

Nightjar Bird Guild

Chuck-Will's-Widow *Caprimulgus carolinensis*
Eastern Whip-Poor-Will *Antrostomus vociferus*

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DESCRIPTION

Taxonomy and Basic Description

The members of this guild, also referred to as goatsuckers (Order: Caprimulgiformes), include two nocturnal species that are identified by their unique calls. The Chuck-will's-widow prefers open habitat including forest gaps, riparian areas, and pastures while the Eastern Whip-poor-will (hereafter Whip-poor-will) prefers more forested habitat with little underbrush. Both species are cryptically patterned and have very wide mouths and short bills with long rictal bristles around their gapes.



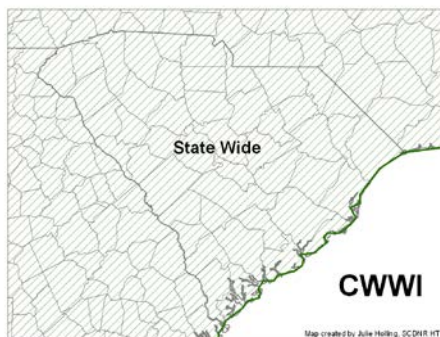
Photo of chuck-will's-widow by SCDNR

Chuck-will's-widows are the largest nightjar in North America with an overall length of 28-32 cm (11-13 in.) and a mass of 110 g (3.9 oz.). They are a mottled reddish-brown color with black patterning on the breast (Straight and Cooper 2012). The whip-poor-will is smaller in size (22-26 cm or 7-10 in.; 43-64 g or 1.5-2.3 oz.) and has more gray and brown patterning with a dark throat contrasted with a white necklace and pale underparts (Cink 2002). These two species are distinguished by their characteristic calls; each "saying its own name". The call of the Chuck-will's-widow begins with a low first note followed by 3 notes in which the middle syllable is emphasized ('chuck-wills-WID-ow'). The call of the Whip-poor-will is 3-noted with the first and last notes accented ('WHIP-poor-WEEL').



Photo of whip-poor-will by USFWS

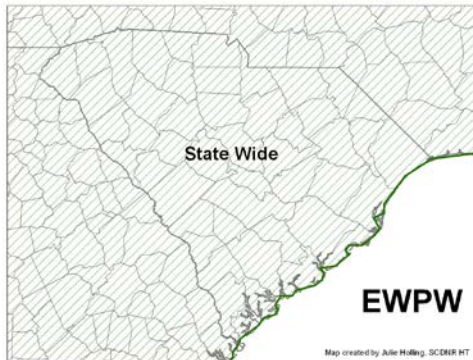
Status



Both of these species are protected under the Migratory Bird Treaty Act; however, neither the Chuck-will's-widow nor Whip-poor-will receives special federal status. The chuck-will's-widow is listed as a Stewardship Species by the North American Landbird Conservation Plan (Rich et al. 2004), and Partners in Flight listed it as a "moderate priority species" for conservation concern (Carter et al. 1999).

POPULATION SIZE AND DISTRIBUTION

Although there are limitations which increase uncertainty in detecting these species, the global estimates of population size are roughly 15,000,000 chuck will's widow and 2,100,000 whip-poor-will (Rich et al. 2004).



These two species have overlapping distributions throughout the Southeastern United States and parts of the Midwest. The Chuck-will's-widow's northern extent is Virginia, west to Iowa and Texas, south to Florida, and winters in the Caribbean and Central America. The Whip-poor-will occurs north to Ontario and New England, west to the Mississippi River, and winters in Florida and along the Gulf Coast.

In South Carolina, the Chuck-will's widow is a summer resident, and confirmed breeding records exist for Greenville, Charleston, Georgetown, Williamsburg, Barnwell, Edgefield, and Saluda counties (Cely 2003) as well as Lexington County (A. Huckabee Smith, pers. comm.). The Whip-poor-will is a winter resident along the South Carolina coast and migrates northward to the middle and eastern sections of the State in April (Sprunt and Chamberlain 1970). Breeding records of Whip-poor-will's have been confirmed in Spartanburg, Union, Chesterfield, and Lee counties. Hamel et al. reported hearing vocalizations of both species in the Coastal Plain at Beidler Forest in Dorchester County and Congaree Swamp in Richland County during May and June (Hamel et al. 1980).

HABITAT AND NATURAL COMMUNITY REQUIREMENTS

The two birds in this guild are often confused with each other due to their similar names and calls. Chuck-will's-widows can occur in mixed, pine, and oak-hickory forests while Whip-poor-wills prefer dry deciduous or mixed forests, open pine, or scrub oak with little or no underbrush. These species are never found in dense forests. Both species nest on the ground and lay two eggs. Like most nightjars, these species do not build a nest structure, but instead eggs directly onto dead leaves or pine needles in the leaf litter.

Both species forage on flying insects at night. The Chuck-will's-widow forages aerially, flying just above the ground and captures moths and flying beetles in its rictal bristles. Chuck-will's-widow have also been documented consuming small birds and bats opportunistically (Straight and Cooper 2012). The Whip-poor-will forages at dusk and dawn and during times of bright moon phases, utilizing the moonlight as a visual aid to capture prey. It usually forages on insects from perches and can capture large prey in its enormous gape (Cink 2002).

CHALLENGES

Their nocturnal nature and cryptic colorings make these species difficult to detect and survey; therefore, little is known about the overall status of their populations. Loss of habitat by forest

succession may impact the distribution of whip-poor-will in part of its range. A better understanding of how human activity affects these birds is needed. Collisions with automobiles on gravel roads along forest edges near breeding grounds or during migration may also affect adult survival of these species (Cink 2002; Straight and Cooper 2012).

CONSERVATION ACCOMPLISHMENTS

Because little is known about many aspects of these species, no specific conservation accomplishments have been noted for these two species.

CONSERVATION RECOMMENDATIONS

Priorities for future research include: habitat characteristic mapping, reproductive success and fecundity, dispersal of juveniles from natal areas, age at first breeding, fall departure dates from breeding territories, migration patterns and routes, and quantitative diet studies.

- Determine the distribution, densities and nest survival rates of breeding Chuck-will's-widow and Whip-poor-will populations in South Carolina.
- Conduct species specific surveys for these nocturnal birds within their range utilizing the United States Nightjar Survey Network (www.nightjars.org).
- Assess potential effects of pesticide use on insect prey species of this guild.
- Determine better habitat characteristics of each species in order to determine possible current or future habitat loss.
- Gather a better knowledge base of how human disturbance at nesting grounds may affect nesting success.

MEASURES OF SUCCESS

Basic habitat characteristics, population surveys, and nest survival data should be collected before any adaptive management occurs for these species. Success parameters will be outlined pending research findings.

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