



Color and Survival

As the human race exerts greater influence on the Earth, our preferences may play a greater role in determining which other species survive, say scientists. New research shows that, in some cases, these preferences may be influenced by subtle factors such as small color highlights. In the case of penguins, the species most popular with humans appear to be the ones displaying markings of warm colors such as red, orange or intense yellow, said a conservation biologist. The more popular a species is, the more likely it will garner human support for its survival.

Researchers have calculated the popularity of various species by studying photographs in large-format photograph books about penguins. Decisions about how many and which photographs to use and how large to make them presumably were made by the books' editors based on their own preferences or on their beliefs of what would appeal to the public. "Penguins are lucky because they are popular with people, especially right now. But that's not true of 99.9 percent of the species out there," said a scientist.

In the case of the penguin study, at the top of the list are the Emperors, featured in the film "March of the Penguins." Species at the bottom of the list are Adelie, Yellow-eyed and Little Blue. Researchers were particularly surprised by the relative lack of popularity of Adelie penguins because that species is probably the most familiar to the public. In all, there are 17 penguin species, and some are now struggling to survive in response to climate change, changing food patterns, and encounters with humans or from industrial activity, such as oil drilling at sea.

The penguins that appear to be the most popular are the ones that display the warmest colors in the upper body, the neck and head. One scientist likened the effect of this coloration to that of a man in a tuxedo pinning on a red carnation. Unlike some other types of animals, human preference for particular penguin species does not seem to be driven by a "cuteness" factor.



Emperor penguins (courtesy NOAA)

Color is not the only factor that can determine a species' potential attractiveness to humans. Characteristics such as size and neoteny – the retention of babyish physical traits such as large eyes and large head – can also play major roles for some animals. For example, pandas, zebras and elephants, are black and white or gray but are highly preferred by humans. "Millions of insects and the countless slimy invertebrates that occupy the oceans" are likely not as lucky, said a scientist.

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