

Probable Breeding of Red-billed Tropicbird in Costa Rica

DAVID CAMERON DUFFY^{1,3} AND LUKE HOCH²

¹Alaska Natural Heritage Program and Department of Biology
University of Alaska, Anchorage, AK 99501 USA

²Fish Wild and Free, SJO #795, P.O. Box 025216,
Miami, FL 33102 USA

³Internet: AFDJ@ORION.ALASKA.EDU

Abstract.—Observations of ten Red-billed Tropicbirds (*Phaethon aethereus*) engaging in courtship flights and landing on Isla Santa Catalina, Costa Rica, suggest the first known breeding location for Costa Rica. Received 17 April 1995, accepted 2 June 1995.

Key Words.—Costa Rica, *Phaethon aethereus*, Red-billed Tropicbird.

Colonial Waterbirds 18(2):214-215, 1995

The Red-billed Tropicbird (*Phaethon aethereus*), although breeding on Pacific islands off Mexico and Colombia and on the Atlantic coast of Panama (Stiles and Skutch 1989), has not been reported to breed in Costa Rica (Slud 1964, Stiles 1984). We report on the possible nesting of this species on Isla Santa Catalina, off Playa Flamingo, on the Pacific coast of Costa Rica.

On 21 November 1993 at 1437 h, we anchored our vessel *The Caroline* just west of the largest island of the Santa Catalina island complex (10°29'N, 85°53'W: Defense Mapping Agency 1993: 94). The two main islands are steep, cliffbound and uninhabited. Stiles and Smith (1977) describe them: "Above the fringing cliffs, the islands are densely covered by bunchgrass (*Uniola pittedi*), with scattered tall cardón cacti (*Cereus aragonii*).

At 1429 h, we observed a Red-billed Tropicbird land on the west side of the island, above the cliff in an area of mixed grass and rocks. The senior author is familiar with this species from Galapagos, Ecuador. Shortly after the first observation, we observed two tropicbirds in zig-zagging courtship flight, with a third joining them (cf. Brattstrom and Howell 1956). At 1456 h, we counted ten tropicbirds in view at once. During this period, we watched tropicbirds land at four separate locations on the main island. In the next hour, the numbers around the island

decreased. At 1613 h, we watched the last three tropicbirds depart westwards, out to sea.

On 19 November 1993, during a watch off the island from 1657 to 1730, we observed no tropicbirds. This suggests that tropicbirds were visiting the island by day but spending the night at sea. Tropicbirds in Galapagos have been reported to display at their nest sites at least two months before egg-laying (Harris 1969). Eastern Pacific egg dates in the literature are mostly from spring months (Palmer 1962), so the birds at Santa Catalina may have been prebreeders, although aerial displays are also apparently performed by nonbreeders (Harris, unpubl. data in Diamond 1975).

D. W. Waller (in Slud 1964) reported three sightings in April and May 1963 "made in the vicinity of Cabo Velas," Costa Rica, a point just south of the Santa Catalina complex. Jehl (1974) spent three days "5 to 20 miles off the Nicoya Peninsula" and saw birds only on one morning; however, he observed one bird in two hours of observation on the afternoon of a fourth day, slightly farther south at the mouth of the Gulf of Nicoya. In transects made at sea in the Santa Catalina area, Stiles and Smith (1977) did not observe this species, nor did they report it from a census of seabirds on Santa Catalina on 18 November 1974. It is unlikely this species

would have been overlooked by them, so the present record may well represent a range expansion.

ACKNOWLEDGMENT

This project was funded by a grant from the National Geographic Society.

LITERATURE CITED

- Brattstrom, B. H. and T. R. Howell. 1956. The birds of the Revilla Gigedo Islands, Mexico. *Condor* 58:107-120.
- Defense Mapping Agency. 1993. Sailing directions: west coast of Mexico and Central America. Publication 153, Defense Mapping Agency, Bethesda, Maryland.
- Diamond, A. W. 1975. The biology of tropicbirds at Aldabra Atoll, Indian Ocean. *Auk* 92:16-34.
- Harris, M. P. 1969. Factors influencing the breeding cycle of the Red-billed Tropicbird in the Galapagos Islands. *Ardea* 57:149-157.
- Jehl, J. R., Jr. 1974. The near-shore avifauna of the Middle American west coast. *Auk* 91:681-699.
- Palmer, R. S. 1962. Handbook of North American Birds. Vol. 1. Yale University Press, New Haven, Connecticut.
- Slud, P. 1964. The birds of Costa Rica: distribution and ecology. *Bulletin of the American Museum of Natural History* 128:1-430.
- Stiles, F. G. 1984. Status and conservation of seabirds in Costa Rican waters. Pages 223-229 *in* Status and conservation of the world's seabirds. (J. P. Croxall, P. G. H. Evans, and R. W. Schreiber, Eds.). Technical Volume 2. International Council for Bird Preservation, Cambridge, UK.
- Stiles, F. G. and S. M. Smith. 1977. New data on Costa Rican waterbirds. *Condor* 79:90-97.
- Stiles, F. G. and A. F. Skutch. 1989. A guide to the birds of Costa Rica. Comstock, Ithaca, New York.