



ABOUT THE COVER

A plumed basilisk lizard (*Basiliscus plumifrons*) runs across the surface of a jungle pool, spraying water in the air. Basilisks are large lizards (up to 80 cm in length) in the family Corytophanidae. The four species of basilisks occupy forested corridors of streams and pools in tropical regions of Central America and South America. When threatened by a predator, a basilisk can escape by running across water on its hindlimbs, earning it the alternate name "Jesus Christ lizard." This remarkable ability is partly due to a basilisk's speed, up to 5.5 km/hr. In addition, the foot of a basilisk has long toes, fringed by long, rectangular scales. These scales create more surface area on its foot and trap air, keeping the basilisk's foot from sinking into the water. A basilisk can run about 4.5 m across the water before sinking. Once immersed in the water, the basilisk uses its large, flattened tail to continue its escape.

Zoologists are concerned that increasing agricultural developments in the tropics combined with global climatic changes threaten the welfare of many tropical lizard populations. Many studies are underway to evaluate how rapidly local populations have been lost in the recent past, and how well particular species can tolerate increased temperatures and deforestation. It is clear that lizard species differ greatly from each other in their ability to tolerate such changes, and researchers have not yet reached a consensus regarding the long-term stability of tropical lizard species. So far, the common basilisk and the brown basilisk have been successful at adapting to agricultural development in Central America, and neither species shows signs of becoming endangered. Nonetheless, increased temperatures and homogeneity of habitat have rendered other species susceptible to epidemic diseases and other stresses. A major focus of ecological and conservational studies is to identify the many factors that interact in nature to influence the evolutionary stability of each species. The exuberant diversity of tropical lizards has fascinated local communities, tourists, and scientists for many generations. All must work together to ensure the prosperity of this natural treasure.



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