

SHORT COMMUNICATIONS:

ULTRAVIOLET BEAK SPOTS IN KING AND EMPEROR PENGUINS

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Abstract. In seabirds, colors of feathers and external tissues have only recently been studied, and ultraviolet (UV) color has not yet been detected. Using live individuals as well as museum skins, we found UV peaks of reflectance in two large *Aptenodytes* species, King (*A. patagonicus*) and Emperor (*A. forsteri*) Penguins. UV reflectance did not occur on the feathers, claws, or skin of these species, nor did we find UV reflectance in five other genera of penguins (11 species). UV peaks overlapped with spots of color on the lower beak that appeared orange for human observers, and beak spots differed slightly in location between the two species. Adults of both sexes possessed these UV markings, but they were lacking in juveniles, as was the orange color of the beak spot, and auricular patches used for selecting mates. Finally, measurements of free-ranging King Penguins showed that recently paired birds had higher UV reflectance than courting ones, suggesting possible roles of UV beak spots in pairing and as an indicator of sexual maturity.

Key words: *Aptenodytes, mate choice, ornament, penguin, ultraviolet reflectance.*