## 2015 NSS WNS RAPID RESPONSE FUND GRANT SUMMARY

2015-1. Title: "2015 Study of the Sandilands Roost."

Award Recipient: Derek Morningstar, Myotistar.

Grant Amount: \$1,500.00

PROJECT SUMMARY: Little is known about how and when bats use maternal roosts, especially those who have survived White-nose Syndrome (WNS). The purpose of this project is to learn the timing of entry and exit from a roost and how long the bats stay in the roost at each stage of their life history in the summer. Long-term, the bats can be recorded as they leave for the season and return in the spring. Knowing how and when they use the roost is critical for developing recovery plans to help them reproduce and recover in a post-WNS landscape. The Sandilands roost is a significant maternal roost of Little Brown Myotis (Myotis lucifugus) and Northern Myotis (Myotis septentrionalis). Three capture events will be conducted; late May, mid-July and late-August. During these capture events, a passive implanted transponder (PIT) tag will be embedded under the skin of the bats. This PIT tag can be read by a logger that will be installed on the entrance to the roost. The logger will record all entry and exit and attribute those to a marked individual bat. The resulting data will be analyzed to determine how long the bats leave the roost to feed each night, how many nights they stay at the roost and how long in the season they remain at the roost. This data will further be used to quantify the fission-fusion dynamics of how individuals within the roost remain together or break apart as a colony. Further details can be found in the 2015 Study Plan for the Sandilands Roost, including other components of the study.