

# MSU Science Zone

No. 24

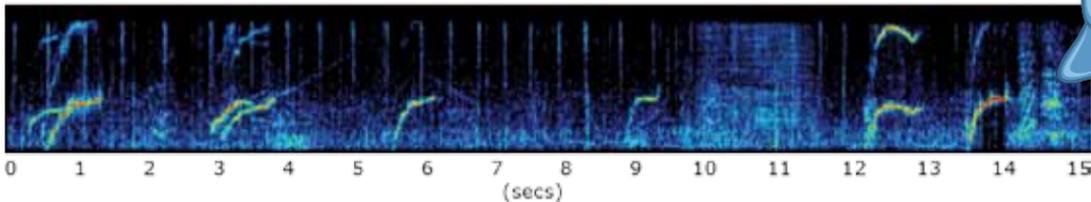
## Do animals have their own language?

There are many ways to communicate, such as crying, making a face, or even slouching. Sometimes we want to communicate something, and sometimes we accidentally do it. For example, farting or burping communicates to others that you are digesting food, but we usually do not want to let other people know that.

If you have ever been around animals, you can see that many of them communicate. Birds sing songs to each other, dogs wag their tails when they are excited, cats purr when they are being petted. But do animals have language? Scientists still are not sure.

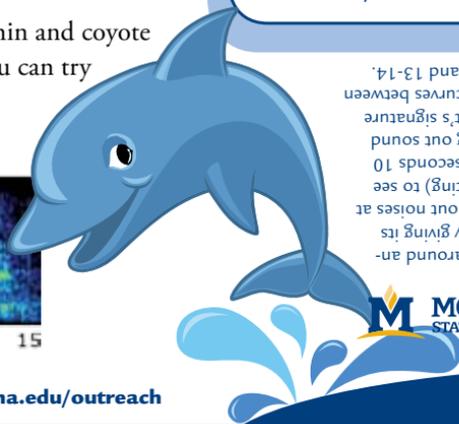
Language is a very complex form of communication. Language is more than just communicating about urgent needs or immediate events, it's about being able to do things like share ideas and creative stories. Scientists cannot yet understand the sounds animals make well enough to know exactly what the animals are communicating.

Scientists at MSU are studying dolphin and coyote noises to look for signs of language. You can try analyzing dolphin noises below.



### Try this!

Look at these sound patterns made by a dolphin in the wild. Circle any clear yellow marks that repeat. These may be dolphins' signature whistles. Every dolphin has its own and scientists think they are like dolphins' names. The light blue lines represent noises the dolphin is sending out to find its way around or detect nearby objects. The large groups of light blue lines are sound bursts the dolphins use to get fish to move certain directions and catch them. Draw a square around any large groups of vertical light blue lines. Look at the sounds again. What do you think the dolphin is doing?



Answer: The dolphin is swimming around announcing itself to other dolphins by giving its signature whistle. It is also sending out noises at regular spaced periods (echolocating) to see what objects are around. Between seconds 10 and 11, and 14 and 15 it is sending out sound bursts to try and catch some fish. It's signature whistle are the bright yellow small curves between numbers 0-1, 3-4, 5-6, 8-9, 12-13, and 13-14.

Learn about opportunities to participate in upcoming science activities and events at MSU by visiting [Montana.edu/outreach](http://Montana.edu/outreach)



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