

The Perils of Being a Purple Martin in New Hampshire

by Pamela Hunt

After two years of solid growth in productivity, our small and threatened Purple Martin population suffered a setback this year. First the good news: After a two-year hiatus, we reinstated the gourd rack off Island Path in Hampton, which had not been erected in 2019 due to House Sparrow issues and in 2020 because of COVID-19. If it weren't for this colony, the story for our coastal martins would be a much sadder one this year.

Things started off well enough, with martins returning to Rye and Seabrook in good numbers in May and starting to lay eggs. By June both colonies were off to a great start, with 21 and 18 nests, respectively. The colony at Hampton was behind by a couple of weeks (largely because as a new site it was settled by later-arriving birds) but by early July it was home to 10 nests – the most ever for this site. Eggs were laid, and chicks were hatching throughout June, but then the weather changed dramatically.

The end of June was marked by a four-day heat wave, with temperatures in Portsmouth reaching 90 or higher, and the first four days of July saw unseasonably cool and rainy weather (high of only 59 on July 3, and over 2.5" of rain). Another 2.7" of rain fell on July 10, contributing to July 2021 being the second wettest July on record for the state. The high temperatures can be of concern, since the gourds we provide for nesting can heat up, although they are equipped with vents for just this eventuality. Cool and/or rainy weather is far more dangerous since it suppresses the flying insects on which martins feed. Cold snaps in spring are known to cause adult mortality, while in summer they make it harder for martins to find food for their hungry chicks.

A check of the Hampton and Seabrook gourds on July 1 found all to be well: no significant mortality from the heat wave. On July 5, John Cavanagh found 82 healthy nestlings in his Rye colony, so presumably they'd dodged the first dose of rain successfully. Nests weren't checked again until mid-August (to minimize the risk of premature fledglings), and that's when we got the bad news. John estimates that half



Purple Martins in the fog in Seabrook, July 15. Photo by Pat Pietrowski.

his chicks were dead in their nests, while in Seabrook it was closer to two-thirds. Hampton fared far better, with only three dead young out of a maximum of 42 nestlings. Overall, despite gains in the number of nests and eggs over 2020, there was a drop in fledglings. That said, the 104 believed to have successfully left their nests is still the second highest since we started keeping careful track around 2010.

So what happened? It appears that the Rye colony suffered its losses during the second rainy period, while Seabrook could have been affected by either or both. The silver lining is that many nests still managed to fledge one or two young despite these losses, suggesting that adults prioritized feeding to the healthiest (noisiest) chicks when food was hard to find. Hampton probably fared better because the chicks were so much smaller due to their later start. They needed less food and the adults appear to have met whatever challenge the weather posed with much more success.

All these martins will winter in South America and are not due back here until the end of April 2022. Special thanks to our dedicated cadre of martin volunteers who will be here to welcome them with fingers crossed.

The Purple Martin project is funded by private donations. Please contact me (phunt@nhaudubon.org) if you are interested in trying to attract a colony to your own property or would like to become a martin volunteer.