



Nesting of Lesser Nighthawks on Beaches in El Salvador

Author(s): Oliver Komar and Wilfredo Rodríguez

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Nesting of Lesser Nighthawks on beaches in El Salvador.—Distribution of the Lesser Nighthawk (*Chordeiles acutipennis*) in northern Central America is poorly understood (Howell and Webb 1995). We here present the first documentation of breeding for the species in El Salvador, as well as the first documentation of breeding in association with terns and plovers.

On 4 June 1994 we found six Lesser Nighthawk nests near the mouth of the Río Lempa, in the Dept. of San Vicente, El Salvador (13°15'N, 88°49'W). Lesser Nighthawks deposit their eggs on the bare ground (Bent 1940:246), here referred to as a "nest." The nighthawks appeared to have formed a breeding colony at the site, since extensive similar habitat nearby was devoid of the birds. We estimate that this colony contained between eight and 15 breeding pairs, based on the numbers of adults (24–30) and fledged juveniles (3) present. The minimum estimate assumes that the colony contained the six observed nests plus two other nests from which the observed juveniles fledged, since Lesser Nighthawks lay only two eggs per nest. The upper estimate is half of the high estimate for number of adults present. Three of the nests contained one egg, two nests contained two eggs, and one contained a hatchling. The eggs were laid directly on the hot sand and were behind the high tide line where sparse beach grass or other beach vegetation grew. About 25 m separated the two closest nests. We measured six eggs; all were 20 × 28 mm (range for length 26 to 30).

Beach-nesting colonies of Lesser Nighthawks have been reported only anecdotally from Costa Rica (Stiles and Skutch 1989); the formation of colonies by this species has not been reported outside of Costa Rica. Our observations represent the first documentation of the behavior from northern Central America.

One of us (WR) found a second nesting site on 13 June 1994, apparently just one nest (only one adult was observed), on the open sand behind the high tide line, at Arcos del Espino, a beach in the Dept. of Usulután, El Salvador (13°11'N, 88°21'W). The nest contained one egg. The nest was within 15 m of a small colony (four nests) of Least Terns (*Sterna antillarum*). Two observations indicate that breeding occurs at other beach sites with similar habitat. On 30 July 1994, we found 11 nighthawks at a tiny island in the Bahía de Jiquilisco and suspect that breeding may occur on the nearby San Juan del Gozo peninsula, Dept. of Usulután. At Punta La Chepona on Isla San Sebastián, Dept. of Usulután, we observed one juvenile and four adult Lesser Nighthawks on 31 July 1994.

We estimate that nighthawks nest in El Salvador at least from 25 April through 5 July, although these dates could vary by two weeks or so (11 April through 20 July). Our prediction is based on an incubation period of 18–19 days and fledgling period of three weeks as reported by Pickwell and Smith (1938) for the northern subspecies Texas Nighthawk (*C. a. texensis*). The breeding season may in fact begin in March, as reported by Stiles and Skutch (1989) for Costa Rica. The Texas Nighthawk found in the southwest U.S. regularly incubates eggs late April through early July (Bent 1940:253), and the latest reported incubation date is 6 August in Arizona (Bendire 1895).

Howell and Webb (1995:373) suggest that resident Lesser Nighthawks in northern Central America breed mainly in the dry interior valleys, based on the existence of June specimens and their personal observations of singing nighthawks in late May 1988 in Depto. El Progreso, Guatemala, and at Santa Barbara, Honduras (Steve N. G. Howell, pers. comm.). However, we can not find any documentation of breeding for that region. The A.O.U. checklist (American Ornithologists' Union 1983:308) gives the breeding distribution in Middle America as lowlands of Mexico, Guatemala, and Belize; in Honduras, in the arid interior valleys of the Caribbean drainage; in Nicaragua, at Tipitapa; and in Costa Rica, in Guanacaste province and near Puerto Cortés. The information in the A.O.U. checklist appears to come from unpublished sources or is presumed from the existence of breeding season rec-

ords (without evidence of nesting). For example, in Honduras Monroe (1968:162) reports that there is "no direct evidence" of breeding but specimens were collected in June. In Guatemala, Land (1970:144) reports the species as a probable resident with "no definite nesting records." Dickerman (1985) collected Lesser Nighthawks on the Pacific coast of Guatemala but did not report evidence of breeding. The Nicaragua record, however, is based on a fledgling and adult female collected 28 April 1917 by Miller and Griscom (Thomas Howell, pers. comm.).

On several occasions, we observed Lesser Nighthawks performing distraction displays. Some adults flew slowly near us, calling loudly (a frog-like trill), as if to solicit our attention. Females that we flushed from nests often appeared to fly with difficulty, landing not far away. Twice they landed on the ground nearby with one wing extended, feigning injury. These birds later flew away with no difficulty. Similar distress-simulation and distraction behavior was carefully described for *C. a. texensis* by Pickwell and Smith (1938). We did not observe any aggressive behavior toward us by the nighthawks.

In El Salvador, the Río Lempa colony of Lesser Nighthawks was adjacent to a loose colony of Wilson's Plovers (*Charadrius wilsonia*), which may have provided some protection to the nighthawks by their warning of intruders. At Arcos del Espino, Least Terns aggressively defending their nests would have inadvertently defended the nighthawk's nest as well. In Peru, Groom (1992) found that Sand-colored Nighthawks (*Chordeiles rupestris*) nesting within 30 m of tern nests benefited directly from terns' aggressive attacks on predators.

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LITERATURE CITED

- AMERICAN ORNITHOLOGISTS' UNION. 1983. Check-list of North American birds, 6th ed. American Ornithologists' Union, Washington, D.C.
- BENDIRE, C. E. 1895. Life histories of North American birds, from the parrots to the grackles, with special reference to their breeding habits and eggs. U.S. Nat. Mus. Spec. Bull. 3.
- BENT, A. C. 1940. Life histories of North American cuckoos, goatsuckers, hummingbirds, and their allies. U.S. Nat. Mus. Bull. 176.
- DICKERMAN, R. W. 1985. Taxonomy of the Lesser Nighthawks (*Chordeiles acutipennis*) of North and Central America. Pp. 356–359 in Neotropical ornithology (P. A. Buckley, M. S. Foster, E. S. Morton, R. S. Ridgely, and F. G. Buckley, eds.). Ornithol. Monogr. 36:1–1041.
- GROOM, M. J. 1992. Sand-colored Nighthawks parasitize the antipredator behavior of three nesting bird species. *Ecology* 73:785–793.
- HOWELL, S. N. G. AND S. WEBB. 1995. A guide to the birds of Mexico and northern Central America. Oxford Univ. Press, New York, New York.
- LAND, H. C. 1970. Birds of Guatemala. Livingston Publ. Co., Wynnewood, Pennsylvania.
- MONROE, B. L., JR. 1968. A distributional survey of the birds of Honduras. *Ornithol. Monogr.* 7:1–458.
- PICKWELL, G. B. AND E. SMITH. 1938. The Texas Nighthawk in its summer home. *Condor* 40:193–215.
- STILES, F. G. AND A. F. SKUTCH. 1989. A guide to the birds of Costa Rica. Cornell Univ. Press, Ithaca, New York.

OLIVER KOMAR, *Dept. of Zoology, Ohio Wesleyan Univ., Delaware, Ohio 43015*, AND WILFREDO RODRIGUEZ, *Escuela de Biología, Univ. de El Salvador, Ciudad Universitaria, San Salvador, El Salvador. Received 4 April 1996, accepted 10 Sept. 1996.*