

Temporary Evening Congregating Behavior of
Purple Martins in Early Summer

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The concentration of Purple Martins (Progne subis) in late summer prior to and during fall migration has been well documented. Such roosting as early as 25 June was mentioned by Sprunt (in Bent 1942:505) for barren or non-breeding birds in New Jersey. Lowery (1974:447) gives some evidence that eggs may be left unattended at night while adults go to large communal roosts. Here we report the congregation of martins for brief periods before dark on five evenings between 18 June and 11 July 1981. Our observations were made about 5 km from Sandersville, Jones Co., Mississippi. The birds congregated in a 17-ha (43-acre) pasture with a house and a few trees, including a tall water oak (Quercus nigra). A dirt road and utility lines crossed the pasture from the highway to the house. Our observations were of martins above the pasture, above and on the utility lines, and in the water oak in the yard of the house.

A large concentration of martins, perching flank to flank on a section of three utility lines above the pasture, caught our attention on 18 June at 20:05. The birds, which included very few mature males, continually changed their positions within the perched group. A conservative estimate of 3120 birds was based on counts plus later measurements of the lines and the breast width of the species. Within 10 minutes all but two had left.

No such concentration of martins occurred during our visit on the evening of 22 June. Only one martin was seen, in circling flight, from 19:30-19:36. We returned to the area at 19:54 and found four martins flying over the pasture. Many small groups passed in high, direct flight northward from the south and southwest between 19:58 and 20:22. Fifteen consecutive groups, only a small portion of those passing, included 14, 4, 3, 5, 3, 9, 4, 3, 7, 17, 8, 9, 1, 16, and 3 birds. Only one single bird passed over; a few, such as the group of 16, circled the pasture before continuing northward.

We saw fewer martins on 30 June. Martins flew to the pasture from all directions at 19:57, although more seemed to be coming from the north. They began to alight on the utility lines at 20:02 and few new birds were seen arriving after 20:09. At that time we estimated that there were 400 martins on the lines. By 20:15 the birds had left. When the martins reached their peak numbers on the lines (the same section occupied on 18 June), we saw 50-100 moving about the canopy of the water oak about 130 m from the birds on the lines. Activity at the oak ceased at the same time the birds left the lines.

On 2 July, four martins were present over the pasture at 19:27, and 15 at 19:30. Between 19:30 and 19:56, we saw seven groups in direct flight high above the pasture. The number circling the pasture increased dramatically at 20:01. At 20:04, one landed on a utility line and within seconds 50 or more joined it. We counted 670 on the lines by 20:09. At 20:11 about 50-75 left to the northwest and all but about 50 left at 20:12. None remained by 20:15. In leaving, the martins circled high and flew north.

On 11 July, one martin appeared over the pasture at 19:51. Between then and 19:59, groups of 6, 7, and 8 passed straight over to the north and a group of 4 flew south. Martins continued to come from every direction until we counted 95 at 20:07. These circled broadly over the pasture and utility lines. Between 20:11 and 20:19, while most of the circling martins dispersed, other groups passed high overhead. Two groups that were travelling southward broke up over the pasture, with one group of 46 splitting into three groups which headed south, west, and north. About half of a group of 74+ headed west, while the others headed south. No martins were seen after 20:19.

The property owners told us that Purple Martins had congregated in the pasture for many years, beginning in early June when the pasture was prepared for native hay and ending in August. On some evenings they saw no birds, and on others the birds were so abundant that they feared the lines would break under the weight. The owners also observed the martins to congregate in the water oak. A few years prior to our observations, the owners had a martin house, but it had since been destroyed. We do not know why such congregations occurred, but the behavior seems to have been consistent for several years.

Acknowledgments

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Literature Cited

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