

By: [Stefania](#) Science Editor

Dolphins' Language, Much More Sophisticated Than Believed!

The tone does matter

It has already been known that each dolphin population has its own dialect or even "language", which cannot be understood by a "foreigner" dolphin, as it is learned. But a new research made by PhD candidate Liz Hawkins, from Southern Cross University's Whale Research Centre, in Lismore, revealed that the dolphin "speech" is much more sophisticated than previously believed. The three years research was made on bottlenose dolphins off the coast of Byron Bay, NSW (Australia). Focusing on the starting and final frequency of the sound and its length, Hawkins encountered 186 different whistle types out of 1650 recorded, of which 20 were common. The whistles could be assigned into five classes based on tone, and they were all connected to certain behavior. Socializing dolphins mostly emitted flat-toned or rising-toned whistles. Traveling groups made "sine" whistles: "These could be advertising their pod to other pods. They could be talking to another pod and saying, 'We are over here ... do you want to join?'," said Hawkins. Resting dolphins emitted "concave" whistles, sounds that failed in pitch and get up again, while downward-toned whistles could not be linked to any particular behavior. One class of whistles was connected to feeding. "They could be advertising they have found food, they could be advertising to other animals there is food there, or it could be referred to a particular type of feeding or a particular type of food", said Hawkins. Dolphins riding the waves of a boat often emitted a particular sound, while in early investigation made by Hawkins, on a dolphin population of Queensland's Moreton Island, encountered a particular whistle emitted by lone dolphins. "That whistle could definitely mean: 'I'm here, where is everyone?'," said Hawkins. She warned that dolphins transmit "context-specific information". "A specialist in linguistics would not call this a language. They are wild animals and generally wild animals only make sounds or transmit information that is essential to their survival. It basically suggests their communication is a lot more complex than what was generally thought."