

New study: Bowhead population greater

There are nearly 4,000 Bowhead whales in the Beaufort Sea, 60 percent more than previous counts showed, according to an intensive, three-month aerial census.

Previously, studies by the National Marine Fisheries Service put the number of Bowheads at 2,300. But a new survey commissioned by Sohio and nine other

oil companies and the State of Alaska conservatively estimated the whales' population at 3,842. The study was conducted by LGL Limited of Toronto.

The size of the population is of considerable importance to everyone living and working in the Arctic. Inupiat Eskimos depend on the marine mammals for

subsistence and have long expressed concern that oil exploration and development could adversely affect the whales' numbers and their traditional lifestyle. Federal authorities and the International Whaling Commission consider the Bowheads a rare and endangered species, and have
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Aerial survey reveals 3,842 Bowheads in Beaufort Sea

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marked them for special attention and protection.

Sohio Alaska Petroleum Company and Dome Petroleum Ltd., of Canada jointly managed the \$600,000 study that was commissioned and funded by 10 oil companies and the State of Alaska. Other companies that participated in the project included: Arco Alaska Inc.; BP Exploration, Inc.; Chevron U.S.A.; Exxon Company U.S.A.; Phillips Petroleum Company; Shell Oil Company; Esso Resources Canada, Ltd.; and

Gulf Canada Resources, Inc.

An accurate estimate of the Bowheads' numbers is needed so that the effects of oil and gas activities as well as Native subsistence hunting can be measured, according to Mark Fraker, a senior environmental scientist for Sohio Alaska. "The research results are encouraging and should help reduce the level of anxiety over the Bowheads' future which concerns the environmentalists, Natives and oil companies," he said.

The results of this survey were considered so important that Fra-

ker was invited to present the findings to the International Whaling Commission last summer during the annual meeting held in Brighton, England.

Previous census efforts yielded a range of population numbers that were often in dispute because counts were made during the spring migration when drifting ice and bad weather hampered observations by North Slope Eskimos and NMFS researchers, Fraker said. Sohio assisted both the National Marine Fisheries Service and the Alaska Eskimo Whal-

ing Commission in previous counting efforts.

One aspect of the new survey which makes it especially noteworthy is the fact that it was conducted during the summer over open water, Fraker said. The bowheads of the Western Arctic winter near the southern edge of the pack ice in the Bering Sea. As the ice retreats north with the coming of spring, the whales follow the ice and then migrate eastward to Canadian waters off the MacKenzie River Delta where

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Bowhead population up

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they spend the summer.

"Our objectives were to obtain the distributions, numbers, productivity and length of Bowheads in their summer range," Fraker said. "We flew systematic surveys over large areas at a height of 500 to 1,000 feet to get the whale counts. These surveys were done as rapidly as possible when the animals were feeding and not traveling."

In addition to providing new and scientifically important population information the survey's extensive aerial photography revealed that Bowheads, like their better-studied cousins the Humpbacks, could be identified as individuals by distinctive patterns of markings and colors. This, Fraker explained, was very important because it helped researchers avoid counting individual whales more than once. "Being able to identify individual whales also gives us the potential to learn details of their behavior

and movement patterns during a given season as well as the ability to follow long-term movement patterns, growth and calving intervals between years," he said.

Sohio's involvement in Bowhead research isn't new, nor is it limited to the most recent census.

A variety of physical and biological studies relating to the Beaufort Sea were conducted concurrently with the development of the Prudhoe Bay oilfield. Research efforts intensified as offshore drilling in the Beaufort Sea came under serious consideration, and their scope was enlarged to include Bowheads when the 1979 Federal/State Beaufort Sea Lease Sale opened the way for increased exploration.

Patricia Starratt, a Sohio Alaska government affairs specialist, was selected as the oil industry's representative on the Alaska Eskimo Whaling Commission's science advisory committee in 1981 to develop closer liaison between corporate and subsistence users.
