

RED PHALAROPE MORTALITY IN SOUTHERN CALIFORNIA

In southern California, Red Phalaropes *Phalaropus fulicarius* are fairly common fall migrants, although their abundance varies from year to year. They are most often seen on the open ocean, but they occasionally occur near shore, and in some years numbers appear on coastal ponds.

Beginning on 17 November 1969 Red Phalaropes were reported dead and dying on the beach of southern California from San Diego northward for at least 50 miles. The extent of this die-off is not known but was apparently quite large since it received notice in local newspapers. On 22 November, dead Red Phalaropes were observed in the water on several occasions and were being fed upon by Fulmars *Fulmarus glacialis* and large gulls *Larus* sp. Over a dozen birds were found floating in the kelp beds near the Coronados Islands, Baja California, and observations on the islands the following May revealed several skeletons of phalaropes that had been plucked clean by gulls. In late December there were reports of a few whitish sandpipers, presumably phalaropes, dead on the beach near the tip of Baja California, and also of more dying birds on the beach north of San Diego. At that time abnormally high numbers of Red Phalaropes were found walking along the beaches, searching for food in kelp cast up by the waves.

Twenty specimens picked up from beaches in the San Diego area in late November were donated to the San Diego Natural History Museum. In each case they were found to be in a starved condition, weighing only half as much as birds collected on the breeding grounds in June. Weights of 13 females ranged from 27.3-45.5 grams with an average of 33.2 grams; of six males from 23.6-31.6 grams with an average of 27.7 grams; one unsexed bird weighed 31.8 grams. Weights of Red Phalaropes from Victoria Island, Canada (Parmelee, Stevens, and Schmidt, Natl. Mus. Canada Bull. 22: 140, 1967), collected in June are: eight females, 49.5-77.0 (62.2) grams; nine males, 43.0-60.0 (53.3) grams.

The stomachs of most birds were empty except that they all contained small whitish or orange balls, 1.7 to 4.4 mm in diameter, of a synthetic nature. Most birds contained only a few balls but one contained as many as 36. The source of this material, which also was washed-up along the tide line on the beach in the La Jolla area, could not be identified. Mr. Gary Smith, of Scripps Institute of Oceanography, reported (pers. com.) that the material was largely inert. Several stomachs contained chink shells *Lacuna* sp., which occur normally on the kelp, but no other food remains were encountered.

Apparently the abundance of surface plankton in southern California was much reduced in the fall of 1969. One possible indication of surface food shortage is that on 22 November many Sooty Shearwaters *Puffinus griseus* were seen diving for food but none were observed feeding at the surface. Both feeding methods are used by this species. It appears that phalaropes were unable to find adequate food at sea. Those that came ashore to feed along the wrack line and in coastal ponds probably encountered better feeding conditions. Those that tried to subsist at sea on the floating balls died of starvation. A previous report of mortality (Ross, Condor 24: 66-67, 1922) that occurred in October 1921 also indicated that the birds were thin.

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