## The Plight of the Bat: The Follow-Up

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To many people, when they think of bats images of horror movies springs to mind: bats in people's hair, bats sucking their blood, bats with rabies. But these are just Hollywood dramatics, not real life. If you remember from the Fall 2011 edition of The Wrackline, bats consume an average of two pounds of insects every night. While this is good news for our outdoor evening entertainment, it's even better news for farmers. Bats are major predators on cropdamaging insects, with current economic benefits of bats being between 4 to 50 billion dollars nationwide per year. But if you again remember from my previous article, bat populations are in a dire situation. White-nose syndrome (WNS; a cold-loving fungus that grows on the bats, causing them to wake up during hibernation and burn all their energy reserves) continues to spread across the country. Since that article, WNS has been confirmed in Alabama and Missouri, with suspects cases in Iowa and Oklahoma. This brings the total of states with confirmed WNS case to 19, along with 5 Canadian provinces.

Here at Parker River NWR and at our sister refuge, Great Bay NWR, we have stepped up our bat research over the past year. We continued mist-netting at the two refuges, with exciting new results. It was known that Parker River was an important migratory stopover for bats, but we have now confirmed breeding on the refuge. Lactating red bats were caught in July, and then a pair of mating red bats was recovered in September after being hit by a car.

Up at Great Bay NWR, we really ramped up our efforts this year with more acoustic surveys being



conducted, along with mist-netting and the exciting radio telemetry study! In July, we partnered with the **Biodiversity Research Institute** (BRI; they do all our mist-netting) to catch and place radio transmitters on lactating northern longeared bats and well as small-footed myotis. Both species are being



considered for listing under the Endangered Species Act. Our hardy employees and volunteers spent many hours (and part of their sanity) tracking these bats. We were able to track them to both their roosting and feeding locations. Interesting to note, the small-footed myotis, a rare species in New England, were found roosting with a large colony of big brown bats in an old barn on an adjacent private property. Closely associated with rocky outcrops, this is the first documented report of these bats roosting in barns.

With so much new data collected this summer, we have only just begun to delve into it. The acoustic data has hardly been looked at, but when it does, we hope to find even more fascinating information. Perhaps we'll discover a bat species using the refuge that we haven't caught in our nets. And because we specifically placed recorders in varying habitat types, we're hoping to learn which areas the bats use most. This will help us better manage the refuge to meet their needs. Every little bit helps when it comes to saving these imperiled animals.

For more information about bats and white-nose syndrome, visit:

http://www.whitenosesyndrome.org/ http://www.batcon.org/