

ABOUT THE COVER: RED-NECKED PHALAROPE

The dainty Red-necked (formerly Northern) Phalarope (*Phalaropus lobatus*) is the smallest, most widely distributed, and most abundant of the phalaropes. They are one of two pelagic species of phalarope and possess nasal salt glands, which enable them to drink sea water. A dimorphic, polyandrous species, the female is the more brightly colored and clearly patterned, and averages five percent larger than the male. This is an example of Darwinian "sexual selection," in which the most colorful females attempt to outcompete other females for access to males, or are preferentially chosen by them, and hence increase the frequency of their "colorful" genes in the population.

In breeding plumage the birds are unmistakable, with red on the front and sides of the neck, a white throat, gray head, and gray upperparts with buffy feather edgings. In winter plumage they are gray above with dark streaks and white below with a variable black cap and prominent line behind the eye. The thin neck and small, black, needle-like bill are distinctive. Immatures are browner. The species is monotypic.

The breeding range of the species is circumpolar, the birds nesting specifically on arctic coastal plain, tundra, and islands from Alaska across northern Canada, including Hudson Bay. In winter they are pelagic, with the North American population apparently wintering mostly off the coast of Peru. The wintering location for the Red-necked Phalaropes that congregate near the Bay of Fundy in the late summer and fall, however, is unknown. In Massachusetts they are a common offshore spring migrant, with recorded high counts of 3000 or more. They are occasionally observed from shore in large numbers, usually during stormy weather.

Red-necked Phalaropes have a polyandrous (literally: "many males") mating system, which is found in less than one percent of bird species. Females court males and mate with several males, while males mate with only one female. Females compete for mates and in courtship have an advertising flight consisting of a "wing-whirr" accompanied by vocalizations. Mating occurs on water, and during this phase of the nesting cycle, females may practice "mate-guarding," to prevent their mate from courting with other females. The female leads the male around, choosing nest sites by starting scrapes on which they both work, and finally the female chooses among the scrapes by laying her eggs in one. Typically she then abandons the incubation and raising of the young to the male (only males have brood patches), and sets off in search of another mate to repeat the process. If there are enough males available (about ten percent of the cases), she may establish up to three nests, thus practicing "sequential polyandry." The favored nesting habitat is grass and sedge borders of shallow bogs and pools. The nest is on the ground, sometimes sunk in moss, often sheltered by a grass tussock. The complete clutch is typically four olive, brown-

marked eggs. Incubation lasts up to three weeks, and the precocial young can swim immediately after hatching. Males may adopt orphans, and distraction displays involve partial extension of their wings.

Red-necked Phalaropes may feed while wading or walking, and sometimes take flying insects with "flutter-leaps," but they primarily forage while swimming. They eat mostly aquatic insects, zooplankton, and crustaceans, for which they forage by spinning like a top on the water surface, presumably to stir up bottom water in the vortex.

Although they rarely pass by our shores in breeding plumage, the sight of a flock of these dainty specks on the ocean surface or simply flying by, makes a day of pelagic birding very worthwhile.

W. E. Davis, Jr.

ABOUT THE COVER ARTIST

Paul Donahue's artwork has frequently appeared on *Bird Observer's* cover, much to our delight. In late 1991 Teresa Wood and Paul began construction of a rain forest canopy walkway at the Amazon Center for Environmental Education and Research (ACEER) off the Rio Napo in the Department of Loreto in northeastern Peru, finally finishing it in April 1994. This canopy walkway, the world's longest, is 450 meters long and 36 meters above the ground at its highest point. It connects thirteen large, canopy-emergent trees, with observation platforms in each tree, and is constructed of aluminum ladders, steel cable, polyester rope, and wooden planks. From late 1992 to 1994 they also worked as the Resident Directors of the ACEER facility.

After a winter in Paraguay painting and training Paraguayan biologists in methods to reach the rain forest canopy, in early June 1995 Teresa and Paul started construction of two new canopy walkways in the rain forests of the Fila Chonta in Puntarenas Province of western Costa Rica. Paul can be reached at P.O. Box 554, Machias, Maine 04654.

The Red-necked Phalarope drawing first appeared in a catalog of Victor Emanuel Nature Tours, Inc. (VENT). Victor Emanuel has kindly given *Bird Observer* permission to use this drawing. VENT conducts birding tours around the world. Their address is P.O. Box 33008, Austin, Texas 78764.

M. Steele