

Is N.Z. Prepared for a Major Oil Spillage in the Sea?

By H. F. Heinekamp*

THE problems of major oil spillages in the sea and the consequent havoc and despoliation they cause to the environment have greatly increased in recent years and are becoming even greater as more and more oil and oil products are transported by larger and larger vessels. The problems multiply as oil is sought and obtained from continental shelf areas beneath the sea and the risks of blow-out and leakage increase. During the past 6 years or so oil pollution has caused considerable havoc among sea birds in various parts of the world. The three major disasters were:

- In March 1967 the wreck of the *Torrey Canyon* off the south coast of the British Isles caused the spillage of 110,000 tons of oil, which resulted in 8,000 oiled birds, mostly guillemots and razor-bills, being washed ashore.
- In 1969 an oil blow-out off the coast of California at Santa Barbara released 21,000 gallons of oil per day for 12 days into the ocean. The resulting oil slick in the Pacific Ocean was 800 miles long. Near Santa Barbara 400 western grebes perished, but it is thought that, in addition, the oil slick caused the greatest mortality of pelagic birds ever known.
- In 1971 the *Arizona Standard* and *Oregon Standard* collided in San Francisco Harbour, California, with the result that 840,000 gallons of oil were spilt. John Smail, of the Point Reyes Bird Observatory, estimates that 10,000 birds, mainly western grebes and guillemots, were killed.

Pollution from Unknown Sources

Oil pollution from unknown sources also causes bird disasters. In 1969, 8,000 common scoters and 11,000 eider ducks were washed up on the Dutch Friesian coast, and in 1970, 14,000 oiled birds, mainly guillemots, razor-bills, and puffins were washed up on the coasts of Scotland and north-east England.

So far New Zealand has escaped this kind of disaster, though shipwrecks have been

occurring since the coming of the European. One needs only examine a map on which these wrecks are charted to realise that the possibility of a major oil spillage such as has occurred overseas is very real indeed. Furthermore, if oil resources are discovered off our coasts, the risk of a blow-out similar to that of Santa Barbara must be taken into account.

Are we in New Zealand organised and prepared to deal with the thousands of oiled birds that could result from a major oil spillage? The Society believes it should be, that New Zealand should keep up to date with overseas research and information, and that contingency plans to meet such a situation should be ready.

Overseas Experience

Overseas experience has shown that oil companies responsible for oil pollution will assist in the interest of maintaining good public relations. For example, in San Francisco the Standard Oil Company supplied 22,500 gallons of mineral oil without charge, for use in cleaning oiled birds, and paid US\$900 per day for food and medicine. More volunteer workers were available in both Britain and the United States than could be used. The same kind of assistance would probably also be available in New Zealand.

Apparently most oiled birds must be destroyed and it is even debatable whether or not any birds at all should be rehabilitated and returned to sea. Of the 8,000 victims of the *Torrey Canyon* disaster fewer than 100 were returned to the sea after a long rehabilitation. However, one positive aspect of these disasters is that we gain experience. From diaries kept by students of the University of California a manual to assist in dealing with these situations has been prepared and much valuable information has been accumulated at the Point Reyes Bird Observatory, San Francisco. In Britain the Seabird Rehabilitation Research Unit of Newcastle University has been set up and one of their projects is a study of the water-repelling properties of bird feathers. Much more research is necessary.

* Nelson Section.