Whale Counters watch rare bowhead calving

By BILL HESS
Tundra Times

Out in the open lead, a large bowhead is acting strangely.

As whale counters working for the North Slope Borough watch, the whale becomes very still, with a full third of its body above water. For five minutes, no movement is detected. The whale watchers divert their attention to counting other bowheads swimming by.

Half an hour later, they note that the whale has disappeared. Suddenly, Simon Koonook observes a tiny whale roll to the surface. At first sighting, it appears dead. Then a large whale, almost certainly the one which had been sitting so still earlier, rises backfirst to the surface, pushing the little one up, in what appears to be a struggle to help the young calf breathe.

Shortly afterward, the new whale assumes a slightly diagonal position across the larger whale's tail, which then swims off with the calf in tow.

The whale watchers observing this event feel they have probably witnessed the birth of a new bowhead, one that ran into trouble shortly after birth, but was hopefully saved by the loving efforts of its apparent mother.

Not only did the whale counters witness an apparent strengthening of the bowhead population during that event, but some of the preliminary figures they have been reaching in the count would suggest that the bowhead population is much healthier than many conservationists and the National Marine Fisheries Service have previously reckoned.

Those low estimates figured heavily in the three-year quota established by the International Whaling Commission (IWC), sanctioned by the United States, and reluctantly accepted by the Alaska-Eskimo Whaling Commission (AEWC). That quota allowed Alaskan subsistence whale hunters 19 strikes this year, out of which

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a devastatingly low six have yielded whales.

The NMFS has estimated the bowhead population to be a minimum of 2,300 whales.

Yet, as of May 29, whale counters working on the Borough's scientific study had apparently counted 2328 animals. Dr. Tom Albert of the Borough stresses that this number is subject to scientific checking and testing, and could change as data is analyzed.

Yet, it is definitely a good sign. Albert says the methods which will be used to come up with a final population estimate after the counting stops later this month take into consideration those whales which were not spotted for many reasons including bad weather, or because the whales were too far out in the lead. The final number expected in about a month should be considerably higher than the May 29 figure.

A recent study sponsored by energy companies in Canada concluded that there were a minimum 3,000 bowhead whales in the world. North Slope Borough mayor Eugene Brower expects the borough's scientific data to bear out the Canadian figures, and perhaps even to surpass them.

Brower says the AEWC will use these figures in future negotiations with the U.S. government and the IWC to argue that there is no need for the current quota. Eskimo whalers hope to win the recognized right to keep the whale harvest to within 2 percent of the best-known estimate.

If the Canadian estimate of 3000 proved true, for example, Inupiat whalers would not exceed the annual 2 percent strike limit with anything less than 60 strikes, which would give them ample opportunity to meet the nutritional needs of their people.

Ray Dronenberg, the biologist working as the principal investigator on the project, readily admits there are problems in counting whales. whales were spotted passing Barrow as early as March, yet the counters were not out until mid-April. Whales will still be passing in late June after deteriorating ice conditions have made maintaining lookout stations impossible.

There are other problems. "Mother Nature really decides when our counters can observe whales," Dronenberg admits. Storms, fog, and wind can all interfere. Then, whales can surface on the far side of wide leads, where there are no counters to record their passage.

"The NMFS has said that whales can travel only through clear, open water," Dronenberg cites an example. "That they cannot push their way through areas cluttered with a lot of heavy icebergs. Yet bowheads have been seen pushing icebergs in front of them, sometimes like they're playing with them. It doesn't seem to bother them a bit."

When weather closes in on a lead, scientists must average the sightings per hour of previous good days, and then use these figures for the bad days. "But what happens," Dronenberg asks, "if a small number of whales have been going by, and after the weather closes in, 30 whales an hour start passing? Or vice-versa?"

An acoustics system using under water radio transmitters is being tested this year to see how effective it could be as a tool to determine how many whales exist, and researching what effects different noises might have on the whales. As oil searchers move in increasing number into bowhead habitat, this could be vital information.

D.V. Holiday, a senior scientist from San Diego, who usually uses his skills in acoustics to track Soviet submarines, has helped the borough devise a system to use the same methods to track whales, in any weather.

Three underwater sonarphones have been placed in the water at regular intervals along the ice. When a bowhead "speaks," the phones at different times because of the time the sound takes to travel different distances through the water. The information is transmitted over an FM frequency to Barrow, where it is recorded on a tape running 24 hours a day. By comparing the different times the same vocalization reached the different sonarphones, scientists can compute exactly where the whale was when it spoke.

Simon Koonook radios a whale sighting from the South Perch to the North Perch, while Sally Towers scans the seas for swimming bowheads. PHOTO BY BILL HESS

Another technique not used by past whale counters may well have resulted in their final counts being too low. "When the NMFS first started counting, they were required by federal mandate to hire people with the appropriate degrees," Dronenberg explains.

This excluded the Inupiat, who instead of sitting in university classrooms, working in laboratories and earning degrees, had spent their lives on the ice and in the water with the whales.

Always, says Dronenberg, past counters had trouble spotting the calves and young whales. They are small, and hard to see. The borough's program includes Inupiat counters working as equals with university-trained scientists, many of them tops in their field.

"It takes trained eyes to spot these calves," notes Dronenberg. "Who has better trained eyes than the Inupiat?"