

on the social and political structure of the coastal villages.

Whaling methods still follow traditional ones. The Eskimo crews operate from whaling camps on the ice and a majority still hunt from *umiaks*, the traditional skin boats. Equipment does include harpoons equipped with explosive charges and so-called "bombs" fired from shoulder guns, but this gear is patterned on 19th-century models. Black powder is used as an explosive, and the charges require fuses to fire and are, therefore, regarded as rudimentary in comparison to the technology now employed by commercial whalers.

The increased whaling activity by Eskimos is attributed in general to population growth and increasing affluence. Settlement of native land claims, the development of North Slope oil and gas resources, and the building of the trans-Alaska pipeline have provided new sources of funds to Eskimo communities. This has made possible the purchase of new boats and whaling equipment and the formation of many new crews. Some observers ascribe the higher numbers of whales struck and lost to the presence of inexperienced crews and captains in the hunt.

Culturally, the bowhead is the chief source of legend and subject of ceremony and celebration for the coastal Eskimos. But the bowhead also provides the staple diet for the significant number of Eskimos still leading a subsistence life. As food, *muktuk*, the whale's black skin with a layer of fat beneath, continues to be regarded as a great delicacy, and the *muktuk* and whale meat distributed by the crews is frozen or dried and used through much of the ensuing year. As the impact statement points out, the meat, *muktuk*, and oil of the bowhead are nutritionally very important in the diet since they provide fat, protein, and vitamins which are lacking in other game taken by the Eskimos.

Eskimo life has obviously changed from the subsistence conditions of even a generation ago. Dog teams, for example, have been almost entirely displaced by snowmobiles, and this has drastically reduced the demand for whale blubber which used to be fed to the dogs. And the eating habits of the Eskimos themselves have changed with the availability of processed food in the larger villages.

But the Eskimos feel that what is not understood is that Eskimos are seeking to adapt to outside pressures while preserving what is essential in their traditional way of life. The Eskimos see their complete relationship with the bowhead

as the main prop of their traditional life. As one observer put it, "for the Eskimo, culturally it is death not to hunt the whale."

At the moment, the Eskimos, who are well organized and have gained considerable experience in working for their political, financial, and ethnic objectives, seem disposed to wait out the government's decision on the issue of the objection. If no objection is filed, the Eskimos would go to court, feeling as they do that they have grounds in international and United States law to claim that the IWC convention does not apply to the Eskimos.

Federal officials, as the impact statement makes clear, are not all insensitive to the Eskimo case. They point out that even if the moratorium goes into effect, the exemption could be restored at the IWC meeting next June. At this point, Eskimos are angry and suspicious and doubt that possibility. Their suspicion extends to conservation groups which, until recently, had good relations with the Eskimos. There are unquestionably some conservationists who think that the Eskimo culture has been fatally compromised and feel that the Eskimo claim to a whaling exemption might well be subordinated to the greater good of extending the prohibition on the killing of whales.

Most conservation groups, however, seem to feel that they have been trapped in the middle on this issue. They suggest that the exercise of good sense and good faith could lead to a satisfactory compromise because the long-term interests of the Eskimos and whales are really identical. Friends of the Earth appears to be taking the lead in a coalition of national conservation groups seeking to effect a cooling of tempers and a compromise.

Somewhat belatedly, a serious search is on for an alternative. Such a compromise, people on all sides of the issue seem to agree, would have to include some effective limitation on the hunt. And such regulations could only be workable if it involved self-regulation by the Eskimos through their traditional village organization. Rules imposed from the outside are virtually impossible to enforce under the conditions prevailing where the hunt is conducted.

It will take effort and skill to satisfy both the Eskimos and the IWC. And in the case of the Eskimos, they will probably have to be persuaded that the bowhead is really in danger and that they themselves are not to be used as pawns. Meanwhile, to one concerned but apparently unbiased observer, the situation looks "out of control."—JOHN WALSH

RECENT DEATHS

Edgar C. Adrian, 87; former professor of physiology and chancellor, Cambridge University; 4 August.

Bennett F. Avery, 75; former dean, Boston University School of Medicine; 2 July.

Kenneth K. Barnes, 55; chairman of soils, water, and engineering, University of Arizona; 13 July.

Langston F. Bate, 75; former chairman of chemistry, Miner Teachers College; 13 July.

Jesse W. Beams, 78; retired chairman of physics, University of Virginia; 23 July.

Grete L. Bibring, 78; professor emerita of clinical psychiatry, Harvard University; 11 August.

Paul Blachly, 47; professor of psychiatry, University of Oregon Health Sciences Center School of Medicine; 3 July.

Arthur A. Coniff, 76; retired professor of biology, Georgetown University; 3 August.

Margaret D. Craighill, 78; former dean, Women's Medical College; 20 July.

Joseph H. Dexter, 84; former professor of physics, City College, City University of New York; 27 July.

Albert H. Douglas, 71; former professor of clinical medicine, Medical School, State University of New York, Stony Brook; 3 August.

Loren Eiseley, 69; former professor of anthropology and history of science, University of Pennsylvania; 9 July.

David Krech, 68; professor emeritus of psychology, University of California, Berkeley; 14 July.

William M. Lepley, 71; professor emeritus of psychology, Pennsylvania State University; 25 July.

Henry L. Lucas, Jr., 61; professor of statistics and biomathematics, North Carolina State University; 8 June.

Lawrence M. Marshall, 67; former chairman of biochemistry, Howard University; 30 July.

H. M. Marvin, 84; professor emeritus of clinical medicine, Yale University; 6 August.

Hans F. Smetana, 83; retired chief of pathology, Armed Forces Institute of Pathology; 5 August.

Kenneth G. Weckel, 71; former professor of agriculture and life sciences, University of Wisconsin; 9 July.

Erratum: Frederick III, the grandfather of economist Oskar Morgenstern, was misidentified in the 12 August issue (p. 649). Frederick was King of Prussia and Emperor of Germany; he ruled briefly in 1888.—D.S.