JOHN WILLIAMS

St. Marks, Florida, is situated on the St. Marks river, about seven miles up from the open gulf. But little timber appears in the intervale, and save for the lighthouse and two or three small buildings close about it, our village offers the first resting place for these birds on their return in the spring. Our river at the gulf presents a broad opening of a mile or more in width, making an especially plain landmark for birds coming into land, after an ocean trip. There seems to be little doubt that the "Martins" come to us directly from Cuba, Central America or lower Mexico, as on their first appearance they come up the river from the south and frequently show signs of extreme exhaustion when they arrive.

The following notes extend over the seven seasons from 1912 to 1918, both inclusive, but are noticeably irregular and incomplete, due in the main, I trust, to lack of spare time from regular occupation.

During the seasons of 1912 and 1913 there was but a single nesting box for the martins in our little village and it was a four-compartment, scant affair that was rapidly passing into decay, and threatened early dissolution but, as will appear, was evidently "Home Sweet Home" to certain members of the family and furnished most cherished memories. In the spring of 1912 two pairs of birds reared young in this box, and it was thought every high

gale would surely bring down the domicile, but the winds were tempered; and in 1913 again two pairs of birds were brave enough to risk the family cares within such shattered, crumbling walls; and again the brood was reared and departed notwithstanding the dropping floor, gaping doors and leaking roof.

A civic awakening came to our town in the late winter of 1913-14 and several boxes were prepared for the use of the martins immediately following their appearance in mid-February. The first arrival in that year was of five birds about 5:00 p. m. on February 4, and ten more came by 9:00 a. m. of the following day.

In my yard I had erected a pole carrying a six-compartment box, three on either side, with cross arms beneath which suspended four long-necked gourds, afterwards increased to eight, which were evidently of too small a capacity for the comfort of the birds, for while often used for sleeping quarters, with the exception of the season of 1917 were never used for nesting.¹

These pioneer birds did not tarry with us and two others came to my pole February 21. These were a male and a female and came flying slowly from the south about 6:00 a. m. directly to my box, the female alighting on the top of the pole, the male on a cross-arm. Both seemed exhausted and scarcely turned their heads during the period of over a half-hour they were closely watched. The tips of their wings were dropped below the body showing white of underparts above the upper border of the primaries. No

¹A gourd of proper size and shape, carefully suspended, furnishes one of the very best permanent nesting sites for the Purple Martin. Some of my original gourds still hang suspended (Nov. 1, 1918) and have weathered all storms since February, 1914. A straight necked gourd, with a body at least eight inches in diameter, should be used: By piercing the upper end of the gourd an inch or more below the end and passing a stout galvanized or copper wire through, a convenient hanging device is formed that will last for years. Gourds have been so used through the South for generations.

alert active movements were noticed. They had departed at 7:30 a. m.

A new box had been erected near the old one that had so long served the birds of this district. On February 24 three birds came to this old box. They were seen first at 7:00 a. m. On the 25th three birds were yet there. A fine rain was falling, temperature about 50°, and at 11:00 a. m. there were twelve martins at the old box; all were on the ledges and roof, the frame of the house barely clinging together. At 9:00 a. m. a steady rain began which lasted all day. About 1:00 p. m. six male and six female martins came to my box, probably the same birds seen earlier in the day at the old box. These birds remained on the outside of my box in the continued rain until about 4:00 p. m., when they flew to the new box near the old decayed one, but did not enter.

February 26, twelve martins were about all day. They kept close to the old house for the most part but visited the new nearby box and were at my gourds. Cold all day, but no rain.

February 27, the old box was dismantled late yesterday, but the birds continued flying about the bare pole. Some were seen to enter the new box, which is a four-hole freshly painted one. Eighteen birds were on the cross-arms and roof of the house at my pole. They seemed much exhausted, sitting almost motionless for a half-hour at a time.

February 28, another cold rain from the northwest. Four male and three female martins at my gourd-pole, all facing the storm but remained *outside*.

March 3, but three pairs of birds seen about the village. All of these located at the Warren box—the one supplanting the demolished box. A pair of English sparrows quarrel for a share in this shelter. Cold and frost March 1. Ice on 2d, with cold wind following, and frost on 3d. A cool reception for exhausted travelers from the tropics!

March 20. Since the 3rd of March we have had but

two warm spring-like days. Much cool weather, with northeast winds and rain. Several new boxes have been put up for the martins about the village and considerable interest manifested in the birds. On wet and cold days the birds are most abundant about the boxes and gourds. A few seem to be permanently established at Warren's and at Fraser's; the latter a crude affair, double, with two holes on each side, about twelve feet up on a pole set within thirty feet of railroad track and opposite our busiest store and the postoffice. However, as we have but a single train daily the traffic will count for little to alarm the birds. On clear warm days these four or five pairs are the only martins to be seen about.

During one or two fine sunny days all birds were away during the entire day.

It is the general opinion among the hunters here that numbers of these birds remain out and nest in holes in the woods. I have never been convinced of this. All the boxes here, seven in number, I believe, have been visited many times by the birds; especially as night comes on and they seek shelter. On March 20 over sixty birds were congregated about the postoffice; on wires and bird boxes for the most part; a few on the roof of one house. Eighteen or twenty came to my pole and one entered a gourd.

March 21 was cloudy with rain most of the day and a large number of the martins remained about the village, for the most part huddled close together on the various boxes or on wires. About sixty birds were counted.

March 22. The sun shone in the afternoon and many of the birds were actively foraging about the open lots.

April 8-9. Cold, with damp north winds. Thirty or more birds about the various boxes all day. On warm, sunny days not infrequently but two or three pairs of birds are to be seen about the village for the entire day. Visitors still come to my pole, but none permanently located there, and building operations were commenced at other boxes.

June 7. Visitors continue to come to my pole, but no birds nesting there. Two or three birds seemed to resort there for a time regularly—lasting two weeks or more—each evening late, and as they are seen usually about sunrise the following day they may have used it for sleeping quarters, possibly an overflow from Fraser's box, which is crowded and contains young birds. These visitors are sometimes females, or males and females.

June 13. Eight to ten birds were assembled on a telephone pole about two hundred yards from nearest nesting box. For the most part they were young birds and were huddled closely. Adults were seen feeding them there. On June 14, 15 and 16 the birds were seen at the same place. A few were on a nearby tree on the 16th.

1915

February 9. A lone male Purple Martin flew from the south over the river near the fishhouses about 8:00 a. m., and between 3 and 4 p. m. three birds flew on the same course. All males.

February 11. Saw a single male martin on top of Warren's box.

February 12. A male martin on wire near Fraser's box.

February 13. One near same place.

February 14 to 16. No martins seen.

February 17. A male martin flying near Warren's. A north wind and cool.

February 18. A male and female martin flying near Fraser's at 8:00 a. m.

February 19. No birds seen.

February 20. A single male seen. A cool north wind continued.

February 21. Two males at my boxes for a half hour between 8:00 and 9:00 a. m.

February 22. Two birds near Fraser's. Sex not determined.

February 23. No martins seen. Rained last night and during early morning; heavy southeast wind.

February 24. Three males and one female about village at 9:00 a. m. Wind went northwest early this a. m.; cloudy and dull.

February 25. Two males seen today. Wind still northerly.

February 26. Two males about village. Wind southwest this evening. Cloudy.

February 27. Twelve martins about Fraser's at noon, seemingly all males, but not sure. Commenced raining about 9:30 a. m. Cold. Rained most of afternoon. 2:00 p. m., 25 to 30 martins came to my box and then off towards Fraser's. Later the same number were huddled on top and on ledges of Fraser's boxes, 8 females and 20 males, as nearly as could be determined.

February 28. Cloudy. Wind east. About 30 birds around my house at 8:30 a. m. At 2:00 p. m. I counted 72 martins about the village, mostly on Fraser's and Warren's boxes, a few on top of a small tree and a few flying. About one-third of them were females. At 5:00 p. m. at least 100 birds on boxes, tree and flying. Eight or more spent the night at my boxes, some of them in one or more gourds.

March 1. 75 to 100 martins about village all day. Cool and windy in morning; towards night wind went northwest. At dark several birds entered my box and gourds and at daylight next morning tails and wings were protruding from gourds.

March 2. Apparently all the birds have gone. Saw none after 9:00 a. m.

March 3. About 20 birds around and on my box before sunup and others flying about village until 9:00 a. m. None seen later until nearly sunset, when about the same number appeared. They may have been off foraging.

March 5. But three or four martins about the village during the day. A heavy blow last night, with rain

from south from 9:00 p. m. until 2:00 or 3:00 a. m. Cleared before sunup. Wind northwest and mild.

March 6. Six or eight birds about village. Clear and bright after 10 a. m. Wind south.

March 7. Three or four birds at my boxes before 7:00 a. m., but soon left. Saw six only about village.

March 13. For past five or six days the birds seem to spend the night at boxes about the village and then are absent from 8:00 to 9:00 a. m. until a half hour or so before sunset. Ten to twelve pairs noted. Two pairs regularly at my box.

March 23. Today for the first time since becoming established the birds have remained about the village all day. For greater portion of day the weather was cloudy, damp and chilly. A heavy white frost at sunup.

March 24. Clear, sharp white frost. Birds were away for most of the day.

March 26. Warm and clear. The first clear day the martins have remained about the village all day. Three pairs about my box.

March 30. Since 26th the birds have been about the village for the most part of each day. About 4:00 p. m. today a heavy shower came and I noted 12 birds at my box huddled outside in the storm. In all I counted 60 birds about the village huddled in groups on boxes and elsewhere; 30 on roof of one house. Twenty-five at my boxes just before dark, all trying noisily for shelter, and as far as I could determine all were finally accommodated after much stormy protest from some birds that had earliest secured shelter. Two birds seemed to be unpopular or had been blacklisted, and until quite dark these failed to gain admission despite many attempts at entrance, which were as often repelled from the birds inside.

April 7. The birds continue to remain about the village for greater part of the day.

April 15. Nest building has commenced. Eighteen pairs seem to have located here. At least four pairs at

my boxes and they are now most industriously occupied in carrying nesting material from about 6:00 to 9:30 a. m. and during the earlier part of the afternoon to a more moderate degree.

May 9. The males evidently assist in incubation, as many of the females seem to have leisure hours, sit on top of the boxes or fly about the village or disappear in the woods for hours at a time.

May 25. Found a young bird dead on ground under my box. Feathers of tail just showing from sheaths; eyes barely opening.

May 30. I find five and sometimes six female martins at my box, but have never counted more than four males. All very busy feeding young now. The food seems to be of great variety. Species undetermined. Twice only have I recognized Dragonflies, of which we have countless numbers of numerous species widely distributed.

July 10. I have seen no birds at my box since July 6 until this evening. Three pairs with their young departed between June 28 and June 30 and the other two families left July 6.

July 11. Six birds about my box at 9:00 a. m. lit and chattered.

July 12. Six birds at my box at sunrise.

July 14. A single bird came to my box about 11:00 a. m., remaining but two or three minutes.

July 24. Eight martins came to my box about 6:00 a. m. Clear and warm. I had seen none at my box nor about village since 14th. About sunset today one came after a brisk shower.

1916

February 14. Mr. Strickland reports several martins arrived at his home a mile up the river. None here yet.

February 20. Two males at my boxes from 9:00 to 10:00 a. m. None others seen about the village.

February 22. One male and three females about village at 2 p. m.

February 29. One male at my boxes 7:00 a. m. and four birds flying about at sunset.

March 2. A male and a female at my boxes this morning.

March 16. Tumult at my boxes until after dark similar to the occurrence of March 30, 1915. On this occasion 30 birds were present, but as I now have two houses and more room there should have been less occasion for petty jealousies. There seemed to be three black sheep this time and the moon shone brightly before all was quiet in the fold.

April 9. From eight to ten birds have been located at my boxes for several days, but at sunup today I counted 24 birds there. Cold and windy. At 2:00 p. m. about 40 birds at my boxes and on roof of my dwelling.

April 15. Noticed first signs of nest building. Birds flying to the ground and twigs being broken from dead pine limb.

May 18. Young birds in one of my boxes and a pair of birds building in the other box.

June 11. Young of one or two broods in my boxes flew today.

June 29. Young birds are accompanying the adults off from the boxes for the day, returning towards sunset.

July 29. Four birds about my boxes at 6:30 a. m. All birds had been absent from the village for about two weeks.

September 12. Five or six birds seen near the fish-houses.

October 2. A lone bird flying at the river.

1917

February 3. A single male martin came flying slowly from the south as I walked down the railroad at 8:00 a. m. Thermo 18°. A strong northwest wind and all ditch water frozen over.

February 17. A male flying near my house just before

sunup. One — probably the same — lit on one of my boxes an hour later. None other seen since February 3.

February 19. A male at my boxes, 7:00 a. m., and two males at 10:00 a. m.

February 20. Two males and two females at my boxes at 5 p. m. The above constitute all of this species noted thus far this year.

February 27. Still but two males and one female martin at my boxes and none seen elsewhere.

March 2. Two males and two females at my boxes this a. m.

March 3. Five birds at my boxes this morning.

March 5. Eleven or twelve birds at my boxes.

March 14. Twelve martins seem to be settled at my boxes.

March 31. Twenty-five birds at my boxes at 5 p. m., the largest congregation of martins I have seen this year. The strangers departed early on April 1.

April 10. One bird seen carrying sticks to box.

April 12. Seven pairs of martins now building at my three boxes and but one other box now in the village so far as I can ascertain.

April 17. Nest building seems to be progressing rapidly.

May 13. First feeding of young noted.

July 14. Three young out of nest, — unable to fly — huddled in a close bunch on the ground at base of pole supporting one of my boxes. Adults feeding them.

July 18. The three juveniles remained on the ground until today, when they flew. Whenever observed they were bunched closely. I judged one pair of birds had been disturbed in earlier nesting as all other than this family had departed from my boxes sometime before the young were found on the ground.

September 8. A single martin flying near my house. The first seen for three or four weeks.

September 16. Four birds on wire near fish-house.

1918

February 27. Five martins at my boxes before sunrise.

March 7. Ten birds at my boxes. The greatest numbers seen together this spring. There have been no arrivals or gatherings here in considerable numbers.

April 17. Nest building well under way.

July 4. During the past week I have seen martins but once at my boxes. They were seen feeding over the marsh and river but they do not return to boxes at night.

July 5. Three birds came to my boxes about noon but remained for only a short time.

September 15. Two martins flying near my house in company of ten or more barn swallows.

October 2. Two martins flying near the river at 8:00 a. m.

Year	When first seen	About No. first seen	Next seen	Spring Migra'n		
				Became comm'n	Last seen	
1909	Mar. 29	1	April 4	April 8	April 17	
1910	May 1	4	May 6	April 12	April 24	
1911	April 2	1	April 6	April 8	April 13	They were common at an earlier date which I failed to record
1912	May 3	3	May 4		April 20	I failed to record the missing date
1913	May 1	3	May 2	April 8	April 22	
1914	Mar. 29	3			April 24	I failed to record the missing dates
1915	April 2	4	May 7			I failed to record the missing dates

Year	When first seen	About No. first seen	Next seen	Fall Migration		
				Became comm'n	Last seen	
1908	Sept. 23	5	Sept. 27	Oct. 4	Nov. 8	Last one seen could not fly, as it had a broken wing
1909	Sept. 25	10	Sept. 29	Oct. 4	Oct. 31	
1910	Oct. 1	20	Oct. 2	Oct. 8	Nov. 4	
1911	Oct. 1	20	Oct. 3	Oct. 7		Failed to report last date
1912	Sept. 16	10		Oct. 12	Nov. 10	First seen by Mrs. E. B. Hayden
1913	Oct. 2					Failed to secure other dates

ACTIVITIES OF PURPLE MARTIN AT ST. MARKS, FLORIDA

	1912	1913	1914	1915	1917	1917	1918
First seen and number	1 box only in village	1 box only in village	¹ 10 Feb. 14	4 Feb. 9	2 Feb. 20	1 Feb. 3	1 Feb. 23
Second appearance and number			10 Feb. 15	Feb. 11	4 Feb. 22	1 Feb. 17	5 Feb. 27
When abundant ..			Feb. 25	Feb. 27	Mar. 2	Mar. 5	Mar. 7
Commenced building			Apr. 12	April 15	April 15	April 10	April 17
First feeding young			May 25	June 5	May 18	May 13	
Young first flying.....		June 9	June 13	June 12	June 11		
Vacate boxes			June 23		Jnne 29		June 27
Becoming scarce.....		Aug. 27		Sept' 6	Aug. 16	Sept. 8	Sept. 15
Last seen		Sept. 20	Sept. 25		Oct. 2	Sept. 26	Oct. 2
Number of nesting pairs	2	2	9	18	?	7	7

¹ In every instance first arrivals were ♂.

² Juveniles, ten days or more old.

³ Were under way.

⁴ Probably ten pairs.

SUMMARY

First arrivals vary from February 3 to February 23.

All first arrivals are males but sometimes the females follow within a day or two.

The birds arrive and depart in the early spring at various times of the day.

Many birds tarry for a few days or a few hours only in the early spring as they first arrive on the vernal migration.

Often sit exposed in a cold rain rather than seek the shelter of a box on which they are resting.

Show a strong attachment for a former nesting box.

Exactng as to the selection of a new box for nesting purposes.

Nest building begins from April 10 to April 17 as extremes.

Generally but one brood reared yearly.

The male aids in incubation.

Earliest positive date for young in nest, May 13.

For at least two to three weeks before the commencement of nest building the birds spend the greater part of clear days away from the boxes, returning to them towards sunset. During rainy or extra cold days they do not so generally depart from the boxes at such times.

All the birds forsake the boxes two to three weeks after the young first fly. Prior thereto they may be absent during the greater part of the day but usually return to the boxes at night.

Latest dates when seen September 20 to October 2 for different years.

TWENTY-FOUR HOURS IN A BLACK SKIMMER COLONY

BY B. R. BALES, M.D.

A day and a night spent in the midst of a densely populated sea bird colony is an experience never to be forgotten. Such was my experience on June 23, 1917. The colony was one of the Black Skimmer (*Rhynchops nigra*), and was located on a small island about fifteen miles off the Virginia coast.

The island is composed entirely of fine sand, and is barely above high tide, in fact, it is so slightly elevated that high tides in 1916 swept over the island drowning all the young birds with the exception of a few which took refuge on several slight elevations. A thin growth of salt water grass covers these elevated portions, but the rest of the island is destitute of vegetation.

The colony, a conservative estimate of which, would number the breeding birds at 4000 pairs, is about one mile long and several hundred yards wide. It is like a city, being more thickly populated at some parts than at others; at one place, without moving, 26 nests could be seen, at another place 14, and at another 10. The similarity to a great city is further carried out by the small detached