



USFWS/Dave Menke

# GOATSUCKERS *of New York*

By John L. Turner

Judging from the sun’s position above the pitch pines flanking the western horizon, I had about half an hour before it set. After that it would be another half an hour before twilight faded and darkness fully fell. And dark was a necessary condition if I was to succeed in my mission—to hear, on this mid-June, early-evening hike in the southeast section of the Dwarf Pine Plains of Westhampton, the onomatopoeic songs of whip-poor-wills (*Caprimulgus vociferus*) and chuck-will’s-widows (*Caprimulgus carolinensis*), two of the three species of “goatsuckers” that occur in New York State.



Sam Bobbing

As a group, goatsuckers have large eyes and funnel-shaped mouths to aid in capturing insects in flight.

The goatsuckers, which include common nighthawks (*Chordeiles minor*), the third member of this family found in

New York, belong to the Caprimulgidae family. This family name comes from the Latin “capra” meaning a female goat, and “mulgeo,” to milk an animal. Why the name “goatsucker” was given to these birds isn’t clear, but the most offered explanation involves people who saw these birds regularly flying around goats and sheep as they fed in the pasture, the birds being attracted to the insects the hoofed animals stirred up. Couple this behavioral tendency with the fact they have very large, supple, pink-lined mouths and someone with a vivid imagination must have thought they suckled goats.

With goatsuckers on my mind, I hiked east through the pine-scented woodlands on a series of sandy trails and roads for nearly two miles, finally coming to a “T” intersection. Making a right turn, I walked about 50 yards and stopped next to a small shrub oak thicket trying to decide whether it made sense to continue given the gathering darkness which made it increasingly difficult to see. Within seconds of stopping I heard the first resounding “whip-poor-will” emanating from the forest on the far side of the thicket. I enjoyed the rhythmic song for several minutes before beginning the walk back. Cupping my ears to listen for more calls, I was soon rewarded with another whip-poor-will, and several hundred yards farther my ears picked up a third in the distance. Just as I came to an intersection a chuck-will’s-widow announced its presence in front of me and in the distance to the northwest another whip-poor-will. By the time I reached the car, I had heard nine whip-poor-wills and two chuck-will’s-widows. It was a great evening!

Ten weeks later I connected with nighthawks. While this species has historically bred on Long Island, and continues to breed in low numbers throughout the state, I know them more as a fall migrant. On late summer evenings, dozens pass over the island on their southbound sojourn to South America, where they spend the winter. During fall migration, a few to a dozen birds fly together in loose flocks as they feed on the wing, zipping to and fro in an unmistakable flight pattern. It was several such southbound birds foraging for insects on a North Fork farm on a late September afternoon that completed the year’s goatsucker trifecta for me.

Despite the name, nighthawks are not hawks, and although they can be active at night foraging on insects attracted to lights, they are actually more active at dawn and dusk. (One of my

strong childhood memories is watching nighthawks foraging around the light fixtures that illuminated a softball field in Smithtown.)

There are two subfamilies of goatsuckers that call New York home: the nighthawks (common nighthawk) and nightjars (whip-poor-will and chuck-will’s-widow). Nighthawks have pointy wings designed for sustained powered flight and feed by “hawking” aerial insects as they zip and zoom about the sky. In contrast, the wings of nightjars are more rounded, and these birds feed closer to the ground. Nighthawks also lack the bristles—specialized feathers that



Michael Allen

Goatsuckers lay their eggs on bare ground or leaf litter.

photo courtesy of auburnbirdbanding.org



Benjamin Van Doren



surround the mouth, reminiscent of cat whiskers—possessed by whip-poor-wills and chuck-will’s-widows. These bristles appear to help deflect larger insects into their large gaping mouths, and may also protect their eyes. Nighthawks also have smaller eyes and probably can’t see as well in the darkness as nightjars whose eyes shine red due to a light-gathering membrane found in their eyes.

Goatsuckers nest in unprotected open settings on the ground. The colors in their plumage—varying shades of earth tones (browns, rusts and tans), along with some grays, white and a little black mottling—combine to form intricate patterns that perfectly mimic leaf litter or tree bark. As a result, you’re unlikely to spot one resting on the forest floor until it flies away from its resting place (see *Conservationist*, June 2004 Letters section).

New York’s goatsuckers lay their typical clutch of two oval, mottled eggs on bare ground or leaf litter: amidst sand and pebbles for nighthawks, and on leaves and twigs for nightjars. Research shows that whip-poor-wills tie their egg-laying to the full moon, perhaps the only bird whose reproductive cycle is known to be connected to the phases of the moon. The young hatch out near the next full moon, a time when the adult birds can

presumably see better and forage more efficiently for the insect prey they feed their rapidly developing young.

When disturbed near their nest, whip-poor-wills will often express their agitation by making a call that has been described as a ‘quirt.’ Several years ago on a hike in the Dwarf Pine Plains, I came around a gentle bend to be met by a whip-poor-will that began quirting. It sat by the right edge of the sandy trail beneath a waist-high pine bough. The quilt call sounded like a cross between the cluck of a chicken and the sound of a water drop forcefully hitting the water. The calling bird suddenly flew up, hovered in the middle of the trail about ten feet off the ground while it flashed the white in its fanned outer tail feathers for several seconds, then darted into the pines. This tail-flashing display often occurs when intruders are near the bird’s nest, so I quickly moved on.

While whip-poor-wills and common nighthawks have widespread breeding distributions throughout New York, chuck-will’s-widows just make it into the southern portion of the state, and are a relatively new addition to the state’s avifauna. The first known confirmed breeding took place in 1975, and the only locations known to harbor breeding

chuck-will’s-widows are on Staten and Long Islands.

All three goatsucker species are declining, both in New York State and throughout much of their range. In the state’s first breeding bird atlas, conducted from 1980-1985, for example, whip-poor-wills were reported as possible, probable, or confirmed breeders in 564 census blocks. Twenty years later, they were recorded in fewer than half of those locations. Chuck-will’s-widows experienced a 62% decline in the number of reported census blocks in the same time period, while common nighthawks showed a 71% decline. These drops are mirrored on a national level; U.S. Breeding Bird Survey data from 1966 through 2006 shows an annual rate of decline for common nighthawk, chuck-will’s-widow, and whip-poor-will of 1.7%, 1.6%, and 2.2%, respectively. While loss of habitat in both their



buff-collared nightjar

National Audubon Society, Inc.

## THE CAPRIMULGIFORMES

In addition to common nighthawks, whip-poor-wills and chuck-will’s-widows, five other species of goatsuckers live in North America: the lesser and Antillean nighthawks, buff-collared nightjar, common pauraque, and the common poorwill, one of only a handful of birds known to go into torpor, a state akin to mammalian hibernation. These eight North American caprimulgid species belong, in turn, to a larger order of birds called Caprimulgiformes. Consisting of five families and 118 species found throughout Asia, Australia, and Central and South America, this order of very interesting and diverse birds includes frogmouths, potoos, and the oilbird, the only bird in the world known to possess the ability to echolocate, as can bats and dolphins. These bird groups, especially the potoos and frogmouths, look comical, almost cartoonish with large, forward-facing eyes adorned with what appear to be, but are not, eyebrows. To me they appear to be the most human-looking of all birds.



potoo

Bill Hubick



Bill Hubick

breeding and wintering ranges appears to be the primary force, other factors include pesticides, road-kills, and excessive predation from species like raccoons and feral cats that are an outgrowth of increasing suburbanization.

More than a century ago, naturalists noted nighthawks hawking over cityscapes and soon realized they were nesting there, using flat pebble and gravel roofs common at the time as a surrogate for their “natural” nesting habitat of pebble beaches, forest openings, burned over areas, and rocky outcrops. The presence of nighthawks nesting in, and foraging over, cities was reinforced to me by a spring and early summer spent in Albany back in the early 1990s. On many early evenings when the weather was conducive for nighthawks to feed on the wing, I’d watch up to a dozen or so birds flitting to and fro over the state capitol and state office buildings, occasionally

making a noticeable nasal “peenting” call as they hunted for the small flying insects that made up the bulk of their diet.

Efforts are underway to combat the decline in man-made nesting habitat used by common nighthawks. The loss of roof habitat stems from the increasingly widespread use of rubberized and PVC waterproof roofs in place of gravel and pebbles. To counter this trend, nighthawk enthusiasts have been creating nesting habitat on roofs in the form of “nesting patches” composed of pea-stone gravel.

Recently, the New Hampshire Audubon Society (NHAS) and the Pennsylvania Game Commission have experimented with placing nest patches on building roofs. To date, those efforts have proven unsuccessful, but biologists are learning and continue to try new methods.

In searching for nesting nighthawks in New Hampshire, biologist Becky Suomala learned of a nest situated in a

dangerous location, next to a heavily trafficked parking lot in a concrete manufacturing factory. But due to the concern and involvement of factory workers, the nighthawk successfully fledged both young, leading Suomala to note: “The chicks only survived because people took interest and cared.” It struck me that this factory experience epitomizes the predicament which goatsuckers generally face: in an increasingly human-dominated world, it is clear that if these fascinating species are to survive in the decades and centuries to come, it will only be because enough people took interest, became concerned, and acted upon that concern.

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