

## **Mating Season Along California Coast**

Scientist Nicolas Mathevon led the new study. He observed seals at Ano Nuevo State Park in California. There, from December to March, more than 4,000 elephant seals gather on the beach to mate and give birth.

At the start of the season, male seals battle to establish their place within the group. The strongest males are then able to mate with the females of their choice.

Stronger, high-ranking males are known as "alpha" seals. Weaker, low-ranking males are known as "beta" seals.

If an alpha seal is heading for something he wants, he calls to the other seals. The call warns beta seals to stay away if they don't want a fight. Usually, the weaker males back off.

## **Elephant Seals' Calls Of The Wild**

"It is a high-stakes environment," said scientist Caroline Casey. She helped write the new study. "We wanted to know what these animals are saying to each other." Casey and her team hoped to find out how the seals use these calls to avoid a fight.

Casey has studied elephant seal calls before. Her previous research showed that elephant seals can identify the calls of other seals. This made her curious as to how they do it.

Mathevon, Casey and their team observed the California seals for five years. Over time, the researchers started to recognize particular animals by the rhythms of their calls. That made them wonder if the seals could do the same.

They designed an experiment to find out. First, the team recorded the calls of an alpha male elephant seal. Then, they used a computer to create two versions of the call. They changed only the rhythm, leaving everything else the same.

Back at the beach, they played both versions of the alpha male call to 10 beta males. Upon hearing the original call, the beta males retreated. They behaved just as they ordinarily would when avoiding a fight.

However, when the beta males heard the call with a different rhythm, they took no notice. This proved that the rhythm of a call is a key part of what makes it recognizable.

## **A First For Mammals Other Than Humans**

This is the first time scientists have identified a mammal that uses rhythm in this way. Mammals are warm-blooded animals with hair or fur. Humans are mammals too, of course.

Mathevon thinks the seals are probably able to recognize many other qualities of the sounds. He believes they can spot complicated divisions of a beat.