



Wings for Plague

BUBONIC plague, like other forms of death in these days, has apparently taken to air travel. Not on the man-made wings of airplanes, but on the wings of hawks, owls, crows and other predatory and scavenger birds, says the U. S. Public Health Service.

The suggestion comes from William L. Jellison, assistant parasitologist at the Rocky Mountain Laboratory of the Service. Thirty years ago, Dr. W. C. Rucker made a similar suggestion, but limited it to one species of burrowing owl that shares habitations with the ground squirrels and other rodents that carry fleas which are in turn the ultimate carriers of the plague germs. Mr. Jellison, however, greatly extends the list of suspected birds, to include two species of hawks, two of falcon, three of owl and one species each of eagle, magpie and crow.

All these birds prey abundantly on the plague-carrying rodents. The scavengers, like crows, devour their catches on the spot, but predators, like hawks and owls, carry the carcasses to their nests, with the possibility of distributing the fleas either on the way or after they arrive. In several cases, these flesh-eating birds were observed in attacks on rodents dead or dying of the plague.

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ETHNOLOGY

Indians Get Back Skulls, Say Drought is Foiled

THE Water Buster Clan of Hidatsa Indians in the northern Plains has got back its bundle of sacred skulls. And ever since it got them back from the museum in New York, there has been plenty of rain.

This is the gist of a speech by Charley Snow, member of the Water Buster Clan, which ethnologists have recorded by phonograph.

The Indian experience of getting back the sacred bundle of skulls, as told to Zellig Harris and C. F. Voegtlin, began ten years ago. There was drought in the upper Missouri country. Hidatsa Indians began to say that they never should have sold their sacred bundle of skulls twenty, or maybe thirty, years ago. After the sale to that museum, it got very dry.

"We wanted to get our skulls," explains Charley Snow in his own language, "but it was difficult for us. The people of the other (clans) helped us; they caused dances to be held; they gave away things; they collected money."

Having raised \$400 by benefits and donations, the Indians named a committee to go "by the edge of the ocean in the city of New York, as our skulls were in that place."

And the happy ending: "Now having brought back the skulls, thereafter ever since it rained; even grass begins to be plentiful; even things which grow become good."

The two ethnologists recording this say that the skulls are proudly referred to by the Water Busters as a triumph of religious power. Clan members and others come to view the powerful objects.

"When ushered into the presence of

the skulls," the ethnologists report, "one must not stand; one sits quietly and prays; then before leaving it is proper to place a present of cloth or money before the skulls."

This old, native American handling of present-day drought problems becomes a new scientific document for study of Hidatsa language. The phonograph record of Charley Snow's speech accompanies a report on "Hidatsa Texts" and his story will be heard again and again where language students struggle with stresses and sounds of his native speech.

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CHEMISTRY

Six Soap Solution Types Now Known to Science

FOUR or possibly six new types of soap solutions—some with potential commercial importance—have been discovered at the chemistry department of Stanford University, Dr. Robert D. Vold of Stanford reported before the American Chemical Society's colloid symposium.

The new discoveries came out of the simple question: What happens when hot or cold water is gradually added to powdered soap? Soap owes its cleaning power to the fact that dilute solutions of substances known as "colloidal electrolytes" (soap is one kind) dissolve many different kinds of materials that would be insoluble in water alone.

Any improvement in the properties of soap, Dr. Vold said, depends in part on identifying the particular forms of solution obtained by mixing water with sodium oleate (soap). Until recently only two forms of soap solutions, known commercially as middle soap and neat soap, were known. Dr. Vold's research has disclosed another four forms and possibly two more besides.

Not all of these newly-discovered forms have commercial applications, said the Stanford scientist, because some of them can exist only at temperatures above the boiling point of water and hence are not useful in laundering.

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The population of Soviet Russia has more than doubled since 1926, the new census indicates.

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