



*Immature Black (lower) and Brown noddies, Cancún, July 9, 1988.*

*Photographs by Steve N. G. Howell and Sophie Webb*

## Notes on tropical terns in Mexico

*Steve N. G. Howell,  
Sophie Webb and  
Barbara M. de Montes*

**S**OOTY TERNS (*STERNA FUSCATA*) breed very locally along the east coast of Mexico. Paynter (1955) considered the only colony in the Yucatán Peninsula to be on Arrecife Alacrán, having found no evidence to support the reports of Friedmann *et al.* (1950) that the species breeds on Cayos Arcas and Isla Mujeres. However, the American Ornithologists' Union (1983) maintains that Sooty Terns formerly bred on Isla Mujeres and also on Isla Cancún. The species also may breed on Isla Contoy (de Montes, pers. obs.) though confirmation has not yet been obtained. There are no confirmed breeding records for the Gulf Coast of Mexico.

We report on the continued existence of the Isla Cancún colony which, with the colony on Arrecife Alacrán, makes up the known breeding population of Sooty Terns in eastern Mexico. Unfortunately, as with so many tern colonies, the Cancún birds are threatened by increasing human pressure. Following our observations at Isla Cancún we researched the status of the Bridled Tern (*Sterna anaethetus*), and here clarify its occurrence in Mexico. We also document the first Mexican record of the Black Noddy.

### The Cancún colony.

About 200 meters off the beach at the Hotel Camino Real on Isla Cancún, Quintana Roo, is a small rock, barely an islet. Since 1974, up to 600 Sooty Terns and 190 Brown Noddies (*Anous stolidus*) have been seen at the islet between April and September (de Montes, pers. obs.) though they have likely been there for many years.

On the afternoon of July 8, 1988, Howell and Webb stopped by to check on the colony, which is threatened by increasing, but often unwitting, disturbance linked to the rapid tourist devel-



The Cancún colony, resort development in the background.

opment of Cancún. On their arrival at 1700 hours no Brown Noddies were present, but 10 to 11 adult Bridled Terns were seen around screaming Sooties. No time was available to visit the rock that day, but observations were continued from shore. At 1710 hrs Brown Noddies began arriving in ones and twos and at 1740 hrs, Howell spotted a Black Noddy (*Anous tenuirostris*) among them. A few minutes later a second Black Noddy appeared and both were watched for about 30 minutes as they preened and flew around before settling down to roost. Plans were made to visit the rock the following day to make a census of



Bridled Tern at Cancún, July 9, 1988.

the breeding terns and, hopefully, to photograph the Black Noddies.

We all headed out to the beach on the afternoon of July 9, 1988, and Howell and Webb swam out to the colony. Their census of the Sooty Terns revealed 35 nests with single eggs, 14 newly hatched chicks, and four medium-sized chicks, representing a total of 53 pairs. Undoubtedly some chicks were missed due to their cryptic coloration and tendency to hide among the rocks, but we doubt that the actively breeding population comprised more than 100 pairs. At most this would account for 200 of the 550 to 600 adult birds present. Harrington (1974) showed that Sooty Terns may return to a colony in their third and fourth years, but that most do not breed before their sixth year; this would help account for the surplus birds. No banding has been done at the Cancún colony but at least three Sooties there wore bands (all on right leg, apparently silver USFW bands) indicating a degree of immigration, or at least visitation, from other colonies.

Howell and Webb found three Bridled Tern nests, each with a single egg, and also found a newly hatched Bridled chick. As indicated in Bent (1921) the nests were relatively well hidden among the rocks and vegetation compared to the exposed Sooty Tern sites. The Bridleds' eggs were slightly smaller than those of the Sooties and differed in their pale brownish-buff (rather than whitish) coloration and their finer dark spotting. Bridled Terns breed on several cays off Belize (Russell 1964; Pelzl 1969) so their presence in Quintana Roo is not surprising.

There was no evidence of nesting by Brown Noddies and, of the 20 birds that arrived to roost before dark, the majority were immature. The observations of de Montes in the 1970s and early 1980s indicated that Brown Noddies probably did breed on the islet, but increased disturbance may have caused them to abandon the site.

On both days we observed the colony, numerous people, both tourists and local residents, caused much alarm to the terns by swimming out and walking around on the islet. Most of the disturbance was unintentional, and the people we spoke to often did not realize the pressure they were putting on the colony. De Montes is trying to increase public awareness of the colony



Comparison of eggs of Bridled (left) and Sooty terns at the Cancún colony.

among the people, including tourists, of Cancún. It is hoped that disturbance can be minimized and that the terns will continue to breed there.

### Black Noddies

As on the previous afternoon, on July 9, 1988, noddies came to roost on the islet and by 1745 hrs both Black Noddies were back at their same perches. Close-range views enabled us to see all features, and numerous photos were taken. From shore, with a telescope, the most obvious features were the relatively uniform blackish plumage (primaries not significantly darker than the back as on Brown Noddies), and sharply contrasting white cap, reminiscent of a White-crowned Pigeon (*Columba leucocephala*). The Black Noddies' smaller size was obvious in direct comparison with Browns. At sea the Blacks' relatively fluttery flight enabled us to pick them out quite easily. The slender bill was only apparent at close range. Strongly contrasting white caps, relatively abraded flight feathers, and lack of contrast between back and tail indicate that both were immatures (Harrison 1983, 1987; Pratt *et al.* 1987).

The discovery of Black Noddies at Cancún is not too surprising since the species is a rare but fairly regular visitor to the Dry Tortugas, Florida (A.O.U. 1983). However, it is interesting to note that the nearest known breeding colony of the Black Noddy is off Venezuela (A.O.U. 1983); Black Noddies bred on Southwest Cay, Belize, from at least 1862 to 1907, but there are no recent records (Russell 1964, Pelzl 1969). Meyer de Schauensee and Phelps (1978) reported that the Black (Lesser) Noddy "Breeds in many small islands in the Caribbean," but apparently no data support that statement (*cf.* Bond 1971)



Two immature Black Noddies (lower) and immature Brown Noddy for comparison, Cancún, July 9, 1988.

It seems likely, however, that Black Noddies will be found in the West Indies, perhaps even breeding, if observers check suitable areas.

#### Status of Bridled Terns in Mexico

Most literature cites only one old record of the Bridled Tern from Mexico, a series of eight birds collected by Nelson and Goldman on the rocky islets at Zihuatanejo, Guerrero, on April 9, 1903 (Ridgway 1919, Friedmann *et al.* 1950); these include the type specimen of *S. a. nelsoni*, the subspecies breeding along the Pacific coast of Middle America. It is likely that Zihuatanejo was, and may still be, the site of a breeding colony. However, the A.O.U. (1983) described the status in Mexico as "Ranges at sea...off Guerrero." Tuck and Heinzel (1978) and Harrison (1983, 1987) map a continuous breeding range for the Bridled Tern from western Mexico to Colombia, but this is largely based on assumption. Bridled Terns almost certainly breed locally along the Mexican Pacific coast from at least Nayarit to Guerrero, but other than the specimens mentioned above, we are aware of only the following records.

In **Nayarit**, the species was seen at San Blas, from 1970 to 1980 (Peter Alden pers. comm., Kenn Kaufman pers. comm.) from late March to May, but no visits were made during the summer. On August 5, 1988, Howell and Webb estimated 17 to 20 pairs of Bridled Terns at San Blas, and observed adults feeding chicks (photos taken). In **Colima**, a single Bridled

Tern was observed at 18°50'N, 104° 11'W, close to Manzanillo, on June 4, 1982 (Pitman 1986). In **Guerrero**, Richard Ryan (pers. comm.) saw a few Bridled Terns off Zihuatanejo in October 1988, and again in November 1989.

Bridled Terns breed widely in the Caribbean (A.O.U. 1983, Bond 1971) but have not previously been documented from the east coast of Mexico. In addition to the breeding at Cancún detailed above we are aware of the following records in eastern Mexico.

In **Quintana Roo**, since the mid 1970s, up to six Bridled Terns have been seen on Isla Cozumel between late April and August (John Guarnaccia, Howell, Kenn Kaufman, Andres M. Sada); on July 12, 1988 Howell and Webb confirmed breeding when they found two nests, each with a single egg, on a small rocky islet near Punta Celarain at the south end of Cozumel. Other colonies probably remain to be discovered. Banco Chinchorro, a large reef 30 kilometers offshore and 165 kilometers south of Cozumel, has never been visited by an ornithologist in summer. In **Yucatán**, at Arrecife Alacran, Fosberg (1962) reported "Many [Bridled Terns] seen on July 5 in a mixed flock with black terns [= *Chlidonias niger*]." However, given that he apparently misidentified Sandwich Terns (*S. sandvicensis*) as Common Terns (*S. hirundo*), and that no ornithologists have reported Bridled Terns from Arrecife Alacrán, the record should, for the present, be considered hypothetical.

The foregoing records indicate that Bridled Terns breed locally along both coasts of Mexico. The species does not seem to nest in large, conspicuous colonies as does the Sooty Tern and the sites mentioned above are all small rocks or islets close to shore. Observers visiting Mexico in the summer should be on the lookout for other colonies as they are almost certainly there to be found. ■

#### ACKNOWLEDGMENTS

We wish to thank Peter Alden, John Guarnaccia, Kenn Kaufman, Richard Ryan, and Andres M. Sada for helpful comments and unpublished observations of Bridled Tern in Mexico, and Kenn Kaufman and Mary LeCroy for their helpful reading of the manuscript. This is publication Number 407 of the Point Reyes Bird Observatory.

#### LITERATURE CITED

- AMERICAN ORNITHOLOGISTS' UNION. 1983. Check-list of North American Birds, 6th Edition: 56-57. A.O.U. Washington, D.C.
- BENT, A. C. 1921. Life histories of North American gulls and terns. U.S. Nat. Mus. Bull. 113. Govt. Printing Office. Washington, D.C.
- BOND, J. 1971. Birds of the West Indies, 2nd Edition. Houghton Mifflin Co. Boston.
- FOSBERG, F. R. 1962. A brief survey of the cays of Arrecife Alacrán, a Mexican Atoll. Atoll Research Bulletin No. 93. Pacific Science Board, Washington, D.C.
- FRIEDMANN, H., L. GRISCOM, and R. T. MOORE. 1950. Distributional Check-list of the Birds of Mexico. Pacific Coast Avifauna No. 29. Cooper Ornith. Club, Berkeley.
- HARRINGTON, B. A. 1974. Colony visitation behaviour and breeding ages of Sooty Terns (*Sterna fuscata*). *Bird-Banding* 45:115-144.
- HARRISON, P. 1983. Seabirds: An Identification Guide. Houghton Mifflin, Boston.— 1987. Seabirds of the World: A Photographic Guide. Christopher Helm, London.
- MEYER DE SCHAUENSEE, R. M. and W. H. PHELPS, Jr. 1978. A Guide to the Birds of Venezuela. Princeton Univ. Press, Princeton.
- PAYNTER, R. A., Jr. 1955. The ornithogeography of the Yucatán Peninsula. Peabody Mus. Nat. Hist. Bull. 9. New Haven.
- PELZL, H. W. 1969. Preliminary Report. Birds of the British Honduras Keys. (Unpublished).
- PITMAN, R. L. 1986. Atlas of Seabird Distribution and Relative Abundance in the Eastern Tropical Pacific. National Marine Fisheries Service, La Jolla, California.
- PRATT, H. D., P. L. BRUNER, and D. G. BERRETT. 1987. A Field Guide to the Birds of Hawaii and the Tropical Pacific. Princeton Univ. Press, Princeton.
- RIDGWAY, R. 1919. The Birds of North and Middle America, Part 8. Bull. U.S. Nat. Mus. No. 50. Washington, D.C.
- RUSSELL, S. M. 1964. A distributional study of the birds of British Honduras. Ornith. Monog. No. 1.
- TUCK, G. S., and H. HEINZEL. 1978. A Field Guide to the Seabirds of Britain and the World. Collins, London.

—Point Reyes Bird Observatory,  
4990 Shoreline Highway,  
Stinson Beach, CA 94970 (Howell);  
Box 664, Wellfleet, MA 02667  
(Webb);  
Apdo. Postal #8, Cancun,  
Quintana Roo, Mexico (de Montes).