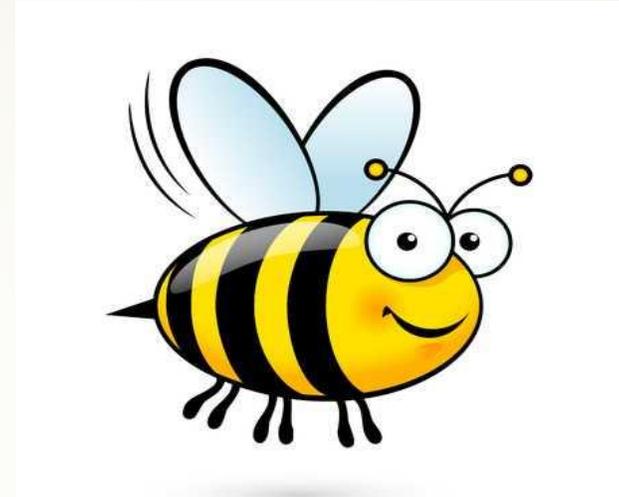




Avian Pollinators

Linda Scott

4 Types Of Pollination



Birds!



- Birds that eat nectar are unwitting pollinators in exchange for their meal
- Hummingbirds are the largest group of avian pollinators in the United States



How do the flowers do it?

Pollination by birds – ornithophily

What makes a flower ornithophilous

Scent is of no use for pollinating birds little or

Usually produce a vivid floral display of more
red, orange or purple hues.



Why these colors?

Hummingbirds lock onto the warmer colors of the ultra-violet spectrum, not including yellow which is preferred by bees.



Floral Posture

Loosely clustered on tips or along flexible stalks



Nectar usually deep within a long tubular flower



...Allowing the flower to place pollen on the bird's body

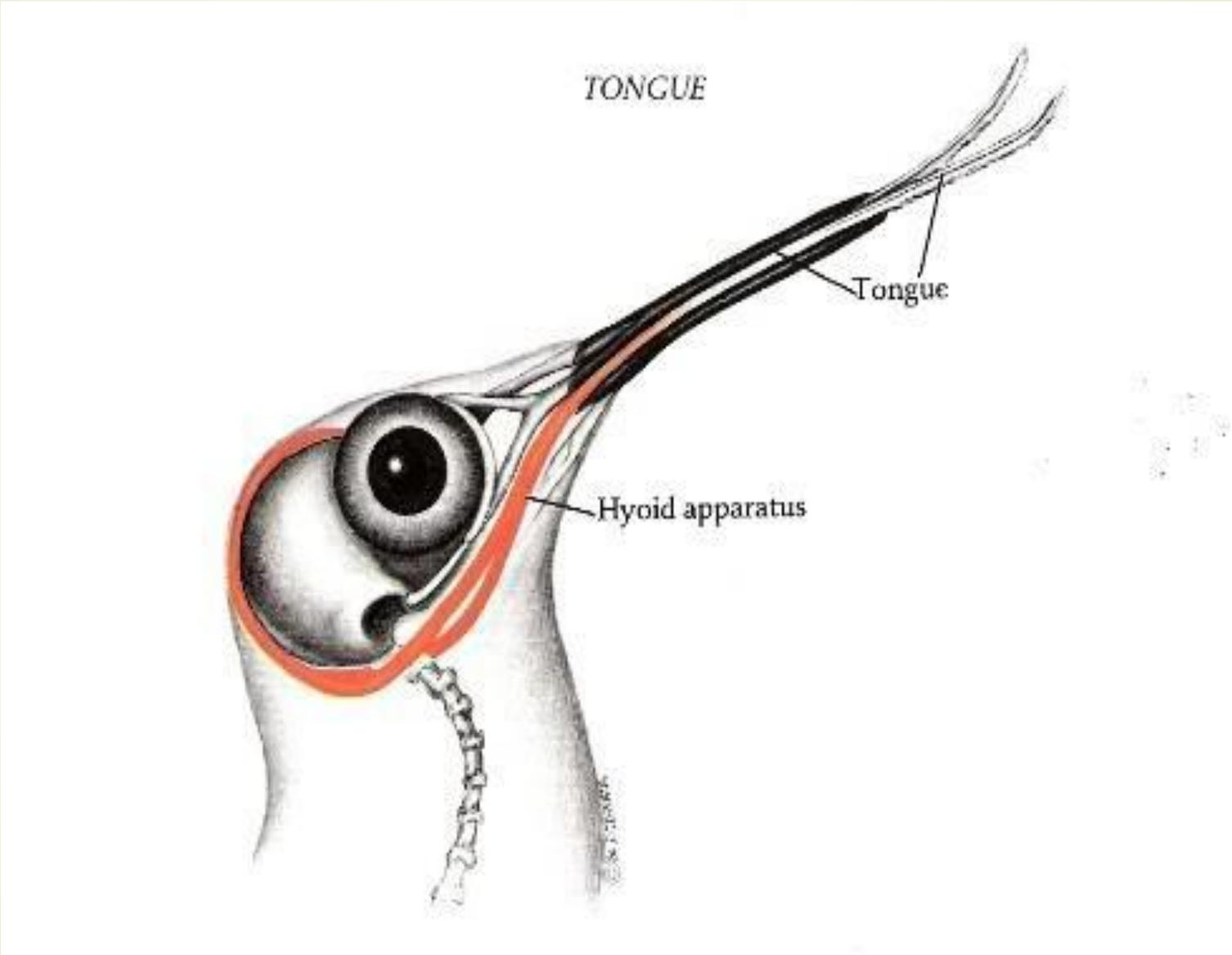


How does it work for the hummingbirds?

Tongue.....whaaaaat?

The hummingbird has a forked tongue which is lined with hair-like extensions called lamellae. When inside the flower, the tongue separates and the lamellae extend outward. As the bird pulls its tongue in, the tips come together and the lamellae roll inward. This action traps the nectar within the tongue.

(PhysOrg.com Research of Margaret A. Rubega and Alejandro Rico-Guevara, University of Connecticut)





<https://www.youtube.com/watch?v=t2oN1obkauc>



Other Avian Pollinators in Arizona

Famous Arizona Avian/Plant Symbiosis

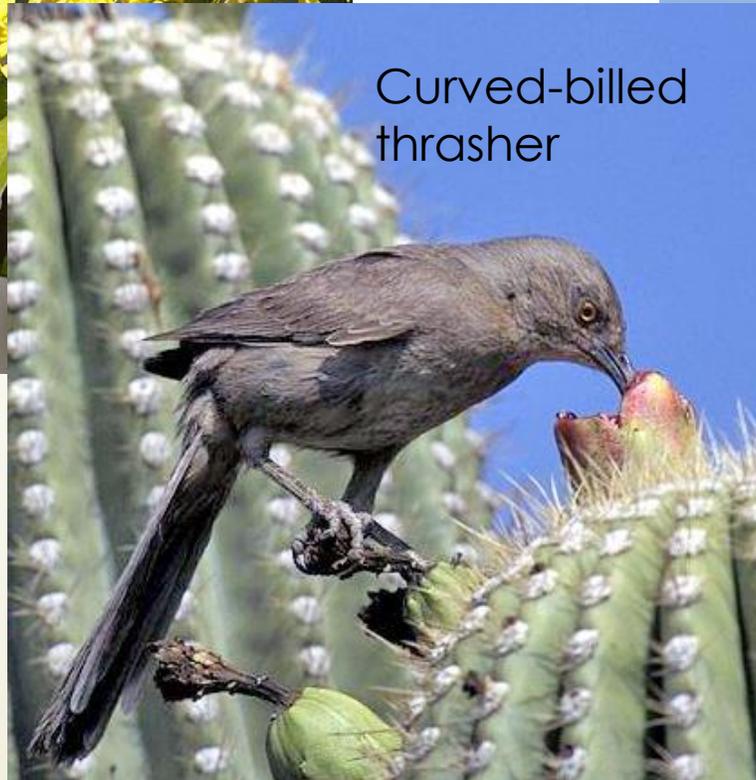




Saguaro Cactus and the White Winged Dove

- Type of Sybiosis – Mutualism
 - Mutualism is an ecological interaction between at least two species where both partners benefit from the relationship
 - According to the Arizona-Sonora Desert Museum White Winged Doves synchronize their migration into the Sonoran Desert with the reproductive cycle of the Saguaro Cactus
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Additional – minor avian pollinators



Why birds instead of bees? What's in it for the plant?



Birds deal with inclement weather and high altitudes better than many other pollinators

