Name _____

The Scientists of Lizard Island

Todd Campbell has always been interested in catching critters. When he was a kid your age, he would catch tadpoles and bugs and dragonfly larvae and keep them in a cooler in his bedroom. He grew up to be an expert lizard catcher. He's now a scientist who studies how different animals live together in nature.

About fifteen years ago, he noticed that something was happening with the lizards in Florida. Green anole lizards had lived in Florida for millions of years. They ate bugs in trees and on the ground.

green anole

About seventy years ago, brown anole lizards came to Florida from Cuba. They rode on cargo boats. Like the green anoles, the brown anoles ate bugs. They also ate baby green anoles if they could catch them. The brown anoles could climb trees, but they usually stayed close to the ground.

brown anole

Todd saw that brown anole lizards were taking over places where the green anole lizards had always lived. He was worried about the green lizards. The brown lizards ate baby green lizards. Would the brown lizards eat all the green ones? Would the brown lizards eat up all the bugs, leaving the green lizards to starve?

Welcome to Lizard Island

Todd knew several small islands where only green lizards lived. So he decided to watch and see what happened to those green lizards when brown lizards invaded the islands.

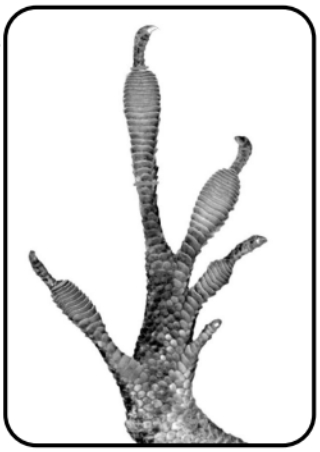
Todd spent three summers visiting the islands. He caught over ten thousand lizards. He marked each one so he could recognize it, and then let it go again. After the brown lizards came to the islands, the green lizards started staying higher in the trees where they could avoid the brown lizards. The brown lizards ate bugs that were on the ground. The green lizards ate bugs that were high in the trees.

Return to Lizard Island

Many years after Todd finished studying the lizards, a scientist named Yoel Stuart decided to visit the islands. Yoel wanted to find out what had changed since Todd had been there. Yoel took a close look at the feet of the green lizards. He knew that lizards that had more sticky scales on their toes were better climbers.

Yoel and his team caught green lizards and looked at their feet. They wanted to count how many scales each lizard had on its toes. It was a lot of work, but they counted the toe scales on more than 600 lizards.

Scales on the bottom of a green anole's foot



Yoel found that green lizards that lived on islands with brown lizards had more toe scales. The green lizards that were the best climbers did very well. They survived because they could live high in the trees and eat the bugs that the brown lizards couldn't reach. Those green lizards had babies who were great climbers, too.

So the scientists discovered that the green anole lizards and the brown anole lizards can share the same island. The green lizards live high in the trees and the brown lizards live close to the ground. And both kinds of lizards find bugs to eat wherever they are.