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ASU students play dolphin name game

BY ALDEMARO ROMERO SPECIAL TO THE SUN

One of the most talkedabout issues among the public when dealing with "intelligence" among animals is the set of abilities that dolphins show. From their complex social behavior in the wild to the "tricks" they can learn in captivity, dolphins have always been the center of attention.

Now researchers from the United Kingdom and the United States have come with data that seems to prove not only that individual dol-

phins have their own "name" but also that they come up with those names at an early stage of their infancy.

Biologists had developed the hypothesis that dolphins had what were called "signature whistlers" years ago. These were melodic sounds that could be recognized by relatives and other members of their own social group. Working at the Marine Mote Laboratory in Sarasota, Fla., researchers from the University of St. Andrews in England, the University of North Carolina and the Chicago Zoological Society,



Photo by Aldemaro Romero

ASU biology graduate student Shelly Kannada analyzes whistles produced by dolphins.

discovered that these whistlers were so unique that even when distorted with a

computer, the "call" could be

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recognized by other individuals of the same group.

As it happens with humans, we can easily recognize the voice of relatives and friends. Even computers can do that, and such is the case of software used by intelligence agencies when trying to confirm that a voice on a tape was produced by this or that subject.

The study carried out with bottlenose dolphins (the same as in the "Flipper" TV shows and movies) shows that these animals develop their "signature whistler" early on and repeat them to others in order to make sure that they memorize the characteristics of

their sounds. In this way they can be recognized even when they are not in sight. Since sounds produced by marine mammals can travel underwater for hundreds of miles depending upon the conditions of the water, individualized whistles are important for effective communication among group member.

In a paper published in the latest issue of the Proceedings of the National Academy of Sciences of the U.S., scientists explained that they computerized the signature whistles of several dolphins so their basic pitch contours remained the same, but other distinctive voice features were removed. The researchers then played these

altered whistles to dolphins through an underwater speaker.

This experiment showed that in nine out of 14 trials, the test dolphins would turn more often toward the speaker if it heard a whistle resembling that of a close relative.

Arkansas State University students who take courses on marine mammals are taught the fundamentals of dolphin communication.

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