

Animal Talk

Scientists take a lesson from Dr. Dolittle by Elena Cabral

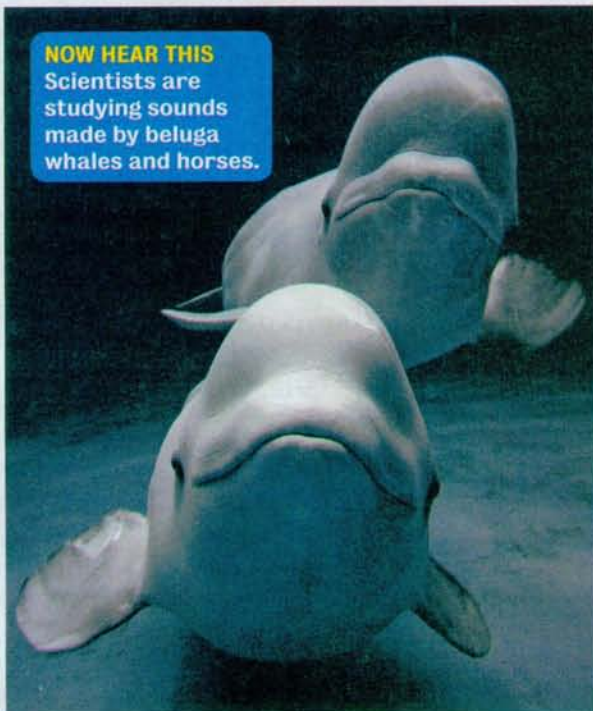
Do you ever get the feeling that your dog or cat is trying to tell you something?

Scientists are hoping to answer a similar question by studying the croaks, clucks, roars, and whistles that animals make.

The researchers are attempting to understand the meaning of the sounds that animals use to communicate in a series of experiments called the Dr. Dolittle Project. The project is named for the fictional character in books and movies who can communicate with the creatures around him.

The project works this way: Scientists gather sounds from animals like elephants, whales, dolphins, and horses. That information is then fed into a special computer that helps track patterns when combined with other information about the animals.

"They are trying to understand how animals communicate, how they signal each other about different things, how they relate to each other socially—basically, how they tick," says Mike Johnson, a pro-



NOW HEAR THIS
Scientists are studying sounds made by beluga whales and horses.

fessor at Marquette University in Milwaukee, Wisconsin, who is working on the project. In one experiment in Canada's St. Lawrence River estuary, scientists discovered that beluga whales call to each other more loudly when they need to be heard over the whirl of passing boats. "The response that they have is the same kind of response that human beings have when we enter a noisy environment. Our voices automatically, whether we want them to or not, get louder," says Peter Scheifele, a professor at the University of Connecticut who conducted the research.

Not every animal on the planet has this ability, Scheifele says. "We know humans do, monkeys do; we know that birds that sing songs do," he said. "Up until recently, we did not know that any whale or dolphin had this response."

Scientists hope to use what they

SN ELLEN EXPLAINS

Hi! I'm SN Ellen, your kid reporter extraordinaire. Sound is helpful to scientists in the study of human and animal behavior.

HERE'S HOW SOUND WORKS:

Sounds are caused by vibrations that travel through the air, or through a solid or liquid.

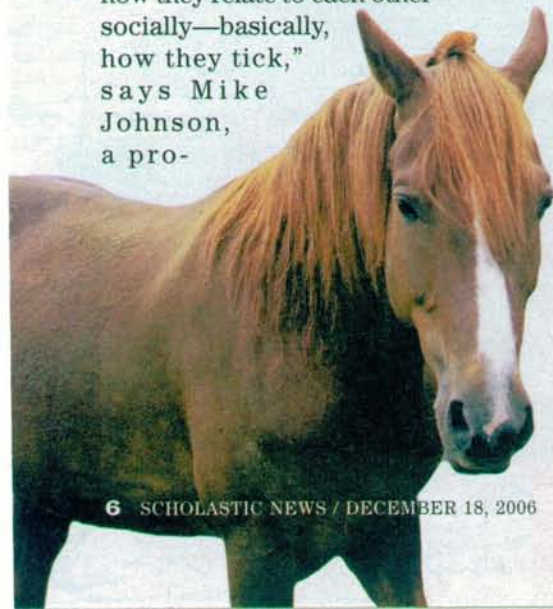
For example, when a phone rings, it vibrates, causing the air molecules around it to vibrate and carry the sound in waves. You hear the sound when those waves reach your ear and cause it to send nerve signals to your brain.

Scientists can measure amplitude—how strong the vibrations are—and frequency—how fast the air is vibrating. These characteristics of sound help scientists distinguish sounds made by different people, animals, or objects.



learn about animal behavior to take better care of animals in captivity, like those in zoos.

They want to use the technology in the Dr. Dolittle Project to pinpoint which animals are making particular sounds. This, scientists say, may help them study creatures in the wild like beluga whales without having to capture or disturb them. "This is a threatened population of animals, and we are concerned with tracking them because we would like to see them come back," Scheifele says.



What's that word?

estuary: (es-choo-air-ee) *noun*. The wide part of a river where it meets seawater.

HIBOYA MINARUCHIMINDEN PICTURES (WHALES); COURTESY OF MARQUETTE UNIVERSITY (HORSE); SN ELLEN VIA SCHOLASTIC ARCHIVE