





A Committee of Vultures (Cathartes aura)

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## : Bird Brief : Turkey Vulture (Cathartes aura)

**ORDER:** Cathartiformes (5 Families) **FAMILY:** Cathartidae (7 Species)

The miracle of fall migration is in full flight. Warblers, shorebirds, falcons, hawks, cranes, owls, passerines, and so many more birds are traversing our skies on their way to wintering habitats and, perhaps, stopping over to forage and rest. Our local summer bird residents are also starting their migration to warmer climates. One of my favorite bird species getting ready to leave for the winter is the Turkey Vulture (*Cathartes aura*). This bird may not be a fan favorite feathered friend, but it is one of the most overlooked and important birds in our skies. Perhaps, after reading this, you may find a new appreciation for this unique bird.

Cathartidae. The name turkey comes from the resemblance to the male turkey's bald red head while vulture derives from the Latin word vulturus which implies something that tears. In its foraging technique, the vulture will place a foot on the carcass and rip flesh off the bone. Other names for the Turkey Vulture include Turkey Buzzard, Buzzard, John Crow, and Carrion Crow. I think the Carrion Crow is the most descriptive alternative name because this scavenging black bird feeds primarily on the decaying flesh of dead animals. No matter what stage of putrefaction, the Turkey Vulture is able to resist infectious disease and toxins because of the high acidity of its digestive tract. Additionally, foraging deep inside a carcass can be messy, thus the reason the Turkey Vulture has no facial feathers for food to adhere to, allowing it to stay cleaner. With all this said, its scientific name Cathartes aura is Latin meaning cleansing breeze and is absolutely true. The Turkey Vulture removes unwanted natural decomposition and cleanses the environment of potentially harmful infectious agents found in decaying carcasses. This special bird does the dirty work to help keep a cleaner planet and does not prey on the living. The Turkey Vulture is neither predator nor prey. It is a gentle giant!

Turkey vultures have a few anatomical and behavioral differences when compared to other birds. First, these gregarious birds are very quiet. They are unable to produce vocal sounds since they lack the sound producing organ called the **syrinx**. When they vocalize, they simply grunt or hiss. Second, you

may have witnessed a Turkey Vulture perched and spreading its wings like a Cormorant. Reasons for this *horaltic stance* are realigning flight feathers, drying feathers after rain or morning dew, thermoregulation, and baking off bacteria from the feathers. And finally, an overheated Turkey Vulture can cool blood vessels in its legs by defecating on them, which is called *urohidrosis*. The evaporated water from the feces will subsequently cool the body, and because of the extraordinary ability to kill bacteria in its highly acidic digestive tract, the defecation can also act as an antiseptic wash.

How does the Turkey Vulture seek food while soaring? Turkey Vultures have a large olfactory bulb allowing for a strong sense of smell, especially for *ethyl mercaptan* which is emitted from decaying flesh. In fact, the Union Oil Company of California added chemicals to its gas lines in the 1930s so leaks could be located by Turkey Vultures. Not only does the Turkey Vulture have extraordinary sense of smell, it can soar effortlessly because of its light wing load. It is able to harness kinetic energy by using rising columns of warm air and then simply soar slowly in circles over great distances smelling for its next meal. Turkey Vultures fly in a V-shaped dihedral wing posture for roll stability during gusts of wind; this is called *passive stability*. Additionally, they are able to soar slower because they extend the primary feathers or "fingers" which allows air to easily pass through the open slots; thus reducing any wind turbulence at the wingtips. This helps to prevent stalling speeds and keep them aloft. The V-shape and outstretched fingers of this large circling bird will make the Turkey Vulture easier to identify high in the sky.



## References:

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