

Conservation Status Report

Black Vulture

Scientific Name: *Coragyps atratus*

French Name: *Urubu Noir*

Spanish Name: *Zopilote Negro*

Body length: 59-74 cm

Wingspan: 141-160 cm

Mass: 1.6-2.3 kg

Breeding Range (words in italics are defined in the glossary):

Throughout southcentral and southeastern North America, from central Texas, north to southeastern Oklahoma, and northeast through Arkansas, western Tennessee and Kentucky, southwestern Ohio, Virginia, Maryland, southeastern Pennsylvania, and southern New Jersey, and throughout southeastern states. Also breeds throughout Central and South America.

Winter Range: Mostly overlaps breeding range. During periods of unfavorable weather, many individuals move southward out of higher elevations and the northernmost portion of the breeding range.

Type of Migrant: Partial

Nest Type: Does not build a nest. Lays eggs directly on ground in a location under cover of some sort (e.g., caves and hollow logs).

Food Habits: Carrion and some live prey

Primary Flight Mode: Short glides interspersed with rapid, shallow flapping. Also soars on thermals with wings held flat.

ECOLOGY

The Black Vulture is one of the most abundant vulture species in the New World, although it is far less widespread in North America than the Turkey Vulture. This gregarious species is often seen in large groups at communal roost sites and large animal carcasses. Many of the roost sites are occupied year-round, and some are used for many years. Black Vultures are opportunistic feeders that feed on all types of animal carcasses, and have also been observed to kill domestic piglets, lambs, and calves, as well as eggs and young birds, small mammals, hatchling turtles, small fish, vegetable material, and animal dung. The species lacks the keen sense of smell of the Turkey Vulture, and often monitors the behavior of Turkey Vultures in order to locate carcasses.

Unlike most other large raptors in North America, Black Vultures do not build nests. Instead, they lay their eggs directly on the ground in a covered location, such as a cave, crevice in a rocky outcrop, hollow log, hollow stump, brush pile, thicket, or even an abandoned building. Nests have also been found on tall buildings in South America. Black Vultures occur in open and partially forested habitats, often close to human settlements or farms. The species has recently expanded its range northward in the eastern U.S., and is increasingly seen in New England and southern Canada.

The Black Vulture is a *partial migrant*; most individuals are sedentary, but many of those in the northern portions of the breeding range migrate south during autumn. The species also undertakes short-term, local movements when weather becomes unfavorable.

POPULATION STATUS

The North American population of Black Vultures is estimated to be approximately 200,000 individuals, comprising $\leq 1\%$ of the global population (Appendix B, Table 1). Data from *raptor migration counts*, *Breeding Bird Surveys (BBSs)*, and *Christmas Bird Counts (CBCs)* indicate that populations of the Black Vulture have (1) increased in northeastern North America since 1974, coinciding with an expansion of breeding range northward and westward; and (2) increased or remained stable around the Gulf of Mexico.

Eastern North America

Historic analyses. None.

Recent analyses. Raptor migration counts, BBSs, and CBCs indicate that populations of the Black Vulture have increased substantially in parts of northeastern North America since the mid-1970s. *Statistically significant* increases were recorded at Cape May Point, New Jersey from 1976 to 2004 (6.9% per year, $P \leq 0.01$) and Hawk Mountain Sanctuary, Pennsylvania from 1984 to 2004 (8.7% per year, $P \leq 0.01$). Black Vultures also were recorded occasionally at Montclair Hawkwatch, New Jersey and Waggoner's Gap, Pennsylvania during the 1980s, but numbers were insufficient (<20 birds/yr) to calculate annual indexes or trends.

From 1994 to 2004, a statistically significant increase in Black Vulture numbers was recorded at Waggoner's Gap (5.2% per year, $P \leq 0.05$), and counts were consistently above 20 birds per year. During this period, a statistically significant decrease occurred at Cape May Point (-6.7% per year, $P \leq 0.01$) and a non-significant decrease occurred at Hawk Mountain (-4.2% per year) (Fig. 1). Holiday Beach, Ontario and Hawk Ridge Bird Observatory, Minnesota also occasionally recorded migrating Black Vultures, whereas no

sightings were recorded at L'Observatoire d'oiseaux de Tadoussac, Quebec and Lighthouse Point, Connecticut.

Population indexes and fitted trajectories for Black Vultures at these sites suggest that this species first occurred as a migrant in Pennsylvania in the 1980s and numbers have stabilized after a period of rapid increase. Counts at Cape May appear to have decreased since 2000, but it is unknown whether this represents a normal fluctuation, change in migration geography, or population decrease. Continued population change at the 1994–2004 rates would lead to a 50% increase of Black Vulture source populations in approximately 13 years at Waggoner's Gap, and 50% decreases in 10 years at Cape May and 17 years at Hawk Mountain.

BBSs show a statistically significant increase of 2.5% per year ($P \leq 0.05$) in Black Vulture populations in the Atlantic Flyway from 1974 to 2004 (Sauer et al. 2004). This region includes the areas from which the seven raptor migration counts receive migrants.

CBC data (National Audubon Society 2002) for the northeastern United States and eastern Canada (Massachusetts, Maine, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, New Brunswick, Nova Scotia, Ontario, and Quebec) for 1975-2004 suggest a statistically significant increase of 12.8% per year ($P < 0.01$), but this estimate should be interpreted with caution, because the number of counts reporting the species was quite low in most years (1974 was excluded because 0 counts were reported the species). For 1994–2004, Black Vultures were reported on at least 30 counts annually, and the estimated trend was a statistically significant increase of 8.0% per year ($P < 0.01$). The trend in Black Vulture numbers in the CBC for the southeastern

United States (Delaware, Florida, Georgia, Kentucky, Maryland, North Carolina, South Carolina, Tennessee, Virginia, West Virginia) also was significantly positive (3.9 % per year, $P < 0.01$) for 1974–2004 and 1994–2004 (4.7 % per year, $P < 0.01$).

Overall, migration counts, BBSs, and CBCs indicate that Black Vulture populations are increasing in the eastern U.S., and increases in the number of CBC counts reporting the species in the Northeast suggest that its range is expanding northward.

Gulf of Mexico

Recent analyses. Raptor migration counts indicate that Black Vulture populations migrating through coastal Texas have remained stable or possibly increased slightly since 1997. Non-significant increases were recorded at Smith Point, Texas (0.3 % per year) and Corpus Christi, Texas (1.6% per year increase), but P -values for both estimates were high (> 0.50), and confidence intervals were wide and encompassed zero, which gives us very little confidence that the true trends differ from zero. BBSs (8.4% per year, $P \leq 0.01$) and CBCs (3.5% per year $P \leq 0.01$), however, indicate statistically significant increases in numbers of breeding and wintering Black Vultures in Texas during this period.

HISTORIC CONSERVATION CONCERN

Direct persecution in the form of shooting and trapping by rancher and farmers was historically a threat to Black Vultures, but these activities no longer impose high mortality rates. Organochlorine pesticides, such as *DDT*, caused thinning of eggshells between 1947 and 1972 in numerous other species, but the effects on vulture populations are unknown (Kiff et al. 1983).

Previously published accounts of population trends in raptors do not report trends for the Black Vulture (e.g., Bednarz et al 1990, Titus and Fuller 1990, Hussell and Brown 1992) in North America, so little is known about the species' status historically.

CURRENT CONSERVATION CONCERN

Black Vultures benefit from a variety of human activities, including livestock-rearing, fishing, and garbage dumps. Vultures also benefit from high densities of roads and their attendant road-killed wildlife, but roads also lead to vulture mortalities due to collisions with vehicles. Ingestion of lead shot in carcasses has been known to impact other avian scavengers, and probably affects the Black Vulture, but such effects have not been studied for this species (Mossman 1991).

Global and United States populations of the Black Vulture are considered secure (Appendix B, Table 1). In the breeding range monitored by raptor migration counts in northeastern North America, the Black Vulture is considered apparently secure in one of the states (Pennsylvania), and is not ranked in the others (Appendix B, Table 2). In nearby areas, it is listed as imperiled in one (Delaware) and critically imperiled in one (District of Columbia) (Appendix B, Table 2).

SUMMARY

Raptor migration counts, BBSs and CBCs all indicate that populations of Black Vultures have increased in eastern North America over the last several decades. Although migration trends indicate a decrease in the last decade in portions of the Atlantic Coast and Inland sub-regions of eastern North America, the increased recording of the species at more westerly watchsites suggests that it has recently expanded its range westward. Migration monitoring in coastal Texas indicates that the species is probably

stable in southern North America, although breeding and winter surveys indicate strong population increases during this period.

ADDITIONAL READING

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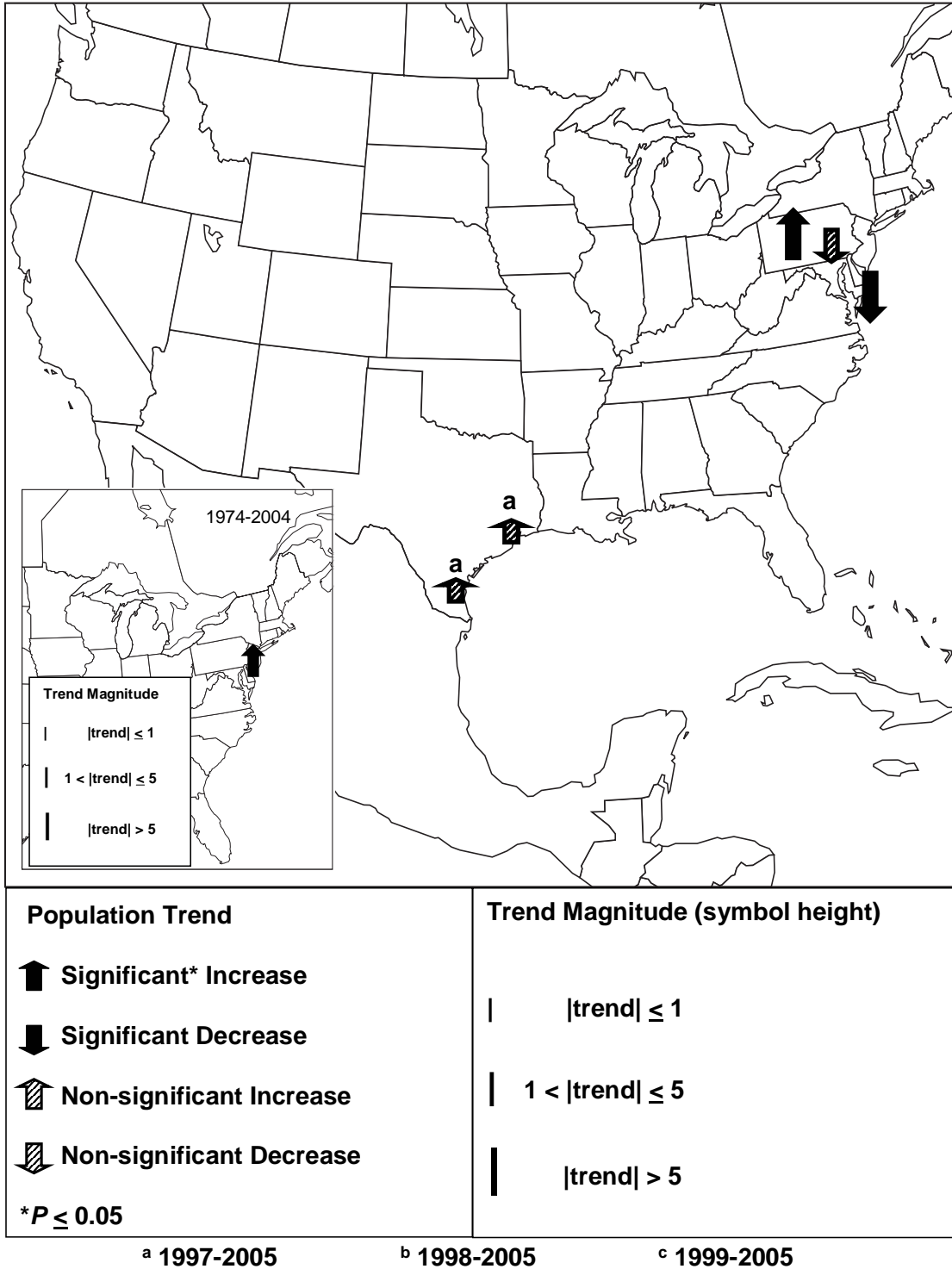


Figure 1. Population trends for Black Vultures at 3 eastern (1994–2004), and 2 Gulf of Mexico (1997–2005) raptor migration counts in North America, and the long-term (1976–2004) trend at Cape May Point, NJ (inset). Trend magnitudes are expressed in percent change per year.