

= Black vulture =

The black vulture (*Coragyps atratus*) also known as the American black vulture , is a bird in the New World vulture family whose range extends from the southeastern United States to Central Chile and Uruguay in South America . Although a common and widespread species , it has a somewhat more restricted distribution than its compatriot , the turkey vulture , which breeds well into Canada and south to Tierra del Fuego . Despite the similar name and appearance , this species is unrelated to the Eurasian black vulture . The latter species is an Old World vulture in the family Accipitridae (which includes eagles , hawks , kites and harriers) , whereas the American species is a New World vulture . It is the only extant member of the genus *Coragyps* , which is in the family Cathartidae . It inhabits relatively open areas which provide scattered forests or shrublands . With a wingspan of 1 @. @ 5 m (4 @. @ 9 ft) , the black vulture is a large bird though relatively small for a vulture . It has black plumage , a featherless , grayish @-@ black head and neck , and a short , hooked beak .

The black vulture is a scavenger and feeds on carrion , but will also eat eggs or kill newborn animals . In areas populated by humans , it also feeds at garbage dumps . It finds its meals either by using its keen eyesight or by following other (New World) vultures , which possess a keen sense of smell . Lacking a syrinx ? the vocal organ of birds ? its only vocalizations are grunts or low hisses . It lays its eggs in caves or hollow trees or on the bare ground , and generally raises two chicks each year , which it feeds by regurgitation . In the United States , the vulture receives legal protection under the Migratory Bird Treaty Act of 1918 . This vulture also appeared in Mayan codices .

= = Taxonomy = =

The common name " vulture " is derived from the Latin word *vulturus* , which means " tearer " and is a reference to its feeding habits . The species name , *atratus* , means " clothed in black , " from the Latin *ater* ' black ' . The genus name , *Coragyps* means " raven @-@ vulture " , from a contraction of the Greek *corax* / ????? and *gyps* / ??? for the respective birds . The family name , *Cathartidae* , means " purifier " and is also derived from the Greek *kathart?s* / ????????? .

The exact taxonomic placement of the black vulture and the remaining six species of New World vultures remains unclear . Though both are similar in appearance and have similar ecological roles , the New World and Old World vultures evolved from different ancestors in different parts of the world . Just how different the two are is currently under debate , with some earlier authorities suggesting that the New World vultures are more closely related to storks . More recent authorities maintain their overall position in the order Falconiformes along with the Old World vultures , or place them in their own order , Cathartiformes . The South American Classification Committee has removed the New World vultures from Ciconiiformes and instead placed them in incertae sedis , but notes that a move to Falconiformes or Cathartiformes is possible .

There are three subspecies of black vulture :

C. a. atratus , named by the German ornithologist Johann Matthäus Bechstein in 1793 , is known as the North American black vulture . It is the nominate subspecies . It is approximately the same size as *C. a. foetens* , but its plumage is not as dark . Its range stretches from northern Mexico through Texas and the southern United States north to New Jersey and Pennsylvania .

C. a. brasiliensis , named by Charles Lucien Jules Laurent Bonaparte in 1850 , is known as the Southern American black vulture . It is smaller than *C. a. atratus* and *C. a. foetens* . The light markings on the undersides of the primaries are whiter and broader than those of the other subspecies , and the underwing coverts are lighter than those of *C. a. foetens* . It is found in Central America and northern South America . To the south , the range extends to the coastal regions of Peru on the west and the lowlands of Bolivia on the east . To the north , it stretches to Sonora in western Mexico and San Luis Potosí in eastern Mexico . It is not found in high @-@ altitude regions .

C. a. foetens , named by Martin Lichtenstein in 1817 , is known as the Andean black vulture . It is approximately the same size as *C. a. atratus* . The markings on the undersides of the primaries are smaller than those of the other subspecies , and the underwing coverts are darker . It is found in the

Andes range , from northern Ecuador through Peru , northern Bolivia , Paraguay , Uruguay , and the lowlands of Chile .

= = = Evolutionary history of Coragyps = = =

From the Early to the Late Pleistocene , a prehistoric species of black vulture , *Coragyps occidentalis* , known as the Pleistocene black vulture or ? somewhat in error ? the " western black vulture " , occurred across the present species ' range . This bird did not differ much from the black vulture of today except in size ; it was some 10 ? 15 % larger , and had a relatively flatter and wider bill . It filled the same ecological niche as the living form , and indeed seems to have evolved into it by decreasing in size during the last ice age . Well documented from fossil bones , the genus *Coragyps* gives a rare glimpse in the evolutionary dynamics of two chronospecies . The final stages of this evolutionary transformation must have been witnessed by humans : a subfossil bone of the extinct species was found in an Paleo Indian to Early Archaic (9000 ? 8000 years BCE) midden at Five Mile Rapids near The Dalles , Oregon .

Fossil (or subfossil) black vultures cannot necessarily be attributed to the Pleistocene or the recent species without further information : the same size variation found in the living bird was also present in its larger prehistoric relative . Thus , in 1968 , Hildegard Howard separated the Mexican birds as *Coragyps occidentalis mexicanus* as opposed to the birds from locations farther north (such as Rancho La Brea) which constituted the nominate subspecies *C. o. occidentalis* . The southern birds were of the same size as present @-@ day north black vultures and can only be distinguished by their somewhat stouter tarsometatarsus and the flatter and wider bills , and even then only with any certainty if the location where the fossils were found is known . As the Pleistocene and current black vultures form an evolutionary continuum rather than splitting into two or more lineages , some include the Pleistocene taxa in *C. atratus* .

= = Description = =

The black vulture is a fairly large bird of prey , measuring 56 ? 74 cm (22 ? 29 in) in length , with a 1 @.@ 33 ? 1 @.@ 67 m (52 ? 66 in) wingspan . Weight for Black Vultures from North America and the Andes ranges from 1 @.@ 6 ? 2 @.@ 75 kg (3 @.@ 5 ? 6 @.@ 1 lb) but in the smaller vultures of the tropical lowlands it is 1 @.@ 18 ? 1 @.@ 94 kg (2 @.@ 6 ? 4 @.@ 3 lb) . 50 vultures in Texas were found to average 2 @.@ 15 kg (4 @.@ 7 lb) while 119 birds in Venezuela were found to average 1 @.@ 64 kg (3 @.@ 6 lb) . The extended wing bone measures 38 @.@ 6 ? 45 cm (15 @.@ 2 ? 17 @.@ 7 in) , the shortish tail measures 16 ? 21 cm (6 @.@ 3 ? 8 @.@ 3 in) and the relatively long tarsus measures 7 ? 8 @.@ 5 cm (2 @.@ 8 ? 3 @.@ 3 in) . Its plumage is mainly glossy black . The head and neck are featherless and the skin is dark gray and wrinkled . The iris of the eye is brown and has a single incomplete row of eyelashes on the upper lid and two rows on the lower lid . The legs are grayish white , while the two front toes of the foot are long and have small webs at their bases . The feet are flat , relatively weak , and are poorly adapted to grasping ; the talons are also not designed for grasping , as they are relatively blunt .

The nostrils are not divided by a septum , but rather are perforate ; from the side one can see through the beak . The wings are broad but relatively short . The bases of the primary feathers are white , producing a white patch on the underside of the wing 's edge , which is visible in flight . The tail is short and square , barely reaching past the edge of the folded wings . The subspecies differ in size according to Bergmann 's Rule , and the amount of white underwing coloration also varies . As it probably forms a cline over its entire range , the species is often considered monotypic .

A leucistic *Coragyps atratus brasiliensis* was observed in Piñas , Ecuador in 2005 . It had white plumage overall , with only the tarsus and tail as well as some undertail feathers being black . It was not an albino as its skin seemed to have had the normal , dark color and it was part of a flock of some twenty normally plumaged individuals .

= = Distribution and habitat = =

The black vulture has a Nearctic and Neotropic distribution . Its range includes the mid @-@ Atlantic , including New Jersey , the southern United States , Mexico , Central America and most of South America . It is usually a permanent resident throughout its range , although birds at the extreme north of its range may migrate short distances , and others across their range may undergo local movements in unfavourable conditions . In South America , its range stretches to central Chile and Argentina . It also is found as a vagrant on the islands of the Caribbean . It prefers open land interspersed with areas of woods or brush . It is also found in moist lowland forests , shrublands and grasslands , wetlands and swamps , pastures , and heavily degraded former forests . Preferring lowlands , it is rarely seen in mountainous areas . It is usually seen soaring or perched on fence posts or dead trees .

This bird with its somehow crow @-@ like aspect gave foot to the naming of the Quebrada de los Cuervos (Crows Ravine) in Uruguay , where they dwell together with the lesser yellow @-@ headed vulture and the turkey vulture .

= = Ecology and behavior = =

It soars high while searching for food , holding its wings horizontally when gliding . It flaps in short bursts which are followed by short periods of gliding . Its flight is less efficient than that of other vultures , as the wings are not as long , forming a smaller wing area . In comparison with the turkey vulture , the black vulture flaps its wings more frequently during flight . It is known to regurgitate when approached or disturbed , which assists in predator deterrence and taking flight by decreasing its takeoff weight . Like all New World vultures , the black vulture often defecates on its own legs , using the evaporation of the water in the feces and / or urine to cool itself , a process known as urohidrosis . It cools the blood vessels in the unfeathered tarsi and feet , and causes white uric acid to streak the legs . Because it lacks a syrinx , the black vulture , like other New World vultures , has very few vocalization capabilities . It is generally silent , but can make hisses and grunts when agitated or while feeding . The black vulture is gregarious , and roosts in large groups . In areas where their ranges overlap , the black vulture will roost on the bare branches of dead trees alongside groups of turkey vultures . The black vulture generally forages in groups ; a flock of black vultures can easily drive a rival turkey vulture , which is generally solitary while foraging , from a carcass .

Like the turkey vulture , this vulture is often seen standing in a spread @-@ winged stance . The stance is believed to serve multiple functions : drying the wings , warming the body , and baking off bacteria . This same behavior is displayed by other New World vultures , Old World vultures , and storks .

= = = Diet = = =

In natural settings , the black vulture eats mainly carrion . In areas populated by humans , it may scavenge at garbage dumps , but also takes eggs and decomposing plant material and can kill or injure newborn or incapacitated mammals . Like other vultures , it plays an important role in the ecosystem by disposing of carrion which would otherwise be a breeding ground for disease . The black vulture locates food either by sight or by following New World vultures of the genus *Cathartes* to carcasses . These vultures ? the turkey vulture , the lesser yellow @-@ headed vulture , and the greater yellow @-@ headed vulture ? forage by detecting the scent of ethyl mercaptan , a gas produced by the beginnings of decay in dead animals . Their heightened ability to detect odors allows them to search for carrion below the forest canopy . The black vulture is aggressive when feeding , and may chase the slightly larger turkey vulture from carcasses .

The black vulture also occasionally feeds on livestock or deer . It is the only species of New World vulture which preys on cattle . It occasionally harasses cows which are giving birth , but primarily preys on newborn calves . In its first few weeks , a calf will allow vultures to approach it . The vultures swarm the calf in a group , then peck at the calf 's eyes , or at the nose or the tongue . The

calf then goes into shock and is killed by the vultures .

Black vultures have sometimes been seen to pick ticks off resting capybaras .

= = = Reproduction = = =

The timing of black vultures ' breeding season varies with the latitude at which they live . In the United States , birds in Florida begin breeding as early as January , for example , while those in Ohio generally do not start before March . In South America , Argentinian and Chilean birds begin egg @-@ laying as early as September , while those further north on the continent typically wait until October . Some in South America breed even later than that ? black vultures in Trinidad typically do not start until November , for example , and those in Ecuador may wait until February . Pairs are formed following a courtship ritual which is performed on the ground : several males circle a female with their wings partially open as they strut and bob their heads . They sometimes perform courtship flights , diving or chasing each other over their chosen nest site .

The black vulture lays its eggs on the ground in a wooded area , a hollow log , or some other cavity , seldom more than 3 m (9 @.@ 8 ft) above the ground . While it generally does not use any nesting materials , it may decorate the area around the nest with bits of brightly colored plastic , shards of glass , or metal items such as bottle caps . Clutch size is generally two eggs , though this can vary from one to three . The egg is oval and on average measures 7 @.@ 56 cm x 5 @.@ 09 cm (2 @.@ 98 in x 2 @.@ 00 in) . The smooth , gray @-@ green , bluish , or white shell is variably blotched or spotted with lavender or pale brown around the larger end . Both parents incubate the eggs , which hatch after 28 to 41 days . Upon hatching , the young are covered with white down . Both parents feed the nestlings , regurgitating food at the nest site . The young remain in the nest for two months , and after 75 to 80 days they are able to fly skillfully . Predation of black vultures is relatively unlikely , though eggs and nestlings are readily eaten if found by mammalian predators such as raccoons , coatis and foxes . Due to its aggressiveness and size , few predators can threaten the fully @-@ grown vulture . However , various eagles may kill vultures in conflicts and even the ornate hawk @-@ eagle , a slightly smaller bird than the vulture , have preyed on adult black vultures .

= = Relationship with humans = =

The black vulture is considered a threat by cattle ranchers due to its predation on newborn cattle . The droppings produced by black vultures and other vultures can harm or kill trees and other vegetation . The bird is also considered a threat to the safety of aerial traffic , especially when it congregates in large numbers in the vicinity of garbage dumps ? as is the case in the Rio de Janeiro Tom Jobim International Airport .

The black vulture can be held in captivity , though the Migratory Bird Treaty Act only allows this in the case of animals which are injured or unable to return to the wild . It receives special legal protections under the Migratory Bird Treaty Act of 1918 in the United States , by the Convention for the Protection of Migratory Birds in Canada , and by the Convention for the Protection of Migratory Birds and Game Mammals in Mexico . In the United States it is illegal to take , kill , or possess black vultures and violation of the law is punishable by a fine of up to US \$ 15 @,@ 000 and imprisonment of up to six months . It is listed as a species of Least Concern by the IUCN Red List . Populations appear to remain stable , and it has not reached the threshold of inclusion as a threatened species , which requires a decline of more than 30 % in ten years or three generations .

The black vulture appears in a variety of Maya hieroglyphics in Mayan codices . It is normally connected with either death or as a bird of prey . The vulture 's glyph is often shown attacking humans . This species lacks the religious connections that the king vulture has . While some of the glyphs clearly show the black vulture 's open nostril and hooked beak , some are assumed to be this species because they are vulture @-@ like but lack the king vulture 's knob and are painted black .

This vulture has appeared on two stamps : those of Guyana in 1990 and Nicaragua in 1994 .