

Lizards in a Hurricane [Google Slides](#)

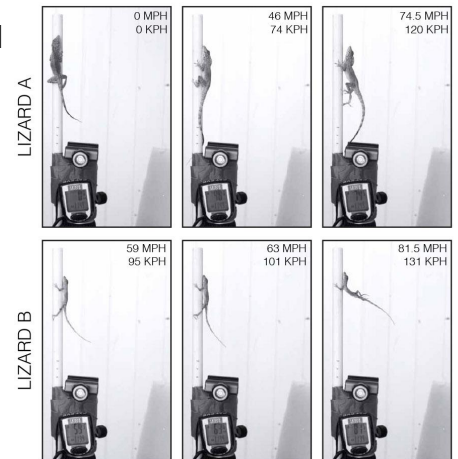
In 2017, a team of scientists in the Caribbean was presented with a rare opportunity. The scientists were studying lizard populations on two small islands, Pine Cay and Water Cay, when hurricanes struck. The first hurricane, Hurricane Irma, brought wind speeds of up to 165 mph (miles per hour), or 265 kph (kilometers per hour). The second, Hurricane Maria, had wind speeds over 124 mph (200 kph). *A commonly studied organism on the island is the anole lizard.*

1. Could this extreme weather event have caused a change in the overall population of anole lizards? What data could you collect to find out?

2. How do anole lizards hold onto tree branches? What other features might help them survive?

3. Scientists set up a wind machine with a leaf blower to test how well anoles could hold on during a hurricane. Describe the anatomical features that seem to be helping the lizard hold on.

4. Examine a series of images showing how lizards Write down 2 observations from these images. It might help to start with “I wonder, or I notice...”



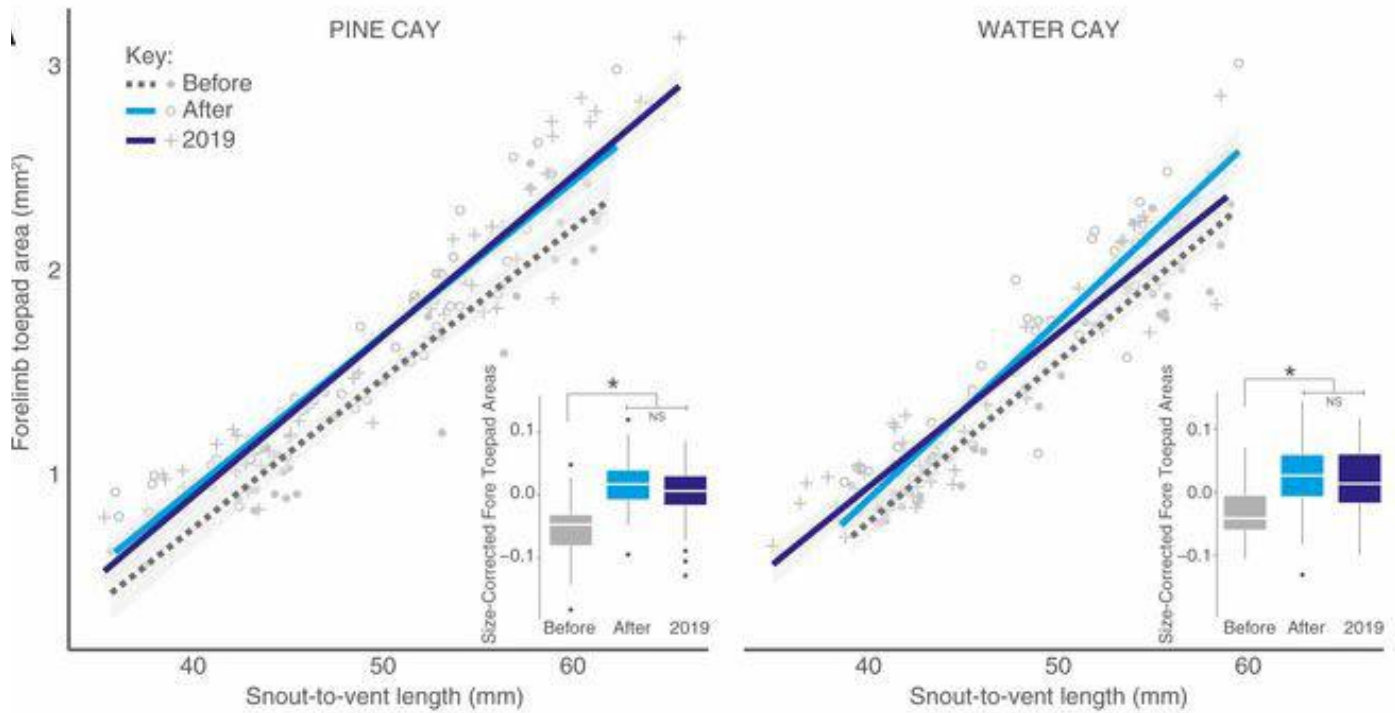
5. Sometimes diagrams can be deceptive. Look at the MPH values for these lizards. What is deceptive about how they are presented here?

6. Compare the lizards' strategy for hanging on. Do they all hang onto the pole in the same way, do they let go in the same way?

7. Which lizard is the champion at holding on? How do you know?

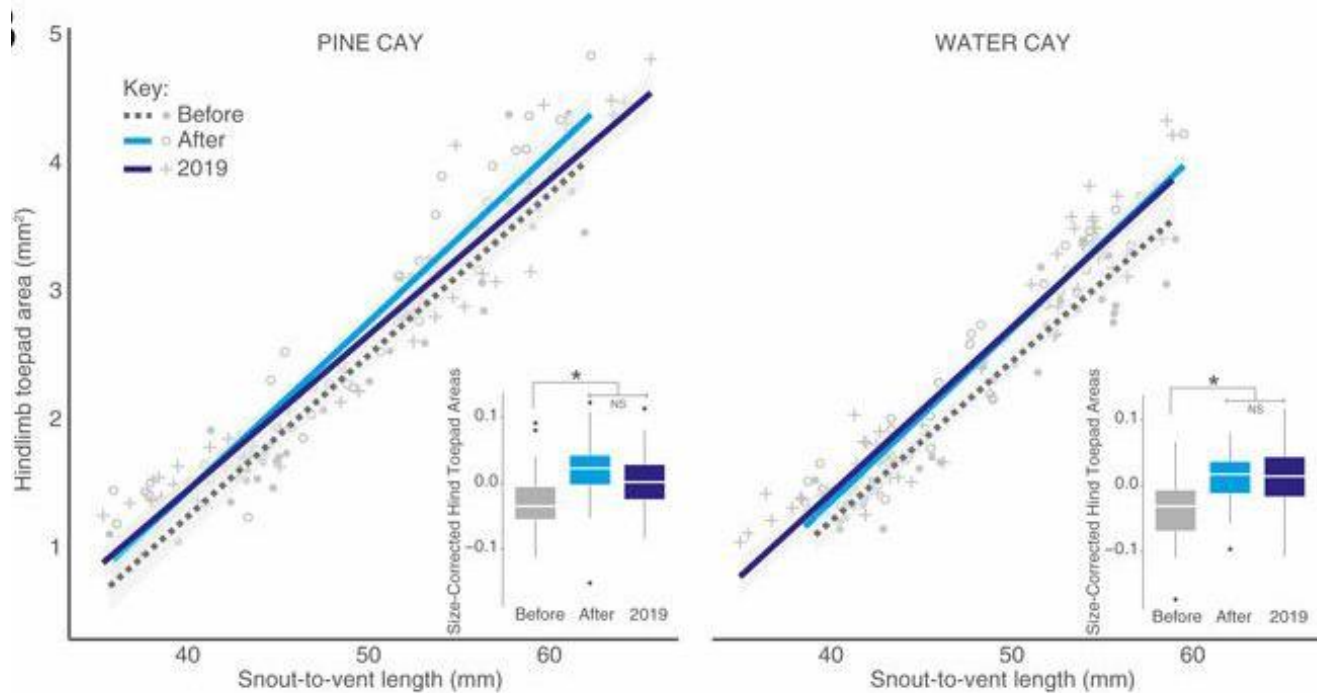
8. If scientists hypothesize that lizard populations may have changed as a result of selective pressure. What other things do you need to know about these lizards?

9. Examine the graph and create a caption (summary)



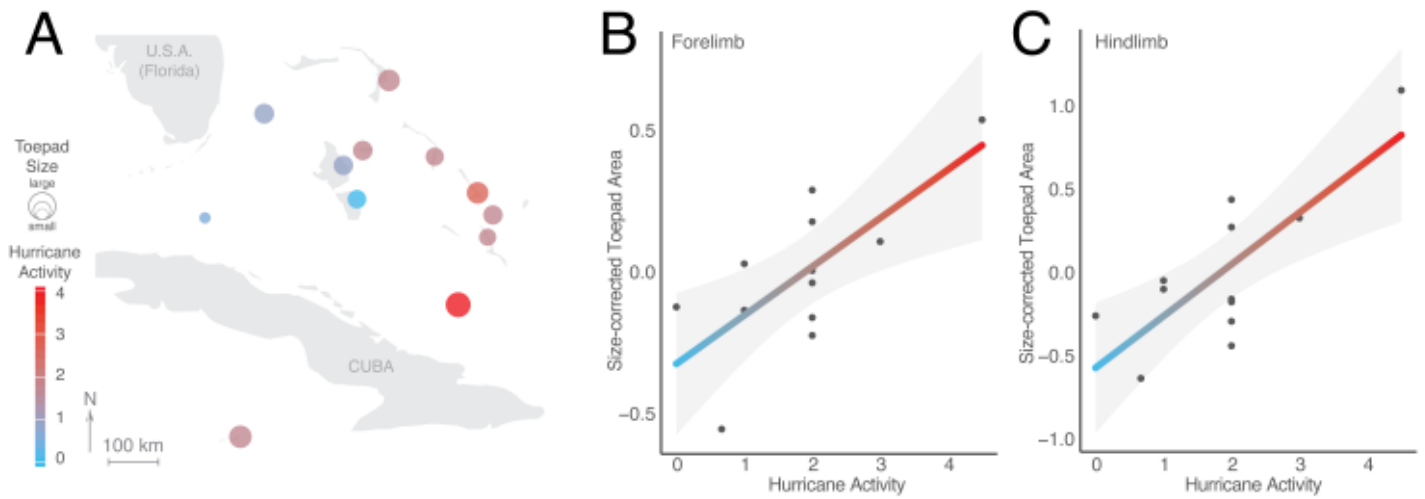
Caption:

10. Compare this graph to the last one.



What does this say about the toe pads of the anoles? Does selective pressure affect both in the same way?

11. This graph shows data collected over the last 70 years.



Caption this graph by summarizing what it shows.

Watch the Video

12. The original study with the leaf blowers set out to answer a specific question about anoles. Summarize what the scientists found from collecting data on anoles.