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About Our Cover

It is feeding time at the Helzberg Penguin Plaza at the Kansas City Zoo, Missouri. This state-of-the-art facility showcases four species including king, macaroni, and gentoo penguins, but the stars of this image are the Humboldt penguins (*Spheniscus humboldti*), here showing their enthusiasm for lunch in their warm-weather habitat. Arguably another star is the habitat itself, which opened in October 2013 and gives members of the public a chance to get up close and personal with these animals, learn about them, and hopefully gain an understanding of the role and status of penguins in the natural world.

There are 18 species of these remarkable birds, all living in the southern hemisphere, except, of course, when one of the Galápagos variety ventures north across the equatorial line. Humboldt penguins live in the Pacific waters and nest on the rocky shores of South America, from Peru to Chile, with the largest groups on Punta San Juan (Peru) and Chañaral Island (northern Chile). They may live up to 12 years in the wild, are about 64 cm (25 inches) in height and have a population size of 3 to 12,000 individuals.

They live in sizable colonies on the beach where they may dig burrows to escape the heat. Another adaptation to control body temperature is the lack of features on their faces and feet. They hunt for small fish and squid in the ocean, usually going no farther than 20 miles out. They are highly social and produce a variety of donkey-like calls when they recognize family members or are nervous about predators. They can produce a clutch of eggs twice a year and may rear up to four chicks. Males and females remain together to care for offspring.

Unfortunately, these and other penguins on the mainland are threatened by entanglement in fishing nets; predation by cats, rats, and foxes; habitat destruction caused by mining; and even from commercial fishing, which may impact the availability of food resources. Therefore, their numbers are thought to be decreasing.

This digital image was recorded with a Nikon D810 camera using an image-stabilized, 28–300 mm zoom lens. The photographer is William F. McComas, editor of *The American Biology Teacher*, Parks Family Professor of Science Education, and director of the Project to Advance Science Education at the University of Arkansas (mccomas@uark.edu).

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