

## ORNITHOLOGY

## Pesticides Kill Birds

**Chemical pesticides by killing off birds and other natural enemies of insects along with the pests, are upsetting nature's balance and creating new problems.**

► MODERN insecticides and weed killers may be causing more problems than they are solving. Along with the pests, chemical sprays are killing birds and other natural enemies of insects and weeds, upsetting a balance which has existed for millions of years.

Leading ornithologists expressed these fears, founded on intense research and field census. Studies on the effects of DDT on birds by Drs. George J. Wallace and Richard F. Bernard, Michigan State University, East Lansing, show high mortality among many species of birds, especially those living in areas with sprayed elm trees. In some areas, all birds of certain species died.

DDT was found in high concentrations in robins, finches and other song birds in most areas. Experiments were made on poisoned house sparrows and American robins, the researchers told the 13th International Ornithological Congress at Ithaca, N.Y.

Earthworms, insects, small mammals and fruits or buds are the prime sources of poisoning in birds, they pointed out. Although the birds are not sprayed directly, these harmless creatures gather enough poi-

son in their systems from spray-covered meals to stop reproduction, cripple or kill.

"Pesticides are used in agriculture to a very large extent, creating, on a world-wide scale, problems affecting birds and other animal populations," Dr. Edwin A. Mason, Arcadia Wildlife Sanctuary, East Hampton, Mass., told the Congress. "If birds are to play their proper role in the control of insects and agricultural weeds, present practices will have to be modified."

Nearly all of the ornithologists at the Congress expressed their fears of modern chemical warfare against pests creating a greater loss to humanity through the depletion of other natural and helpful creatures, especially birds.

The natural relationship among birds and insects and plants has continued for eons, the scientists pointed out. Yet, man in the short time of his existence, has unbalanced this food chain and driven many natural creatures close to extinction. Research must be oriented to find the pattern of land and agricultural practice that will result in a better balance.

• Science News Letter, 82:7 July 7, 1962

## Birds Transmit Diseases

► "A BIRD IN HAND" is not necessarily "worth two in a bush."

Disease-causing parasites are sometimes passed to humans by wild birds from almost all geographical areas. Diseases ranging from epidemic fever to the deadly "sleeping sickness" are transmitted through birds by blood-sucking insects.

The birds, which host such hitchhikers as ticks, can carry disease over large chunks of the earth's surface due to their ability to migrate.

These startling facts were presented at a special symposium at the 13th International Ornithological Congress at Ithaca, N.Y. More than 600 scientists from 40 countries attended the Congress, held in the United States for the first time.

Although birds act as perfect hosts, only rarely has a bird been observed to suffer or succumb due to harmful effects of a virus infection, the ornithologists were told.

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## OCEANOGRAPHY

## Submerged Volcanoes Traced Off East Coast

► A CHAIN of submerged peaks has been discovered swinging from the New England shore east and south to the tropical island of Bermuda.

Oceanographers believe the peaks were volcanoes which erupted on the ocean floor some 70,000,000 to 100,000,000 years ago. They have long since become dormant and covered with fossil-bearing sediments.

The two dozen seamounts, stretching 1,000 miles, were the focus of an extensive underwater survey conducted by Hudson Laboratories and the Woods Hole Oceanographic Institution with help by the U.S. Navy Hydrographic Office. They had been overlooked until recently because of the deep layers of sediment or mud that nearly buried the peaks.

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## OCEANOGRAPHY

## Vehicle to Probe Ocean

► A POD-SHAPED "sea monster" with spider-like arms is the latest addition to an armada of unusual research vehicles being built to explore the ocean depths.

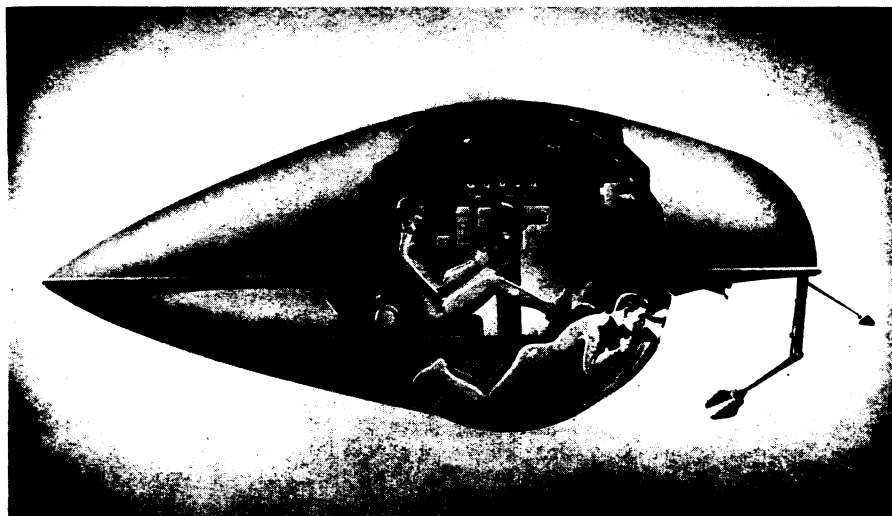
Named the Deepstar and designed by Captain Jacques-Yves Cousteau, world-famous French undersea pioneer, the self-propelled vehicle can work more than two miles below the ocean surface. Deepstar will be used to scoop up ocean-bottom samples, gently handle oceanographic instruments, and make oceanographic surveys. It will be built by Westinghouse Electric Corporation.

The research vehicle joins such unorthodox vessels as the pencil-shaped FLIP, the whale-shaped sophisticated aluminum submarine ALUMINAUT, and the bomb-shaped SEAPUP VI, which has skis for landing gear. All have either just been built or will be completed by the end of next year.

The nearly seven-ton vehicle, Deepstar, will carry a crew of three. Power driven by battery-operated propellers, the easily maneuverable craft will be able to stay beneath the surface 24 hours. Its cruising speed is about three and one-half miles an hour with a range of 24 nautical miles.

A remotely controlled arm will be used for collecting samples as the vehicle skims the ocean floor.

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**INSIDE THE "DEEPSTAR"**—An artist's conception shows the prone position of the observer in the deep sea research vehicle "Deepstar." Three echo sounders will be used by the pilot to guide the craft.