Dolphin Whisperer Could Help Us Talk To E.T.

Scientists hoping to develop a common language with dolphins may help us talk to extraterrestrials.

By Irene Klotz | Wed Aug 31, 2011 04:51 PM ET

For 27 years, marine biologist Denise Herzing and colleagues have been regular visitors in the Atlantic Ocean home of a 200-member pod of spotted dolphins living north of the Bahama Islands.

Understanding the relationships between the members of the pod is key to unraveling what their dozens of whistles, clicks and other signals mean.

"The large goal of this project is to tell the story of what it's like to be a dolphin," Herzing, a researcher with Florida Atlantic University in Boca Raton and the founder and head of the Wild Dolphin Project, told Discovery News.

But being a curious and intelligent species, the dolphins weren't content to just let the scientists take their underwater videos and record their sounds.

Dolphins are known to have sophisticated brains. They also have a complex social structure, as they form alliances and share duties. When trained, they have the ability to pick up language.

"There are times that they play games with us in the water," Herzing said. "This particular group seems to be curious about us, probably because we're in the water analyzing them."

That got her thinking about creating a rudimentary communications system, so that the dolphins, for example could ask for a particular toy. Two-way communication with dolphins has been attempted various times over the years, but never with a group of animals in the wild.

The research has implications in the search for extraterrestrial intelligence, or SETI, with the dolphins standing in as a sort of E.T. analog.

"The idea is 'how do you recognize intelligence?' That's why people test dolphins and primates in captivity, to try to measure their cognitive skills, their abilities, how they use their minds," Herzing said.
"If you ever got to some place (with a non-technological but potentially intelligent species), how would you recognize it and how might you establish some communicative repertoire?" she said. "There's a lot of species on this planet that we can probably learn from as models."

Today's SETI searches are too crude to distinguish what an alien signal might mean.

"It's kind of like making a time-exposure photo of a city at night. Because you build up the light, you can't see the faint stuff, like the stoplights changing, because the (picture) exposure is longer than the time it took for them to change," said radio astronomer Seth Shostak, with the SETI Institute in Mountain View, Calif.

"But the basic idea is sound. You don't want to be too self-centered in your work," he said. "You have a lab for studying other kinds of intelligence right here on Earth. That was talked about 50 years ago and it's still a good idea today."

Herzing is continuing to refine the technology for two-way communication with dolphins. The prototype used an underwater keyboard and props such as balls and scarves that were labeled with symbols and paired with a whistle sound the dolphins could replicate. Her research is under review for publication.