

Leech's Storm Petrel's Chatter Response to Predator Vocalizations
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This summer, I worked as a researcher and cook on Kent Island in the Bay of Fundy. Both facets of my employment were overall very positive, and I have left the island with a renewed interest in cooking and a new hobby of bird watching. I originally chose to go to Kent Island in an effort to remove myself from the distractions so commonly found on campus, and hoped that isolation and quiet would encourage personal and academic reflection that can only stem from periods of boredom. While I would like to think that this overall growth of character was achieved, I was surprised to find that my time on the island were always filled and never dull. I worked on a long-term data set monitoring the colony of breeding Leech's storm petrels, cooked for twenty people, and did a personal project on the effects of predator vocalizations on ambient Petrel chatter calls. Outside of those larger commitments, I spent my days learning how to paint, going on walks in the woods, and swimming in the basin at high tide. I left the summer with a greater technical understanding of ornithology and the process of becoming a researcher, but learned equally important lessons on how to ask answerable scientific questions, study living systems, and find beauty on every walk in the woods or hole in the ground.

Although working as the cook was a last-minute addition to my application, the job quickly became one of my favorite parts of the day. My experience cooking, although less academically rigorous, was equally as challenging and just as rewarding as my research. I had very limited cooking experience prior to this summer, but was able to learn basic techniques and create healthy, interesting meals for large groups using limited ingredients (we were in the Bay of Fundy after all). I learned how to organize large grocery orders and plan meals in advance to accommodate visitors to the island. I am returning to Kent Island twice more next semester, and am looking forward to cooking for both trips.

Originally, I came to the island planning on working with Savannah Sparrows with the Canadian researchers on the island. However, alongside cooking, this proved to be too much of a time commitment. For a while, every day was a new conversation, a crash course in ornithology, but also forest ecology, and entomology. Eventually, I joined the other Bowdoin student who was working on Petrels to help collect data for the long-term project. The data set with sixty years of Petrel data did not make it to the island, so I was unable to use that data for my own project. I stayed up late to listen to the calls of the petrels returning to the island at night (in an effort to avoid predators) and eventually came up with my own project looking at the Leech's Storm Petrel's chatter response to predator vocalizations.

Leech's Storm Petrels make a very characteristic chattering call at night when returning to the island from feeding waters. I hypothesized that the birds make a choice when they use chatter at night, making them more detectable to predators. I went to densely populated areas of petrels on the island both near and far from gull colonies and recorded the response in ambient chatter to a series of playbacks of predators, silence, other chatter recordings, and the sound of an unknown predator in a similar pitch. I was unable to analyze the chatter calls individually because there is great variation between male/females and burrowing/flying petrels. Instead, I studied the change in the rate of chatter calls in response to predator (Herring Gull) vocalizations and various controls, as it did not need to discriminate between the aforementioned factors. After analyzing my data, it does not appear that the night playbacks or the second aspect of my project affected the chatter responses of the birds. The second facet of my project compared the response rate of individual birds in burrows to recorded Petrel calls with and without a predator playback directly before. I knew from prior experience that petrels are very likely to respond to chatter playbacks when they are in their burrow. I wanted to know if the calls of a predator directly before the Petrel playback would affect their response rate.

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