Wild animals losing their fear as largest predators are dying out

By Washington Post, 03.07.16



This raccoon is not afraid of predators — and that's a bad thing, says scientist Justin Suraci. Because the largest predators are dying out and no longer a threat, smaller animals feel more secure and nature is thrown off-balance. Photo: Michael Clinchy

Large animal hunters like wolves or tigers are known as apex predators. They are at the top of the food chain. No other animal except man hunts them.

Apex predators are very important. They help keep nature in balance.

For example, wolves hunt elk. By killing some elk, they keep elk herds from getting too large. When there are too many elk, trees cannot grow well. Soon, birds have nowhere to live. One problem leads to another.

Scientists know apex predators help keep nature balanced. However, most only look at the way they kill other animals.

Scientist Justin Suraci thinks there is something else that is important about apex predators. He said it is that other animals are frightened of them.

Watching And Waiting

Suraci says other animals spend much of their time watching and listening for apex predators. Even if they are never caught, that fear is part of their lives. It makes a big difference in the way they behave.

Fearful animals spend time worrying about getting eaten, Suraci says. They hide, they run, they carefully look and listen. In turn that means they spend less time eating. More of the even smaller animals they eat manage to stay alive.

Suraci says all that has changed. Apex predators are quickly disappearing all over the world. At the same time, fear is disappearing too. Smaller animals are no longer afraid now that the big hunters are gone. They are behaving differently and in ways that are harming nature.

Bringing The Fear Back

Suraci decided to run an experiment to test his ideas. His plan was to reintroduce fear to an area with no apex predators left. He wanted to see what might change.

Suraci traveled to the Gulf Islands in British Columbia, Canada. He picked the raccoons living there to study.

The raccoons were once hunted by big cats and bears. Now those predators are all gone, killed off by humans.

The raccoons have gotten very bold, and no longer seem scared at all. They flock to the beach in search of fish and crab. They do not even bother to look around them, or to hide.

A Pretend Predator Changes Behavior

To make the raccoons fearful again, Suraci set up speakers near the shore. The speakers played the sounds of dogs barking.

The raccoons quickly started to act differently. They spent far less time in open areas than before. When they did appear in the open, they spent much more time looking around. Overall the raccoons spent around two-thirds less time looking for food than before.

The difference in the way the raccoons acted soon spread to other animals.

Those raccoons eat crabs and fish. Because they were now eating fewer of those animals, there were soon more crabs and fish around. There were also fewer periwinkle snails than before. Crabs eat periwinkle snails.

Restoring Balance To Nature

The new fear brought back balance, Suraci says. Balance was lost after humans killed the apex predators.

When the balance of nature is upset all sorts of problems happen. There can be too many of some animals, and too few of others. Plants and trees can start to die out. Diseases can start to spread.

Of course, recordings of barking dogs is not the answer. It would not take long for animals to realize the danger was not real. Instead, we must start trying to bring apex predators back.

Bringing them back is the only way to make nature healthy again, Suraci says.