

## A Catastrophe for Wildlife

By Scott Thurber

In the brief period since Monday's tanker collision, volunteers in the Bay Area have picked up more oil-soaked seabirds than were rescued in the two months following the Santa Barbara oil spill of 1969.

The oil is still on local waters. If it coats beaches, mudflats and tidepools in local wildlife areas, it could kill off substantial food sources of the surviving seabirds. These foods include ghost shrimp, clams, mudworms, and other small water organisms.

Bay Area wildlife experts and spokesmen for the still largely-uncoordinated wildlife rescue-and-protection effort offered some disconcerting statistics yesterday.

• So far, about 2000 birds — admittedly a rough estimate — have been collected in shoreline areas and taken to various special centers for cleaning and protracted treatment. The two-month figure in the Santa Barbara area was 1600, sources there said yesterday.

• Although there have been relatively few deaths among the seabirds collected, cleaned, and treated in the Bay Area, many — perhaps most — may die before the treatment is ended. In the Santa Barbara area, less than five per cent survived.

• Nobody has made any attempt to count dead seabirds along the various affected bay and ocean-front



AP Photo

Mike Vardas of Daly City cleaned a duck at Stinson

areas. More than 5000 dead waterbirds were found in the Santa Barbara area.

The major wildlife area still threatened—and it was recurrently threatened with each high tide—was Bolinas lagoon, one of the major seabird sanctuaries on the Pacific Flyway.

A combination of suspended "booms" across the channel entrance—interspersed with thick layers of absorbent straw—kept oil-intrusion into the lagoon at high tide periods to a minimum early

yesterday morning and again yesterday afternoon.

Clerin Zumwalt, a lagoon expert who serves as naturalist for the nearby Audubon Canyon Ranch, said he spotted only a few small patches of thin oil on the lagoon surface near its south (seaward) side yesterday.

He happily reported no traces of oil on the lagoon's beaches—or oily birds along its shores.

"So far, so good," he said hopefully.

Inside the Bay, there ap-

peared no imminent threat to the most valuable areas initially threatened—in the Richardson bay section—barring a return of the main oil slick.

Norman McIntosh, curator of the Audubon Society's big Richardson Bay Wildlife Sanctuary, said he was taking no chances.

Beaches around the sanctuary were covered with straw at low tides — to absorb any oil which might drift in on the high tides.

If the beach and mudflat areas should become coated with oil, he said, "in essence it would pave the beach and rocks just as though you put down heavy asphalt for a road."

He said it would cut off air so that the "little creatures" in that habitat couldn't breathe.

Zumwalt said the oil spill posed little danger to fish. Most fish in the Bay Area, he said, are deep feeders — and only surface feeders (he said there are a few of these, mostly carp, in the bay itself) would be threatened by the surface oil.

Dr. Lawrence Binford, ornithologist and assistant curator of the California Academy of Sciences said treated birds must be kept in captivity and under special care for months before they are released — "until they moult."

It takes them that long to regain the natural oils in their feathers which insulate them and enable them to float, he said.