



Project Nighthawk 2011 Newsletter

AUDUBON SOCIETY OF NEW HAMPSHIRE



Photo by Mark Suomala

Concord Highlights

The 2011 field season was very busy with Common Nighthawk activity in both familiar and new locations. Observing and recording behavior was challenging as nighthawks were active in somewhat obscure locales and there was a lot of movement between locations. Although no chicks were observed, previous nest sites and new ones were active. Mosquitoes were in abundance; observers were kept busy protecting themselves from blood loss during observations.

Concord watches: Three coordinated watches were held: June 15, June 27, and July 20. Nine males were regularly observed and for the first time we were able to confirm more than one female. Two females were observed simultaneously at different locations. Although not confirmed, we have reports of up to four different females in the area. Final watch tally: nine males and three females.



Nest patch and photovoltaic panels on top of the James C. Cleveland Federal Building in Concord.
Photo by Jane Kolias



Green roof on top of the Warren B. Rudman Courthouse in Concord.
Photo by Jane Kolias

Coordinated Watch Totals

Steeplegate Mall: 2 males
Havenwood/Heritage Heights: 1 male
Industrial Park Drive: 1 male
Pembroke gravel pit: 2 males, 1 female
Broken Ground: 1 male, 1 female
53 Regional Drive: 1 male
Downtown Concord: 1 male, 1 female

New location for nighthawks: Volunteers discovered two new locations with extensive nighthawk activity; the Broken Ground area in East Concord and the pine barrens which encompasses parts of Ossipee and Madison. See details on the following pages.

Gravel patch and green roof: Planners incorporated two gravel patches in their design of a new roof for the James C. Cleveland Federal Building on Pleasant Street. The patches are placed alongside the new Photovoltaic System. A green roof was installed on the adjoining Warren B. Rudman Courthouse.

Keene Highlights

Project Nighthawk Coordinator Becky Suomala and Concord volunteer Jane Kolias met with Keene nighthawk coordinators Brett Amy Thelen and Ken Klapper along with seven volunteers for a coordinated watch in Keene. Volunteers were stationed in five locations throughout the downtown area. Four nighthawks were observed: 3 males and a possible female. This coincides with the number of birds that have been observed in the area during watches in previous years. Keene has 25 nest patches installed on 10 different buildings. Although



Gravel rooftop in Keene where chick was seen in 2009.
Photo by Jane Kolias

no nighthawk nests have been located, in 2009 a chick was observed on a gravel rooftop being fed by a male. We don't know for sure where the chick came from but suspect it was from a nearby rooftop.



Volunteer Sigrid Scholz watches for nighthawks at dusk over the Colony Mill Marketplace in Keene.

Photo by Kathleen Murphy

Ossipee Highlights

New nest sites located: Whip-poor-will researchers located two new nighthawk nest sites in the Ossipee Pine barrens which includes the towns of Ossipee and Madison. Although we were not able to confirm any chicks, behavioral observations of the parents indicated that the nests were successful. This is the first confirmation in quite a few years of nesting nighthawks in this area. Volunteers counted a total of 5 nighthawks in Ossipee, (4 males and 1 female),

and 2 males in Madison. The pine barrens are one of the few remaining natural nesting locations for nighthawks in the state.

Ossipee training: Project Nighthawk Coordinator Becky Suomala conducted a training session for nighthawk observers in Ossipee on June 28th. Eight volunteers thwarted hungry mosquitoes to learn how to identify nighthawks and record their behavior.



Nighthawk volunteer training in Ossipee.
Photo by Jane Kolas



Nest location in Ossipee Pine Barrens.
Photo by Pam Hunt



Female on ground in Ossipee Pine Barrens.
Photo by Pam Hunt

Late Migrants

On October 22, 2011 a Common Nighthawk was found in distress in the seacoast town of Rye, NH. It was taken to a wildlife rehabilitation facility where it was fed and examined and determined to be in good health. Normally nighthawks undertake their southward migration in late August and early September. They can be seen at dusk quietly circling overhead a few at a time or in large groups often following river valleys. They have one of the longest migration routes of any North American bird as they journey to South America to spend the winter. As insectivores it is imperative that they leave the colder climates

before the fall frosts impact insect populations. However, this fall there were several reports of extraordinarily late migrants including nighthawks and Chimney Swifts. Late migrant sightings could be caused by a phenomenon called "*reverse migration*." In most small birds, migration routes are genetically programmed and young birds can innately navigate to their wintering area. Sometimes this programming goes haywire and the young birds fly off in the exact opposite direction, 180 degrees from their intended route. A more common cause of reverse migration is when upper level winds are strong and mi-

grating birds are blown or pushed in the opposite direction. This is most likely what happened to the Rye bird. Cloud cover, which can obscure celestial and other navigational aids, may also be involved. For the most part, biologists don't really understand why birds reverse migrate, only that they do. As for the nighthawk that was found in Rye? A local resident was driving south and took the bird along to be released in Virginia. A full belly and chauffeured ride to a warmer climate? Hopefully this will help it the rest of the way to South America.

Nesting Attempts

In addition to the Ossipee nests, there were three confirmed nesting attempts although no chicks were found. The pair at the gravel pit in Pembroke attempted a nest but failed early in the season. We think they re-nested but were not able to confirm due to access restrictions. On July 17 volunteer Rob Woodward located a female at a nest site in the Broken Ground area of East Concord. Only one egg was found in the nest indicating this was likely a second nesting attempt. The nest attempt was very late and failed at hatch for unknown reasons.

The Broken Ground area is a previously unknown location for nighthawks and an unusual choice for a nest site as it is heavily wooded. A third female was observed incubating two eggs on a residential rooftop in downtown Concord on June 30. Sadly, this nest was predated four days after the eggs were laid. The homeowners reported seeing crows nearby. Behavioral observations at Industrial Park Drive indicated a possible nest located there but we could not confirm.



Broken egg, the result of predation, in front of female on residential rooftop in Concord.
Photo by Jane Kolias



Two eggs at nest site in Ossipee Pine Barrens.
Photo by Pam Hunt



Nest site in Broken Ground area of East Concord. This densely treed area is an unusual nesting choice. Nighthawks typically prefer to nest in more open areas such as fields, stone rooftops, and gravel bars.
Photo by Becky Suomala



Single egg in Broken Ground area of East Concord.
Photo by Stephanie Parkinson

Grant Support

Support from the Benjamin Couch Trust was a critical component to the success of Project Nighthawk in 2011. The grant helped fund coordinated watches in Concord and Keene, power point presentations for the public, training for new volunteers, and monitoring of nest patches. We are very appreciative of their support.

Plans for Next Year

Data Publication. 2011 marked the completion of the fifth year of Project Nighthawk. We are in the process of writing up the results of the nest patch experiment for potential publication. With five full seasons of data collection we feel we have the basis for understanding some Common Nighthawk behaviors in more depth. We have observed and recorded data from several different scenarios including: three successful nesting years with fledged chicks

(2007, 2008, 2010), one nesting failure and re-nesting attempt (2009), a nesting attempt ending in predation (2011), nesting/non-use display sites, chick feeding and nest defense by the parents. We are working to enter and compile the observational data in a way that will allow behavioral analysis. It's quite a challenge since the birds don't always behave in predictable ways that work well with averages and standard deviations.

Predation Study: This summer a

rooftop nest in Concord was predated shortly after the female laid two eggs (about 4 days later) and in recent years a nighthawk researcher in Pennsylvania reported all 4 nighthawk nests he was watching succumbed to predators. We are seeking funding for a study using motion sensor cameras to aid in the monitoring of activity at a few selected study sites. Quail eggs will be used to replicate a nighthawk nest.

Volunteers

Thanks to the many individuals whose persistence, patience and dedication makes the study of nighthawks in NH possible. Volunteers logged just over 300 hours for Project Nighthawk in 2011. Activities included field observations, office support, public education, project development and data analysis.

Zeke Cornell
Catie Donohue
Kathy Gunther
Lindsey Herlihy
Stephanie Herlihy
Benton Holmes
David Howe
Pam Hunt
Ken Klapper
Jane Kolias
Jeannie Lacey
Susan Lee
Tyler Maikath

Cynthia Melendy
Chele Miller
Kathleen Murphy
Gail Page
Kathie Palfy
Bill Parkinson
Stephanie Parkinson
Carol Plato
Bob Quinn
Joe Quinn
Linda Rauter
Udo Rauter
Sigrid Scholz

Jane Shapiro
Jonathan Shapiro
Nat Stout
Sharon Stout
Becky Suomala
Mark Suomala
Brett Amy Thelen
Jennifer Wiley
Rob Woodward
Mary Wright



Volunteers gather at the NH Audubon McLane Center for the annual Goatsucker Gala, a wrap-up of the Nighthawk and Whip-poor-will projects field season. Photo by Jane Kolias

Supporters/Sponsors

A big thanks to our supporters and sponsors for their donations of time, funding, space, and expertise. Their involvement with Project Nighthawk is invaluable to our continued work.

Antioch University New England
Ashuelot Valley Environmental Observatory
Benjamin Couch Trust
Jennie Brown
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Claremont School District
Concord Public Library
Kathleen Connors
Cracker Factory
Larry Denoncourt
Anne Donaghy
Filtrine Manufacturing
Hannafords

Town of Hanover
Havenwood Health Service Center
Harris Center for Conservation Education
David & Pat Immen
Interface Stereo
City of Keene
Keene Cinemas
Keene High School
Keene Housing Authority
Keene State College
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Mary Wright
Woodsville High School
Mary Wright

<http://nhbirdrecords.org/bird-conservation/Nighthawk-main.htm>