

# NIGHTHAWK NEST PATCH EXPERIMENT



by Bob Hines

Project Nighthawk is a research initiative led by NH Audubon to understand and conserve a state-endangered bird species, the Common Nighthawk (*Chordeiles minor*). Most active at dusk and dawn, the “peent” call of Common Nighthawks was once a familiar sound in cities and towns throughout New Hampshire, where they nested on flat, pea stone gravel roofs and fed on insects attracted to city lights. Nesting nighthawks have disappeared from all New Hampshire towns except Concord and Keene, and their numbers have declined dramatically in these towns. The cause of the decline is not known but rubber and PVC have largely replaced stone roofing and Project Nighthawk’s first initiative was an experiment to determine if the decline in urban areas is linked to the loss of pea stone roofs.

Nighthawks naturally nest in open areas such as gravel beaches, burned-over areas, and cultivated fields. They began nesting on gravel rooftops, which resemble these natural sites, as early as 1915 in New Hampshire. Project Nighthawk initiated an experiment in 2007 to investigate the potential for restoring nesting nighthawks by placing simple gravel “nest patches” on flat rooftops initially in Keene and Concord. With the help of supporters and volunteers Project Nighthawk installed 14 nest patches in the greater Concord area, 14 in the Keene area, six in Hanover, and seven additional patches.

We have not found any nighthawks using the patches we have installed and we’re not sure they are large enough to attract a nesting bird. The males tend to display over rooftops that are entirely stone indicating that they prefer a larger area of stone. The patches may work in situations where a nighthawk has nested recently on a stone roof and it has just been converted to another substance such as rubber. Birds usually have strong fidelity to nest sites where they have been successful and will return to the same place each year. If a female is accustomed to nesting on a particular roof, she may accept a nest patch as a replacement. This may be why Vincent Marzilli was originally successful using patches in Maine in the 1980s (*Maine Fish and Wildlife*, Summer 1989.) We also suspect that nest predation may be an issue on rooftops in general, which was documented in Pennsylvania and here in New Hampshire. In both instances, crows were the suspected culprits. If predation is an issue, smaller patches will be easier search targets for predators than large rooftops and therefore may not be good choices for successful nesting.

We suggest advocating for pea stone rooftops rather than putting up patches as a potentially more successful strategy for providing nighthawk nesting sites in urban areas. We don’t want to discourage people if they are really interested in putting up a patch, but it’s important to be realistic about the chances of success.

NH Audubon is not currently placing new patches. We have a Gravel Patch Handbook, available on our website, with complete instructions for installing a patch. Project Nighthawk would like to know about any nest patch installations or other measures taken for attracting nesting nighthawks.

## PROJECT PARTNERS

Project Nighthawk’s Nest Patch Experiment is led by NH Audubon in partnership with the Harris Center for Conservation Education and is made possible with the help and support of many volunteers, building owners and managers, sponsors and supporters. Individuals and companies generously donated time, expertise, and materials. We are grateful for this vital support. More information on Project Nighthawk initiatives and annual summaries may be found on the Project web site (below).



Volunteers installing a nest patch in Concord. Photo by Pam Hunt.



Female Common Nighthawk with two chicks. Photo by Pam Hunt.

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