

Copy Critters By Caleb Clarkson

Growing up, I can remember almost all of the tattered and worn posters that adorned the classrooms of my school. Many of them had historical timelines, periodic tables, and the like. However, many said roughly the same thing in different fonts, colors, and shapes- "Be Yourself." For kids in school scared about fitting in, the often-repeated phrase can help ease anxieties. However, for creatures and critters out in the wild, it can be quite advantageous to "be" someone or something else!

Mimicry, a biological adaptation where an organism imitates the appearance, behavior, or sounds of another species, is a powerful evolutionary tool that can help increase the probability of an organism surviving and reproducing. Imitating an appearance is handy for many species, and for some species, it can be the difference between getting a meal or becoming one.

This is true for a Texas native, the longest insect in the United States, the Giant Walkingstick! With no wings or "weapons", the Giant Walkingstick relies on its brown to green stick-like legs and body to blend in with its arboreal environment and hide from predators.

It isn't just for camouflage. Sometimes organisms mimic a species that stands out! For the Scarlet Kingsnake in South Texas, its eye-catching colors do more than just draw attention to itself; its mix of red, yellow (or white), and black banding makes it very similar in appearance to the highly venomous Texas Coral Snake. Potential predators who go after the Scarlet Kingsnake might think twice before approaching it, as it looks strikingly similar to another snake with a nasty bite and deadly venom.

Some plants also mimic other, more harmful plant species by creating buds and leaves that resemble sharp, irritating thorns. This mimicry, where one species imitates another, harder-to-predate species, to confuse a shared predator, is Batesian mimicry; named after Henry Walter Bates, one of the first scientists to write of mimicry in animals.

Some species even mimic the sounds and signals of other organisms. Birds are popular mimics in nature, and their abilities have been immortalized in the swashbuckling stories of peg-legged pirate captains with rambunctious and witty Parrots atop their shoulders. Luckily, you don't need to be on the high seas to hear avian ad-libs. There might be some mimicking birds in your backyard.

Texas's state bird, the Northern Mockingbird, is known for the myriad of different bird songs and calls that it can produce. While Mockingbirds can replicate birdsong, they've also been heard producing the sounds of a phone ringing, car alarms, and the meows and barks of cats and dogs. The mimicry serves many different purposes. Various calls are used to attract mates and show off their fitness to potential suitors. They are also used for defending their territory, scaring off competitors, and making it seem like more birds are in the area than there are.

Mimicry is a fascinating survival strategy used by many species across the globe. Organisms that might have been a quick meal for a hungry predator use imitation to blend in and deceive, allowing them to live another day and reproduce. For competing species, mimicry can be the competitive edge when defending the best territory or attracting the best mate. In our society, maybe it is best to be yourself, but in nature, sometimes imitation is just as powerful as authenticity.

Photo by Sheryl Travis

Caption: The Northern Mockingbird can mimic a myriad of sounds