

## Oriental honey buzzards might stop to smell the pollen

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Oriental honey buzzard flying in early daylight in Shivanahalli, Bangalore, Karnataka. Credit: Seshadri.K.S/Wikipedia

Oriental honey buzzards, birds of prey, likely use a combination of their senses of smell and sight to identify nutritious pollen dough balls found in Taiwanese beehives, according to a study published July 15, 2015 in the open-access journal *PLOS ONE* by Shu-Yi Yang from National



Pingtung University of Science and Technology, Taiwan, and colleagues.

Scientists think that raptors, birds that hunt and feed on other animals, may use their sense of <u>smell</u> to detect <u>food</u>, but this has only been demonstrated in one type of vulture. The Oriental honey buzzard, a bird of prey in Taiwan, regularly forages in apiaries for yellow pollen dough, a softball-sized mixture of pollen, soybeans, and sugar that beekeepers provide as a supplementary food for bees. Since pollen dough is not similar to any naturally occurring food, the authors of this study investigated whether the buzzards identify the dough's nutritious contents using their <u>sense of smell</u>, or perhaps in combination with vision. The authors of the study used a series of experiments where individual birds could choose between two doughs that varied in pollen content or color, to test whether buzzards use the scent of pollen to find their food, and whether the food color influences their preference.

The authors found that buzzards almost always chose pollen-containing dough over dough without pollen, when the dough was otherwise identical in size, shape, and yellow color. Vision also seemed to play a role in foraging, as the buzzards preferred yellow over black or green dough if both contained pollen. In addition, buzzards still preferred pollen-containing over pollen-lacking dough when both doughs were black, but at a lower rate than when both were yellow. The authors suggest that <u>buzzards</u> likely identify the dough using their sense of smell, in combination with their vision. The authors conclude that olfaction is likely of far greater ecological importance to this species than previously thought, and should be considered when studying their behavior.

**More information:** Yang S-Y, Walther BA, Weng G-J (2015) Stop and Smell the Pollen: The Role of Olfaction and Vision of the Oriental Honey Buzzard in Identifying Food. *PLoS ONE* 10(7): e0130191. DOI: <u>10.1371/journal.pone.0130191</u>



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