TURKEY VULTURE - CATHARTES AURA

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Accipitriformes Family: Cathartidae Genus: Cathartes Species: C. aura

Habitat:

Biomes: Look for Turkey Vultures as they cruise open areas including mixed farmland, forest, and rangeland. They are particularly noticeable along roadsides and at landfills. At night, they roost in trees, on rocks, and other high secluded spots. The turkey vulture is widespread over open country, subtropical forests, shrublands, deserts, and foothills. It is also found in pastures, grasslands, and wetlands. It is most commonly found in relatively open areas which provide nearby woods for nesting and it generally avoids heavily forested areas.

Distribution:

In US: It is found in open and semi-open areas throughout the Americas from southern Canada to Cape Horn. It is a permanent resident in the southern United States, though northern birds may migrate as far south as South America. The turkey vulture is widespread over open country, subtropical forests, shrublands, deserts, and foothills. It is also found in pastures, grasslands, and wetlands. It is most commonly found in relatively open areas which provide nearby woods for nesting and it generally avoids heavily forested areas.

In Other Countries: ^^^^^^

Holistic Description: If you've gone looking for raptors on a clear day, your heart has probably leaped at the sight of a large, soaring bird in the distance– perhaps an eagle or osprey. But if it's soaring with its wings raised in a V and making wobbly circles, it's likely a Turkey Vulture. These birds ride thermals in the sky and use their keen sense of smell to find fresh carcasses. They are a consummate scavenger, cleaning up the countryside one bite of their sharply hooked bill at a time, and never mussing a feather on their bald heads.

Species Richness: 5 SUBSPECIES

Population Dynamic: NONE

Evolution and Systematics:

Evolution: Oldest record of cathartid vulture Paracathartes howardae is from early Eocene (about 60–50 million years) in Wyoming; slightly larger than extant Turkey Vulture. Pleistocene record includes extant and extinct cathartids. Cathartes aura apparently originated in mid-Pleistocene, and Pleistocene fossils from La Brea tar deposits in California (40,000–10,000 years) indicate that these vultures were larger than present-day ones, perhaps because of cooler climate and prevalence of large herbivores.

Systematics: Slight variation in wing and tail length; generally larger at higher latitudes over range. Birds in e. North America larger than in West or South. Bare skin of hindneck has yellow-white band on birds resident from s. Costa Rica to lowlands of South America east of Andes. Downy chicks white in North America, but said to be grayish on Falkland Is. Subspecific taxonomy based on poorly defined average differences in size (wing and tail length) and coloration, including plumage and bare skin of head and neck. As many as 6 subspecies recognized, depending on authority.

Number of Species: 5 SUBSPECIES

Number of Genera: 5 SUBSPECIES

Physical Characteristics:

Size and Length: Length: 25.2-31.9 in (64-81 cm) Weight: 70.5 oz (2000 g)

Wingspan: 66.9-70.1 in (170-178 cm)

Coloration: Turkey Vultures appear black from a distance but up close are dark brown with a featherless red head and pale bill. While most of their body and forewing are dark, the undersides of the flight feathers (along the trailing edge and wingtips) are paler, giving a two-toned appearance.

General Body Features: Turkey Vultures are large dark birds with long, broad wings. Bigger than other raptors except eagles and condors, they have long "fingers" at their wingtips and long tails that extend past their toe tips in flight. When soaring, Turkey Vultures hold their wings slightly raised, making a 'V' when seen head-on.

Special Features of the Body: It flies at low altitudes with its wings in a V-shaped angle called a dihedral. As it flies, it rocks from side-to-side instead of flapping its wings. This saves energy and allows the turkey vulture to stay in the air longer. It also glides on thermals or updrafts of air.

Special Features of the Head and Sensory Organs: The turkey vulture has excellent eyesight and a keen sense of smell that helps it locate rotting meat.

Dentition: BEAK/LAMELLAE/GIZZARD

Special Features of the Limbs and Digits: Because the turkey vulture doesn't hunt and kill its food, its legs and claws are weaker than those of most birds. The turkey vulture's bald head helps keep dead meat, along with the bacteria it carries, from collecting in the vulture's feathers while it is digging into an animal carcass.
Any Special Internal Anatomy: The turkey vulture urinates on its legs. The urine cools the vulture and the acids in the urine kill any bacteria that ended up on the vulture's legs when it was stepping in carcasses.
Sexual Dimorphisms: Sexes similar, females averaging slightly larger than males but evidently distinguishable only from Discriminant Function equations.
Differences Between Juvenile Stage and Adult: Juvenile has gray head with black beak-tip; by first spring, head is pinkish red; bill becomes progressively more ivory-colored with age.

Behavior:

Diurnal, Nocturnal, or Crepuscular: Diurnal
Activity: The Turkey Vulture's distinctive slow, teetering flight style probably helps the bird soar at low altitudes, where it is best able to use its nose to find carrion. At other times they may soar high on thermals and form mixed flocks or kettles. On the ground they move with ungainly hops and are less agile than Black Vultures. Often, especially in the morning, they can be seen standing erect, wings spread in the sun, presumably to warm up, cool off, or dry off. Outside of the breeding season, Turkey Vultures form roosts of dozens to a hundred individuals. When Turkey Vultures court, pairs perform a "follow flight" display where one bird leads the other through twisting, turning, and flapping flights for a minute or so, repeated over periods as long as 3 hours. Migrating flocks can number in the thousands. At carcasses, several Turkey Vultures may gather but typically only one feeds at a time, chasing the others off and making them wait their turn. Despite their size, Turkey Vultures are often driven off by smaller Black Vultures, Crested Caracaras, Zone-tailed Hawks, and other species.
Locomotion: Walks on ground or forward along branches with body axis in horizontal or oblique posture; usually sidles along branch in vertical or oblique posture. Also hops and runs, especially when competing at carcass, but less adept on ground than Black Vulture. Will wade into water up to belly feathers to feed or bathe. Flight mode is almost entirely gliding and soaring, by using low-level air movement or high-altitude thermals. Low wing-loading, high aspect ratio, dihedral wing position, and “teetering” flight maximize the stability and lift at low altitudes that are necessary to detect carrion scent. Where thermal and deflected updrafts are unpredictable or weak, may flap intermittently.
Communication and Perception: Turkey Vultures lack the vocal organs to make proper songs. Most of their vocalizations come down to a form of low, guttural hiss made when they are irritated or vying for a better spot on a carcass. They also may give a low, nasal whine while in flight. LACKS A SYRINX.
Home Range: Active nests usually well spaced—e.g., generally 1 nest/valley in Ohio —but can also be as close as 93–156 m. Reports of nesting aggregations undocumented. Only apparent published evidence of territorial defense is Davis's observations; also Coles's suggestive evidence from relative location of nests (1/valley).
Degree of Sociality: Social, but not as much as Black Vulture. Forages individually in the sense that birds are initially single when flying low over vegetation; if birds see other vultures descend to carcass, then they are attracted to it.
Level of Aggression: Of 1,447 interactions observed at roosts in California, 18% were of low intensity (intention movements not necessarily directly toward another vulture), 80% of moderate intensity (definite move toward another vulture), and 2% of high intensity (actual contact made with conspecific). Of these, 27% involved extended and lowered head, open bill, or biting. In 99% of 2,525 encounters, individual that initiated interaction won without contest. Of 143 encounters between North American migrants on nonbreeding grounds in Venezuela, 38% were of low intensity (beak toss or threat), 49% of moderate intensity (pecking or biting), and 13% of high intensity (protracted high kicking with feet and biting with bill).
Migration: Resident to long-distance migrant. Some Turkey Vultures in the southern United States are year-round residents. Birds in the northeast migrate short distances southward, to North Carolina through Louisiana. Western birds migrate much farther, with large numbers (more than a million) moving through Central America and in some cases as far as Venezuela, Colombia, and Ecuador.

Predators:

Predators: Pennsylvania, Maryland, Fox, Opossum, Dog, Raccoon, Mongoose, Bald Eagle.
Anti-Predator Defenses: Foul-smelling regurgitate, or habit of feigning dead, thought to repel would-be predators. When adults are threatened while nesting, they may flee, or they may regurgitate on the intruder or feign death. If the chicks are threatened in the nest, they defend themselves by hissing and regurgitating. The young fledge at about nine to ten weeks. Family groups remain together until fall.

Diet and Nutrition:

Adult Diet: Turkey Vultures eat carrion, which they find largely by their excellent sense of smell. Mostly they eat mammals but are not above snacking on reptiles, other birds, amphibians, fish, and even invertebrates. They prefer freshly dead

animals, but often have to wait for their meal to soften in order to pierce the skin. They are deft foragers, targeting the softest bits first and are even known to leave aside the scent glands of dead skunks. Thankfully for them, vultures appear to have excellent immune systems, happily feasting on carcasses without contracting botulism, anthrax, cholera, or salmonella. Unlike their Black Vulture relatives, Turkey Vultures almost never attack living prey.
Juvenile Diet: NONE
Special Adaptations for Getting Prey: CHECK FEATURES
Parasites: The turkey vulture is sometimes accused of carrying anthrax or hog cholera, both livestock diseases, on its feet or bill by cattle ranchers and is therefore occasionally perceived as a threat. However, the virus that causes hog cholera is destroyed when it passes through the turkey vulture's digestive tract. This species also may be perceived as a threat by farmers due to the similar black vulture's tendency to attack and kill newborn cattle. The turkey vulture does not kill live animals but will mix with flocks of black vultures and will scavenge what they leave behind
Reproduction:
Mode of Reproduction: Monogamous
Mating System: Believed to be socially monogamous and to mate for life or until 1 member of pair dies, but no firm evidence. In Wisconsin, marked breeding individuals kept same mate for up to 5 consecutive years, and birds only known to take new mate when earlier mate died or disappeared. Pairs not known to associate during migration or on nonbreeding grounds.
Mating Season: April to June
Courtship: NONE
Territoriality: HOME RANGE
Mating: During courtship in captivity, male held wings high, inflated neck and throat air sacs, and uttered low groaning sound. Also rocked slowly, side to side, alternately lifting feet in air, ending display by clicking bill. In spring, ritualized dance observed, in which 2 birds faced each other and performed Up-and-Down Display while bill-gaping: Held wings above horizontal, and each partner jumped alternately up and down while “yapping.” “Submissive” bird then put head down, touching bill to ground. Wing-spreading and hopping also occur during gregarious “dance” performed by Turkey Vultures in early spring, but function unknown. Copulation occurs on ground, boulders, rock ledges, or in trees.
Nesting: Turkey Vultures nest in rock crevices, caves, ledges, thickets, mammal burrows and hollow logs, fallen trees, abandoned hawk or heron nests, and abandoned buildings. These nest sites are typically much cooler (by 13°F or more) than surroundings, and isolated from human traffic or disturbance. While they often feed near humans, Turkey Vultures prefer to nest far away from civilization. Turkey Vultures don’t build full nests. They may scrape out a spot in the soil or leaf litter, pull aside obstacles, or arrange scraps of vegetation or rotting wood. Once found, many of these nest sites may be used repeatedly for a decade or more.
Egg-Laying: Clutch Size: 1-3 eggs Number of Broods: 1 brood Egg Length: 2.6-3.0 in (6.5-7.5 cm) Egg Width: 1.7-2.1 in (4.4-5.3 cm) Incubation Period: 28-40 days Nestling Period: 60-84 days Egg Description: Creamy white tinged with gray, blue, or green, and spotted with purple to brown.
Hatching and Incubation/Gestation: Downy, often blind, and defenseless beyond a quiet hiss. Downy, with naked face, throat, and crop area. Described as blind or with eyes open. ALTRICIAL
Development: Chicks are altricial, or helpless at birth. Both adults feed the chicks by regurgitating food for them, and care for them for 10 to 11 weeks. When adults are threatened while nesting, they may flee, or they may regurgitate on the intruder or feign death. If the chicks are threatened in the nest, they defend themselves by hissing and regurgitating. The young fledge at about nine to ten weeks. Family groups remain together until fall.
Parental Care: Nestlings are brooded continuously by parents for 5 d, male and female taking turns; brooding then decreases until nestlings are 2 wk old. Adults may feed brood by regurgitating small amounts of well-digested food, as Black Vulture does; after brooding, frequency of feeding varies, but generally 2–3 times daily.
Lifespan: Up to 16-17 years old.
Conservation:
Official Federal Status: Least Concern
Special Statuses in Individual States: NONE
Threats: Turkey Vultures increased in number across North America from 1966 to 2014, according to the North American Breeding Bird Survey. Partners in Flight estimates a global breeding population of 18 million with 28% spending some part of the year in the U.S., 9% in Mexico, and 1% breeding in Canada. The species rates a 5 out of 20 on the Continental Concern Score. Turkey Vulture is not on the 2014 State of the Birds Watch List. These birds were threatened by side-effects of the pesticide DDT, but today they are among the most common large carnivorous birds in North America. However, because they live on rotting meat, like California Condors, they can fall victim to poisons or lead in dead animals. The main

concern is lead shot that ends up in carcasses or gut piles left by hunters. The animals eat the shot and eventually suffer lead poisoning. Other threats include trapping and killing due to erroneous fears that they spread disease. Far from it, vultures actually reduce the spread of disease.

Conservation Efforts: ^^^^^^

Extra Facts:

1. The oldest recorded Turkey Vulture was at least 16 years, 10 months old when it was found in Ohio, the same state where it had been banded.
2. The Turkey Vulture does not build a nest - they lay eggs directly on the ground.
3. They can fly low to the ground to pick up the scent of dead animals.
4. A Turkey Vulture live up to 20 years in the wild.
5. People mistakenly call turkey vultures, buzzards, which is the British name for certain hawks.

Notable Species:

1. C. a. aura is the nominate subspecies. It is found from Mexico south through South America and the Greater Antilles. This subspecies occasionally overlaps its range with other subspecies. It is the smallest of the subspecies but is nearly indistinguishable from C. a. meridionalis in color.
2. C. a. jota, the Chilean turkey vulture, is larger, browner, and slightly paler than C. a. ruficollis. The secondary feathers and wing coverts may have gray margins.
3. C. a. meridionalis, the western turkey vulture, is a synonym for C. a. teter. C. a. teter was identified as a subspecies by Friedman in 1933, but in 1964 Alexander Wetmore separated the western birds, which took the name meridionalis, which was applied earlier to a migrant from South America. It breeds from southern Manitoba, southern British Columbia, central Alberta and Saskatchewan south to Baja California, south-central Arizona, southeast New Mexico, and south-central Texas. It is the most migratory subspecies, migrating as far as South America, where it overlaps the range of the smaller C. a. aura. It differs from the eastern turkey vulture in color, as the edges of the lesser wing coverts are darker brown and narrower.
4. C. a. ruficollis is found in Panama south through Uruguay and Argentina. It is also found on the island of Trinidad. It is darker and more black than C. a. aura, with brown wing edgings which are narrower or absent altogether. The head and neck are dull red with yellow-white or green-white markings. Adults generally have a pale yellow patch on the crown of the head.
5. C. a. septentrionalis is known as the eastern turkey vulture. The eastern and western turkey vultures differ in tail and wing proportions. It ranges from southeastern Canada south through the eastern United States. It is less migratory than C. a. meridionalis and rarely migrates to areas south of the United States.