

BEACH CARCASS SURVEY SUMMARY FOR MARINE BIRDS AND MAMMALS, REDWOOD NATIONAL & STATE PARKS (RNSP). MAY-JULY, 1998.

Introduction

In conjunction with breeding season snowy plover beach surveys, RNSP personnel also survey beaches on the return trip for the presence of beached marine mammals/birds to determine if background levels of oil are present on any of the carcasses. In addition, these surveys provide a baseline of mortalities occurring along the parks= beaches. Natural mortality is expected, and undoubtedly only a fraction of carcasses are found and recorded. Five reaches were surveyed: #2-#6. See the snowy plover breeding survey progress report (RNSP, July 1998) for a discussion of reaches unsurveyed.

Methods

Carcass surveys are done primarily on the return trip, generally on the wet sand portions of the beach (since the dry sand portion is surveyed for plovers). However, surveyors look for carcasses while on the dry sand portion of the beach as well. Transects are walked parallel to the surf line, and binoculars are helpful to spot carcasses from a distance. Species is recorded, sometimes with the help of a key (Ainley, 1993) and presence of oil is noted. Condition of the carcass, as well as if it=s been scavenged (scavenging should indicate a lack of oiling) are recorded as well. All data is later entered into a beach carcass database.

Results

A total of 15 beach carcass surveys were done (five in mid May, five in mid June, five in mid July). 3 surveys turned up no carcasses whatsoever. On the remaining 12 surveys, a number of points can be noted: **none of the carcasses showed any presence of oil** (total of 103 carcasses were found-both bird and mammal); **cause of death could not be determined for any of the carcasses; most were scavenged**, but on many carcasses scavenging could not be determined because of decomposition.

Species totals were as follows

birds:

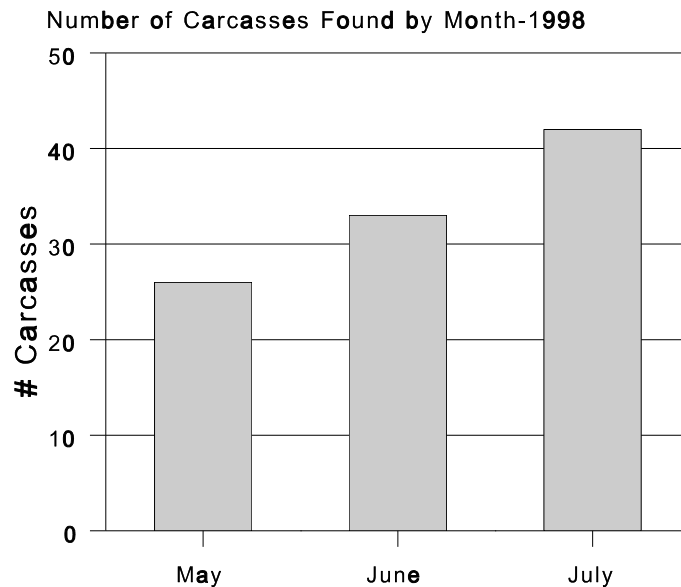
caspian tern	1
common murre	29
cormorants	6
fulmar sp.	1
gull sp.	25
loon sp.	2
surf scoters	10
unknown seabirds	19
western grebes	4

white-winged scoter 1

mammals:

harbor seal 1
pinniped sp. 1
sea lion 1

Figure 1.



The total numbers of carcasses found increased as the season advanced (Fig. 1). The increase was slight, and could be due to the greater ability of surveyors to pick out carcasses as more surveys are performed, or reflect the higher mortality of juveniles at sea. However, it was difficult to age the carcasses. Many of the carcasses were found while surveying for snowy plovers on the dry sand portion of the beach. It is important for surveyors to be aware of this; the totals would be considerably lower if carcass surveys were confined to the wet sand portions.

Literature Cited

Ainley, D.G., et al. 1993. Beached Marine Birds and Mammals of the North American West Coast: A Revised Guide to their Census and Identification, with Supplemental Keys to Beached Sea Turtles and Sharks. National Oceanic and Atmospheric Administration, Sanctuaries and Reserves Division, U.S. Department of Commerce.