

Flying Through Summer

This summer was a lot of fun and one of the best learning experiences of my life. As the Purple Martin Conservation Association's (PMCA) summer intern, I had the privilege of working with their field biologist, Pat Kramer, who taught me a great deal about Purple Martins. The summer began with learning to use a spotting scope to read bands and age and sex the martins. In addition to monitoring the Indianhead research colony in Edinboro, PA, we also monitored the new houses on Presque Isle State Park, where the PMCA was trying to attract martins. Martins nested at two of those sites, Sommerheim Drive, which had two successful nests, and the Rotary Pavilion which had one successful nest. It was during this time that I learned of the trouble that House Sparrows can cause in Purple Martins colonies. I also learned that Tree Swallows and European Paper Wasps will take over the martin housing if allowed. I now realize how important it is to monitor martin housing.

One of my favorite activities of the summer was conducting nest checks. I learned to record our observations in each cavity on Project Martinwatch forms, noting such things as the status of nests and the number of eggs and young. I saw firsthand the impacts nest mites, fleas and blowflies can have on young martins and learned the importance of changing nest materials to minimize parasitism.

Before I knew it, there were nestlings! Pat taught me how to age them using the laminated baby photos, and when they were old enough (at least 11 days old), he taught me how to band the nestlings. It was about this time that we started collaborating with Drs. Bridget Stutchbury and Scott Tarof of York University in Toronto, Canada. We began a study aimed at determining the parentage of young in each nest. Dr. Eugene Morton conducted a similar study at a colony site in Maryland in 1995 (see *Purple Martin Update* 4(1), page 1) and discovered that martins are not necessarily monogamous despite the appearance. To study parentage, we took blood samples from all the nestlings and adults at three colony sites: the Indianhead research site, Andy Troyer's colony in Conneautville, PA and the Waterford, PA colony site of James R. Hill, III. In total, we banded roughly 900 birds and collected blood samples from almost 500. The blood samples will be used for DNA analyses of parentage. Capturing and handling the adult and nestling Purple Martins was definitely the highlight of my summer.

Another project involved radio-tracking fledgling martins to learn more about where they go after fledging. Once again, Pat and I collaborated with Drs. Tarof and Stutchbury. For this study, we attached radio tags, like little backpacks, to the birds with Kevlar® string. Later we searched for these radio-tagged birds in the Edinboro area and at the roost at



Presque Isle Bay. Look for the results of this study and the parentage study in future issues of the *Purple Martin Update*.

One day in August, Pat and I went down to Greene County, PA to help other Purple Martin enthusiasts find the roost there. A roost had been observed on weather radar for at least three years, but its actual location had yet to be found. We all gathered at Rohanna's Golf Course which is a known staging area for the martins. We observed about 500 martins perched on wires before they headed to the roost for the night. We already knew the directions the martins flew in, but did not know exactly where they spent the night, we split up into smaller groups and went to

various places in that particular direction to try to determine the site of the roost. One person was lucky and saw the martins fly directly overhead his location. Unfortunately, we were not able to determine the exact location of the roost that night. However, we were informed a few days later that the roost was found at a maximum security prison not too far from Rohanna's Golf Course.

When I first visited the Purple Martin roost on the cattail islands of Presque Isle Bay, I could not believe my eyes. Thousands of birds were flying directly overhead, just waiting to drop into the cattails, where they would spend the night. This began about the beginning of August. Every day, we would go to the staging area in the Beach 11 parking lot on Presque Isle State Park. As soon as we started playing the dawn song, Purple Martins would fly in from all directions. Hundreds would perch on the utility wires giving us a great opportunity to read leg bands. We did this most evenings until dusk, when the martins left us to go roost. We would then drive down to the roost to watch the martins go in for the night. Once the birds were in for the night, we would use a receiver and antenna to scan the roost for radio tags. One night, we went out to the islands in canoes. Watching the roost from shore is spectacular, but it doesn't hold a candle to watching it from the center of the roost. It was an amazing evening; having thousands of Purple Martins flying right above your head is simply indescribable!

Unfortunately, the end of August meant that I had to leave the PMCA to return to graduate school. However, I will always remember the fun I had this summer as well as everything I have learned about Purple Martins. I would like to thank the PMCA for this wonderful internship experience. I would also like to thank Dr. Stutchbury and Dr. Tarof for teaching me techniques such as taking measurements and blood samples from the martins; it was a very rewarding experience in itself. Lastly, I would especially like to thank Pat Kramer for being so kind and generous and teaching me as much as he did—and for making this summer utterly unforgettable.