

The Status and Occurrence of Red-tailed Tropicbird (*Phaethon rubricauda*) in British Columbia.

By Rick Toochin and Jamie Fenneman.

Introduction and Distribution

The Red-tailed Tropicbird (*Phaethon rubricauda*) breeds on islands and atolls throughout the Indian Ocean and across tropical regions of the central and southern Pacific Ocean including the Hawaiian Islands (Schreiber and Schreiber 2009). It ranges more widely at sea when not breeding, regularly ranging north in the Pacific Ocean to California and south to Australia (Schreiber and Schreiber 2009). Populations of this species are generally large and stable, with the Hawaiian breeding population alone estimated at 9,000-12,000 pairs (DOFAW 2005). The total global breeding population is estimated at 17,000-21,000 pairs, most of which breed in the tropical Pacific Ocean (DOFAW 2005). Although populations are large, this is an island breeding species, and some colonies may be subject to declines due to introduced predators (Schreiber and Schreiber 2009). Red-tailed Tropicbird is known in North America only from 30+ California records (Hamilton *et al.* 2007, Tietz and McCaskie 2014) and one specimen record from Vancouver Island in British Columbia (Whittington 1992, Campbell *et al.* 2001). The species has recently been found to occur regularly far offshore off southern California, with a smaller number of records farther north to central California (Hamilton *et al.* 2007); it is accidental off Humboldt County in northern California (Tietz and McCaskie 2014). An individual sighted 227 nautical miles off the Oregon coast in August 2005 was slightly beyond the 200 mile offshore limit and thus is not included on the state's official bird list (Hamilton *et al.* 2007). Although unrecorded within Oregon and Washington waters, both of these states have hosted single vagrant Red-billed Tropicbirds (*Phaethon aethereus*) and, given these records, Red-billed Tropicbird should be sought in coastal British Columbia during future El Niño events, especially during future El Niño events (OFO 2012, Wahl *et al.* 2005, WBRC 2012).

Identification and Similar Species

The identification of the Red-tailed Tropicbird is covered in all North American field guides. There are no other species in British Columbia that would cause any identification issues for observers if this species were encountered. The following identification criteria are taken from Schreiber and Schreiber 2009.

The Red-tailed Tropicbird resembles a large tern. The plumage is mainly white with a satiny sheen, often suffused with varying degrees of pale pink. The sheen and the degree of pink may fade with plumage wear. A black crescent extends around front of eye, the black eye line continuing just past the eye. The flank feathers have black centers with white edges, and the shafts of outer primaries are black. The bill is as long as the head and is a deep red to orange-red or coral-red colour with a black tip that is serrated and slightly decurved. An interesting

physical feature of the Red-tailed Tropicbird is that the external nostrils are fully open, unlike most pelecaniformes. The middle two rectrix tail feathers are about as long as the body with black feathers and a narrow red feather in the center. The central feather is wider toward the base and white in colour. The feet are black distally, with the basal half and tarsi a light blue-gray colour. The Red-tailed Tropicbird is 44–47 cm in length and is even larger at 80–102 cm with full central rectrices. The adult birds are so distinctive looking that they are not easily confused with other species at sea.

Immature birds are white with black bars and have spot-like markings over the entire plumage except on the throat, belly and the inner 7 primaries. The central rectrices are not elongated in shape. The bill is gray-black. The Immature birds may be confused with immature Red-billed Tropicbird (*Phaethon aethereus*), but the eye-stripe is less extensive and the secondaries not dusky below.

Occurrence and Documentation

Perhaps the most unexpected and remarkable bird occurrence in the province, the Red-tailed Tropicbird is known in British Columbia only from a single heavily decomposed carcass that was discovered along the Lupin Falls Trail in Strathcona Provincial Park, Vancouver Island, on June 5, 1992 (Whittington 1992, Toochin *et al.* 2013a). Although the carcass was discovered on the forest floor of an old growth coniferous forest, the location was adjacent to Buttle Lake, which is a very long and deep lake that has a history of attracting unusual marine waterbirds (e.g., Caspian Tern, Red Phalarope) (N. Hentze pers. comm.). The tropicbird remains were primarily skeletal, with the exception of some remnant feathers which, fortunately, included the long, red central tail feathers (Whittington 1992). The condition of the carcass suggests that the bird had likely died weeks, or even months, prior to its discovery (Whittington 1992). The most likely scenario to account for the location of its discovery is that the bird was captured on the lake in April or May by one of the resident Bald Eagles and consumed at a feeding perch, with portions of the carcass falling to the forest floor below the perch where they were subsequently discovered (N. Hentze pers. comm.). The occurrence of Red-tailed Tropicbird in British Columbia came during a year of warmer-than-usual waters off western Vancouver Island as a result of El Niño (M. Meredith pers. comm.). Another vagrant species of warmer waters, the Elegant Tern, was also found in unusually large numbers in the Pacific Northwest, including British Columbia, during the same year (Toochin *et al.* 2013a, Toochin *et al.* 2013b). These species are closely associated with warmer water currents and, with the influx of warm southern waters during the 1992 El Niño event, these species apparently moved northwards into areas where they do not normally occur (Hamilton *et al.* 2007). Such warm water events occur at differing magnitudes several times each decade and regularly produce unusual

southern seabirds (Hamilton *et al.* 2007). It is possible that this species could occur in British Columbia in the future during another El Niño event.

Acknowledgements

We want to thank Don Cecile and Barbara McKee for editing the manuscript. We wish to also thank meteorologist Mitch Meredith for information on El Niño and Nathan Hentze for extra information on the skin specimen.

References

Campbell, R. W., N. K. Dawe, I. McTaggart-Cowan, J. M. Cooper, G. W. Kaiser, A. C. Stewart, and M. C. E. McNall. 2001. The Birds of British Columbia – Volume 4 (Passerines [Wood-Warblers through Old World Sparrows]). Vancouver: UBC Press.

DOFAW. 2005. Division of Forestry and Wildlife (Hawai'i Department of Land and Natural Resources) Hawaii's Comprehensive Wildlife Conservation Strategy for Red-tailed Tropicbird. [Online resource] Retrieved from <http://dlnr.hawaii.gov/wildlife/files/2013/09/Fact-Sheet-Red-tailed-Tropicbird.pdf> [Accessed: February 12, 2014].

Hamilton, R. A., M. A. Patten, and R. A. Erickson. 2007. Rare Birds of California: A work of the California rare bird record committee. Western Field Ornithologists, Camarillo, California. 605pp.

OFO. 2012. Oregon Field Ornithologists - Records Committee. [Online resource] <http://www.oregonbirds.org/index.html>. [Accessed: December 14, 2013].

Schreiber, B. A. and R. W. Schreiber. 2009. Red-tailed Tropicbird (*Phaethon rubricauda*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology. [Online resource] Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/043> [Accessed: February 13, 2014].

Tietz, J. and G. McCaskie. 2014. Update to Rare Birds of California: 1 January 2004 – 4 February 2014. [Online Resource] Retrieved from http://www.californiabirds.org/cbrc_book/update.pdf [Accessed: February 8, 2014].

Toochin, R., J. Fenneman and P. Levesque. 2013a. British Columbia rare bird records: July 1, 2013: 2nd Edition. [Online resource] Retrieved from <http://www.geog.ubc.ca/biodiversity/efauna/documents/BCRareBirdListJuly2013XZB.pdf> [Accessed: December 16, 2013].

- Toochin, R., P. Levesque, and J. Fenneman. 2013b. Rare Birds of Vancouver Island. [Online resource] Retrieved from <http://www.geog.ubc.ca/biodiversity/efauna/documents/RareBirdRecordsofVancouverIslandXZA.pdf> [Accessed: December 16, 2013].
- Wahl, T. R, B. Tweit, and S. Mlodinow. 2005. Birds of Washington: Status and Distribution. Oregon State University Press, Corvallis, Oregon. 436pp.
- West, G.C. 2008. A Birder's Guide to Alaska. American Birding Association, Colorado Springs, CO. 586 pp.
- WBRC. 2012. Washington Bird Records Committee – Summary of Decisions. Washington Ornithological Society, Seattle, WA. [Online resource] <http://www.wos.org/wbrccsummaries.html>. [Accessed: December 16, 2013].
- Whittington, B. 1992. Red-tailed Tropicbird – A First for Canada. *Birders Journal* 1(6): 309.