

## Studying Animals

Imagine your favorite animal. Where does the animal live? What does the animal eat? Some scientists study how animals live in the wild. This kind of science is called ecology.

Aristotle and Theophrastus were probably some of the first ecologists. They lived almost 2,400 years ago. Theophrastus studied the way animals acted in nature. He watched how animals behaved with other animals. He also watched how animals lived in their habitats.

2,100 years later, people were still studying animals. In the 1700s people traveled the world. They wanted to explore and trade goods with far-off lands. Scientists often came on these journeys. Two scientists from Europe noticed something interesting. They noticed that the plants they found in other places were not the same plants they saw in France and Germany.

About that same time, a Dutch scientist studied how animals and plants work together. He was curious about how energy moves through nature. This scientist came up with the idea of the food chain. The food chain helps us understand what animals eat. Knowing what different animals eat can help us understand how energy moves through nature.

In Sweden, Carl Linnaeus studied living things another way. Linnaeus saw that many living things have features in common. He used his observations to put plants and animals into groups. 100 years before, John Ray organized animals into groups based on their teeth and feet. For example, he could connect giraffes and pigs because they both have hooved feet.

- **Why does putting animals into groups require creativity?**

In the 1800s, people were still trying to learn about animals. Charles Darwin and Alfred Wallace both traveled all over the world. They collected samples to study. Wallace lost his work and samples in a shipwreck. These two men had many of the same ideas about how animals change and adapt. Darwin became more famous because he could show more evidence than Wallace.

Aldo Leopold was a scientist who wanted to protect the wilderness. In the 1920s, ranchers and farmers in New Mexico were upset. The farmers wanted to kill all the bears, mountain lions, and wolves in the state. They said that these animals hurt or killed their farm animals. Leopold did not want to do this. He thought killing the predators would cause problems for other animals.

- **Why do you think Leopold and the ranchers thought differently about animals?**

Louis Leakey was a scientist from Kenya. He was interested in nature. He thought that scientists should go into the wild to watch animals. In the 1960s, Leakey worked with 3 women to study animals like this. Jane Goodall from England studied chimpanzees in Africa. Dian Fossey from America went to Africa to study gorillas. Birute Galdikas from Canada studied orangutans in Borneo. These women lived with the animals. They learned about how animals live together in the wild.

- **Many people think scientists work by themselves in a laboratory. How are the scientists in this story different?**

- **Why do you think each group of scientists is trying different strategies to study nature?**

Scientists have tried all kinds of ways to learn more about animals. Some went into nature to study animals. Some watched from far away. Others lived with the animals. Even today people study animals. There are many scientists this story did not talk about. Scientists often have to work together to study animals. They work together to figure out what their observations mean. Nature is like a big puzzle. Scientists are trying to figure out how the pieces fit.

- **Some people think science is done very quickly. After reading this story, how long do you think science takes? Explain.**

- **What does this story tell you about the people who do science?**