

Super Adaptations

By Julia Juarez

Super strength, super speeds, or super sight; these might be the traits of your favorite fictional superhero, but they're also found in nature, as animals have developed unique adaptations over time to better survive. There are three types of animal adaptations: behavioral, structural, and physiological. Behavioral adaptations include things that animals will do, such as hibernating during the winter. Structural adaptations, like the ears of an elephant, include physical outward features. Finally, physiological adaptations include internal processes, like temperature regulation. Now that we know the basics, let's talk about some super animals who have developed these amazing adaptations!

The Green Basilisk has a unique nickname: The Jesus Lizard. That's because this lizard is able to run on water! They can move five feet per second on water to evade predators, and they can do this for up to fifteen feet until they eventually sink. In order to do this, they use their long toes. A Green Basilisk lizard's rear foot has specialized scales that, when running quickly, can create tiny air pockets above the water. Not to worry though, they are highly skilled swimmers and can easily out-swim a predator once they sink.

Similarly, the Pygmy Gecko can not only can they run on water, but can casually walk and even float on top of the water. The Pygmy Gecko is light enough not to break the surface tension, and they also have super hydrophobic skin. This means that their skin repels water.

For another amazing adaptation, let's look to the Artic Reindeer. According to new studies, Artic Reindeer are able to shift their eye color depending on the season. For the most part, Artic Reindeer have golden eyes in the spring and summer, but as the arctic winter draws near, and the time of day starts to blur, Artic Reindeer's eye will change to a deep blue. This change happens in the Tapetum Lucidum, which is a layer of tissue in the eye that reflects visible light. This is also how cats and dogs' eyes "glow" at night.

Another animal with incredible eyes is the Bald Eagle. A Bald Eagle's eyesight is estimated to be up to eight times better than a human's eyesight and they can spot prey from over a mile away. Their excellent eyesight and other adaptations make the Bald Eagle an apex predator of the sky.

Yet another animal with super eyes is the Mantis Shrimp, which is able to see an array of colors that the human eye cannot. While many animals are able to see more colors than humans, the Mantis Shrimp have up to sixteen types of photoreceptors. For comparison, humans only have four!

The Mantis Shrimp not only possesses amazing sight, but also super strength! In fact, the Mantis Shrimp holds the world record for its punching abilities. With a claw acceleration that matches a .22 caliber bullet, these guys do not mess around.

A different kind of strength can be found in the African elephant, the land animal that can lift the heaviest weight. They have been recorded lifting over 13,000lbs! Another famously strong animal is the Silverback Gorilla. Even though they are primates like us, their strength is far more impressive! The adult male silverback gorilla can lift up and even throw 1800 pounds.

The animal kingdom will never cease to amaze us. Who needs superheroes when we have super animals all around us?

Photo caption: Bald Eagles use their impressive eyesight to spot prey

Photo credit: Mike Williams