An issue of survival: bowhead vs. tradition

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whale's "small"-the narrowest point be-

the hunters above. Suddenly the captain stopped pacing; his eyes were riveted on a spot far down the lead. The crew snapped alert. Hanging in the shimmering Arctic mirage was a ball of vapor. Seconds later the sound carried to us: pahhhhh, a great rush of air exhausting from the whale's huge lungs. The crew scrambled into the umiak and set off, driving the boat quickly and

harpoon float has been a part of Eskimo

whaling gear for more than a thousand

years, an invention of marvelous sim-

plicity that slows the whale's flight, tires

the animal by the drag, and, when the

whale is submerged, signals its location to

quietly with short, powerful strokes, the captain pointing the bow 400 yards ahead of where the whale had surfaced. Four other boats also were launched, each aiming for a spot where the whale might rise next.

Within ten minutes the whale surfaced again, very near one of the boats. Through my binoculars I could see the crew straining to overtake it. The harpooner stood abruptly, raised his weapon, and as the umiak grazed the whale's back, he thrust it deep between the animal's shoulder blades. The darting gun went off with a roar, throwing the shaft high in the air.

Instantly the whale dove, and one of the Eskimos threw the float overboard. At first it spun crazily as the carefully coiled line was drawn after the sounding whale. The 20-fathom rope quickly ran out, however, and the float was pulled under. A moment later the dull whump of the exploding bomb was heard. And the float popped up nearby.

By now eight boats were converging on the scene. As the dying whale erupted, its flukes thrashing, another harpooner fired his shoulder gun, putting a bomb at the base of its skull and killing it. Now the whaleboats strung themselves

out along the harpoon line and began the slow task of towing the whale to shorefast ice for butchering. It took an hour for the procession to reach ice thick enough to support the 40-ton carcass. First, the tail was pulled out and the flukes cut off by the crew that had struck the whale. Then a block-and-tackle was rigged from the

fore the tail-to an arch cut in the ice. With 40 men hauling on the line, the carcass began to emerge, moving one inch for every yard of rope. When the whale was finally on the ice,

one of the older men mounted the carcass

and, cutting lightly on the skin with a long-handled blubber spade, delineated the shares each of the crews would receive. This was an ancient procedure: the first crew to strike the whale would take the largest share; the second crew, somewhat less; and so on, down to the tenth crew. Even if the whale were killed before all the crews helped dispatch it, each would receive a share in the order they reached the scene. This simple system, by rewarding quick assistance, provides a check against uncoordinated hunting and consequent loss of whales. Two or three men from each crew now began to work on their assigned sections

of the whale with spades and hooks, stripping away the skin and blubber, then the meat, and finally the entrails and bones. Nearly all of the whale would be used, the meat stored in cellars dug into the permafrost where it would remain frozen year-round. Within 24 hours the butchering was finished; all that remained of a 50-foot-long bowhead whale were some useless entrails, frozen blood, and a few bones.

ver the past decade I have watched the Eskimos of Point Hope take and butcher more than 50 whales. I have profound respect for these native whalers and for their hunt, which is a central part of their culture. Important questions, however, are being asked about the status of the bowhead whales of the western Arctic-the only viable population of that species left on Earth. The others, in Hudson Bay and near Greenland and Spitsbergen, were systematically extirpated by commercial whalers between the sixteenth and nineteenth centuries.

The questions being asked concern the increasing annual kill of bowheads by Eskimos, and the advisability of allowing the hunt to continue without restrictions. These questions in turn raise the issue of claims of native Americans to aboriginal

he midnight sun of May hung low on the northern horizon, washing the icefields in its viscous red light. The temperature was -10 degrees, and I shifted uneasily on the freight sled, trying to keep the wind from finding its way into the openings of my parka. Judging from their nervous movements, the six Eskimos seated beside me were equally unsuccessful in fighting the cold.

Our whaleboat, an 18-foot sealskincovered umiak, similar to a dory, sat ready on the ice, its harpoon projecting over the bow. The captain and harpooner paced in a curious syncopated shuffle, tapping one mukluk against the other to force circulation back into their feet.

With 11 other whaling crews spread across two miles of Arctic Ocean ice near Point Hope, Alaska, we had been waiting for more than a month for the return of the bowhead whales. For the past five days we had had little sleep; offshore winds had opened a wide lead between the shorefast ice and moving polar pack, and we expected this channel would direct migrating bowheads near us.

Despite the combination of fatigue, hunger, and cold, several Eskimos, as always, were alertly scanning the inky lead-now 400 yards wide-for the telltale V-shaped spout of a bowhead. The harpooner, as he had many times today, checked to see that the safe pins were in the darting gun and that the bomb-lance shoulder gun, a 35-pound brass smoothbore, would not be fouled by the harpoon line.

Both weapons were developed in the nineteenth century by Yankee whalers to reduce the loss of wounded bowheads that escaped into the icepack towing lines and gear. The darting gun, mounted on the harpoon shaft beside the toggle iron, is designed to fire a small bomb into the whale the instant it is struck; the bomb is set to explode a few seconds later. The shoulder gun can throw a similar bomb accurately from ten yards. Because they were far more effective than hand lances, these weapons were quickly adopted by Eskimo whalers,

Also in the boat was a large inflated sealskin float with 180 feet of threequarter-inch line coiled around it. The hunting rights which conflict with the conservation of wildlife resources belonging to all Americans,

This conflict was not created this year, however, or even in this decade. It began with inroads made on the bowhead population a century ago by commercial whalers.

A thousand years ago the Eskimos of northern Alaska developed a whaling culture, which came to dominate their annual cycle because of the great amounts of food and raw materials it yielded. The focal point of the Eskimo year was the eight weeks in spring when the whales passed by on their annual migration from the northern Bering Sea to summer feeding grounds in the castern Beaufort Sea. Communities from the Bering Strait to Point Barrow devoted their entire resources to the spring hunt, which could provide half their food needs for a winter lasting 40 weeks.

For centuries Eskimos and bowhead whales existed as coinhabitants of a stable ecosystem. But this rhythm was shattered forever in 1848 when a Yankee whaler sailed through the Bering Strait and discovered a rich new whaling grounds. In contrast with other species, the bowhead was slow and docile, and enormously rich in blubber and baleen. In particular, it was the baleen, used to filter plankton, that brought the bowhead to the brink of extinction. As women's fashions evolved, with increasingly narrow waists and billowing skirts, the long flexible plates of baleen were in great demand for use in skirt hoops and corset stays.

Within two years more than 200 whaling ships were cruising Arctic waters. The whalers quickly established a pattern of operation that remained essentially unchanged for 60 years, until 1910 when the industry died. Reaching the northern Bering Sea in May, they forced their way through leads toward the Bering Strait, trying to reach the bowheads before they passed northward into the inaccessible icefields of the Arctic Ocean.

These maneuvers through shifting floes were risky and took a terrible toll of ships and men. From April, when the first

ships met the ice, to October, when the fierce autumn weather of high latitudes forced them to retreat south, they were never out of danger. Having only sailpower, they could not buck adverse winds or currents and were helpless when floes closed in.

It was this lack of maneuverability that allowed the bowheads a measure of safety; often they could escape into the icepack out of reach of the ships. But this sanctuary was short-lived; the skyrocketing price of baleen encouraged development of steam-powered vessels capable of penetrating previously inaccessible corners of the Arctic Ocean. Thus whalers soon discovered their "El Dorado"—the bowheads' summer feeding grounds off the Mackenzie River delta. In these waters, where the whales lacked the protection of the icepack, the population was nearly exterminated.

Ironically, it was their increasing scarcity that saved the bowheads from extinction. By 1906 so few whales were killed that the price of baleen reached more than \$5 a pound, and spring steel was adopted as a cheap substitute. Within two years the price of baleen fell below \$2 a pound, and most merchants retired their ships.

ike the Yankee whalers, the Eskimo hunters also suffered. For in the 1880s, as the price of baleen soared, they had been inexorably drawn from their aboriginal hunting economy into a shore-based commercial operation. But the first winds of change reached the Eskimos in the 1850s as pelagic whaling began to cut into the numbers of bowheads that passed their villages each spring.

Data from this period is sparse, but it is clear that the reduction in the bowhead population reached disastrous proportions for Eskimos in just three decades. In 1852 and 1853, before pelagic whaling made deep inroads into the stock, a British naval vessel wintering at Point Barrow recorded that the Eskimos took 17 and seven whales, respectively. In 1882 and 1883, near the peak of pelagic whaling activity, a U.S. Army expedition

reported that only one and two whales were taken at Point Barrow.

This catastrophic decrease in the Eskimos' most important food source may have been offset by increased exploitation of caribou, seals, and fish; but for a society so intricately arranged around the spring whale hunt both for subsistence and cultural needs, such a severe reduction in the kill within one generation must have been a shock.

One thousand years of aboriginal whaling came to an end in 1885, when Pacific Steam Whaling Company of San Francisco set up shore stations on the northern Alaska coast to hunt whales in Eskimo fashion at the spring leads. The venture was immediately successful and was copied by competitors at locations from St. Lawrence Island to Point Barrow.

This development, perhaps more than any other in their history, changed the Eskimos' lives by providing them with lucrative employment. Shore stations were generally staffed by a handful of white men who maintained the equipment through the winter and hired large numbers of natives to man the boats in the spring. With most stations outfitting several crews (one station had 20!), the competition for able crewmen was intense and wages were driven higher and higher. Soon enterprising Eskimos grew rich and hired their own crews, competing effectively with the white men.

In this headlong rush for baleen the number of shore-based whaling crews increased fourfold, and for a few years the number of whales killed increased proportionately. But the large catches were short-lived.

The third phase of Eskimo whaling—a return to subsistence hunting—began around 1910. Darting guns and shoulder guns were now used, but without a cash subsidy the number of whaling crews shrank to earlier levels—perhaps 20 at Point Barrow and another 20 spread out along the coast. And because of the high price and scarcity of equipment, it was difficult to start new crews. A young Eskimo wanting to attain the prestigious position of whaling captain had three options: inherit the equipment, marry into it, or less commonly—gain great wealth so he could purchase it.

Between 1910 and 1965 only 10 to 15 bowheads were taken annually by Eskimo hunters. But then the fourth phase of native whaling was ushered in by the increasing tempo of construction projects in Alaska, which created a seller's market for laborers. Unskilled and semi-skilled workers could now earn several thousand dollars in a few months. Although a well-equipped whaling captain may have \$9,000 invested in his outfit and will spend another \$2,000 for food and other goods, these sums suddenly were within reach of any ambitious Eskimo. Thus the number of whaling crews nearly doubled.

More importantly, the number of bowhead whales killed has increased dramatically. In 1974 Eskimos killed and butchered 20 whales, while 3 were killed but lost and at least 28 struck but lost. In 1976 there were 48 bowheads killed and butchered, 8 killed but lost, and at least 35 struck but lost. And by May 31st of this year, with the spring whaling season drawing to a close and the fall hunt yet to come, 26 whales had been killed and butchered, 2 killed but lost, and at least 77 struck but lost.

It is this last category, the whales struck but lost, that is most disturbing, for there is no way of knowing how many die of their wounds. If we assume the worst, then the total number of whales killed by Eskimos may be more than twice the number actually butchered.

he bowhead whale, in the view of many conservationists and scientists, is the most endangered cetacean on Earth, its population still far below pre-1848 levels. And the high level of the 1976 and 1977 kills by Eskimos has caused a great outcry. At its June meeting in Canberra, Australia, the International Whaling Commission passed a resolution-with the United States abstainingwhich calls for a total moratorium on the killing of bowheads by natives. If the United States does not file an objection by October 20th, then presumably the government must enforce the ban in 1978. The Department of Commerce recently filed an environmental impact statement, the first ever, on the bowhead hunt, and hearings will be held in Alaska and Washington this month.

Regardless of the government's decision, the concern of the International Whaling Commission is justified. For the bowhead is the species of great whale about which the least is known, and any attempt to estimate its numbers is bound to fall in the realm of sheer guesswork. The bowhead population may indeed be critically low—too low to survive under

the present level of Eskimo hunting pressure.

But having spent many whaling seasons in the Arctic, I believe a total ban on Eskimo whaling would create more problems than it would solve. It would certainly be harmful to Eskimo culture (in which the act of the hunt can be as important as the food it gathers), for it would further erode ancient lifeways and traditions that already have been greatly altered by foreign influences.

Moreover, the ban would be difficult to enforce. It would be viewed by Eskimos as another attempt by white men to tamper with inalienable hunting rights, and the repercussions could be disastrous.

If the United States does file an objection to the IWC resolution, and thereby absolves itself from enforcing a ban on Eskimo whaling, what can be done that would be in the best interests of both whales and natives?

First, we must determine the pre-1848 level of the western Arctic bowhead population, its annual decrease, and its present status. Surprisingly, while the commercial bowhead kill is well documented, the data has never been compiled. This rich resource for the most part lies in logbooks and newspapers of the Yankee whaling industry, The New Bedford whaling museum in Massachusetts has begun extracting this data for computer storage. This will yield not only information on population levels but also on migrations, feeding and breeding grounds, and sizes of individual whales.

A relatively easy way to reduce the number of whales struck but lost would be to require that each whale be struck with a darting gun-harpoon-float combination before it can be shot from a shoulder gun. The shoulder gun if used alone is an incredibly wasteful weapon, for a wounded whale, if not retarded by a harpoon float, can be difficult to locate. On the other hand, the shoulder gun is a quick, effective weapon for the *coup de grâce*.

Until an informed judgment can be made about the status of the bowhead, a village-by-village quota should be imposed, based perhaps on each village's annual kill during the mid-1960s.

At the heart of the bowhead controversy lies the argument of some preservationists that subsistence hunting died with the advent of welfare programs and well-paying jobs for native Americans. The Eskimos reply that traditional hunting, including whaling, yields vital provender—both spiritual and caloric.

It is a case of two vastly different cultures in conflict, and the resolution is not in sight.