

# Modern sounds block talk of traveling Blue Whales

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for the Tundra Times

They are the largest animals ever to have evolved on earth.

At 150 tons and over 100 feet long, an adult blue whale could behave like the bully on the block but it doesn't; most are placid browsers, straining vast volumes of ocean for the small animals on which they graze.

They are enigmas. Some 70 million years ago, their ancestors decided to return to the ocean although they had already established themselves as dry land mammals.

Whales are loving (witness the long motherhood period), playful, curious and intelligent. With that intelligence, it makes one wonder why they so often beach themselves.

But the most intriguing part of their behavior is that apparently they have a kind of language of their own. In the murky depths of the ocean, sight is not a very reliable sense, so it appears they use sound. The communication could be, for instance, between a mother and her baby or between a couple of adults wishing to establish a more meaningful relationship.

Scientists have called whale talk "songs," for lack of a better description. But they don't know exactly what information the songs contain. They range over a broad acoustic spectrum which, to us, would spread from soprano to bass. However, some frequencies are so low they're inaudible to human ears.

A typical whale song lasts about 15 minutes, although they can go on for an hour or more. Often they are repeated, note for note, measure for measure.

On occasion, a group of whales will join in a singalong. And the songs may gradually change, by some mutual

consensus, from month to month.

During their yearly migrations, a group of whales may leave their winter waters in the middle of a song and return six months later to resume the "tune" at precisely the right note and just where they left off.

Whales are very good at remembering, and seem to have a great deal to talk about. It's aggravating that we haven't been able to understand them or their cousins, the dolphins.

Unfortunately, during the past century, we've been interfering with their communications. One of their principal "hums" is about 20 cycles per second — way down at the end of the keyboard. That is about the frequency at which many of our maritime engines operate.

Biologist Roger Payne has calculated that, with a sound wave trapped in a deep water "channel," two whales once probably could have communicated with each other even if they were as far apart as Antarctica and the Aleutian Islands.