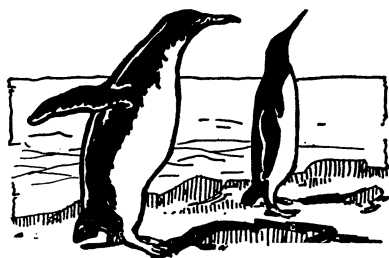


## NATURE RAMBLINGS

by Frank Thone

ORNITHOLOGY



### Very Solemn Citizens

THE HIGH interest in the Antarctic that centered recently around Antarctic expeditions has brought into prominence most of the more interesting of the comparatively few animal species that inhabit that desolate end of the world. Among mammals, whales and sea elephants have held the front of the stage; among birds it has been albatrosses and penguins.

The penguins are among the most interesting of all the folk in feathers. They have been "fishers on the wave" for so long that they have totally lost the power of flight, and now use their plumeless wings only as swimming flippers, like those of the seal or whale. This matter of having four propellers instead of only two, as most birds have, gives them a tremendous advantage when swimming under water in pursuit of fish, which form their chief food.

They are also distinguished in being about the only creatures in the world, apart from man, who habitually go about in a completely upright position. Other two-legged creatures in especial other birds, still hold their bodies more or less horizontally, presumably a reminiscence of original quadruped habit.

This erect habit, coupled with the shortness of their legs, compels them to a very short-strided, waddling, often hopping gait, which looks very comical to our superior human eyes. It must look all right to the penguins, however, for they have never been seen laughing at each other. In fact, they are about the most sober humorless birds in the world. Their affairs are conducted with the utmost seriousness; in their meticulous dress of black and white they look for all the world like so many little Old-World town councillors.

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PSYCHIATRY

## Mental Disease Found Common in Indians

PREVALENCE of mental disease among a tribe of Canadian Indians was reported before the American Sociological Society, meeting in Philadelphia, by Dr. John M. Cooper of the Catholic University of America.

Dr. Cooper, who has spent much time studying the culture of these Northern Cree Indians on Hudson Bay, described his efforts to learn something of their mental troubles. The mental diseases of primitive men, he explained, are an almost untouched field of science.

About 85 per cent. of these adult Cree, at least among the women, are subject to hysteria, Dr. Cooper stated, saying that this large estimate was made by a priest who has lived for 11 years in their country. The more common symptoms of the hysteria are convulsions, hallucinations, melancholia, insensibility to pain, and catalepsy. Rather frequently an Indian affected will run from the tent into the woods, in flight. Abnormal fears, perhaps distinct from hysterical states, occur frequently. Such Indians dread leaving the lodge or going hunting alone.

The other mental illness noted among the Cree is thought by Dr. Cooper to be unique. This is the Wihtigo psychosis, which shows itself as an abnormal craving to eat human flesh and a delusion of being transformed into a Wihtigo. A Wihtigo is a supernatural being supposed to have cannibalistic tastes, and much feared by Cree Indians.

Explaining the basis for this unusual mental disease, Dr. Cooper said that in desperate times of famine the Cree have been driven to eat human flesh. Often in such cases they were suffering from mental breakdown. In their struggle against hunger, and their horror of cannibalism and of breaking tribal taboos against it, some of the famished Indians emerged from their conflict with a craving for human flesh and delusions of being cannibalistic creatures. This Wihtigo psychosis occurs among both men and women.

Hysteria and kindred types of mental disease are extremely common among Cree, sub-polar peoples, and the Malaysians, Dr. Cooper stated. The graver psychoses are seemingly more rare, but far more exact statistical data and studies of individual cases are needed, he urged, to explain the mental ills of the primitive.

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ICHTHYOLOGY

## Fish Grow Best in Water That Is Not Too "Clean"

IT IS NOT good for a fish to be alone. Fish make better growth in water that has been "conditioned" by keeping a number of their species in it than they do in absolutely fresh water, Prof. W. A. Allee of the University of Chicago told the American Society of Zoologists at its meeting in Boston.

In the experiments he outlined, fishes of several species were kept in aquaria of "conditioned" well water, pond water and distilled water, while "control" groups of fishes were kept for comparison in similar but "unconditioned" water samples. In general, the fishes in the conditioned water grew better than their respective controls. Some of the fishes in the unconditioned distilled water actually died, apparently through loss of necessary elements from their bodies into the water. In all cases, fishes lost

chemical substances into the water, but the loss was more rapid into the unconditioned than into the conditioned water.

Prof. Allee postulates the endowing of the conditioned water with some kind of growth-promoting substance from the bodies of the fish that have lived in it. Whatever the substance is, it shows a considerable degree of resistance to heat, for when raised to 21 degrees Centigrade above the boiling point it still retained its effectiveness. It can also be concentrated, heat-sterilized and re-diluted to its original strength without change. The chemical nature of this growth-promoting factor is not known as yet, but preliminary indications are that it is either a protein or associated with a protein fraction.

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