

THE PHYLOGENETIC TREE OF ANOLE LIZARDS – HHMI BIOINTERACTIVE VIDEO

1. Describe the four types of anole lizard species that live in the Caribbean. (2:00-3:00)

Name	Habitat	Description/Appearance
Grass-bush anole	Grasses and bushes	
Trunk-ground anole	Low parts of tree trunks and on the ground	
Twig anole	Twigs and small branches	
Canopy anole	High up in the canopy	

2. Explain why the long legs of the Trunk-ground Anole and the short legs of the Twig Anole are adaptations for their unique lifestyles and environments. (3:20-5:30)

3. What are two unique features of the toepads of the Canopy Anole? How do these improve its fitness in its environment? (5:40-6:50)

4. In Jonathan Losos' experiment, they took long-legged Trunk-ground Anoles and placed them on 7 islands which originally had no lizards on them. These islands did not have any large trees: only small ones with thin branches.

a. What did the scientists observe over the next few generations in all 7 of these islands? (9:30-10:00)

b. Bonus: Discuss the three steps of evolution by natural selection that must have occurred: (variation, survival and reproduction of the fittest, evolution).

