



Airports and Wildlife

What you Need to Know

A Guide for the Public



CONNECTING GLOBALLY

North Central Texas Regional General Aviation and Heliport System Plan

Why is Wildlife a Concern at Airports?

Many people are now familiar with the January 15, 2009, landing of US Airways Flight 1549 in the Hudson River, known to some as the “Miracle on the Hudson.” On departure from New York’s LaGuardia Airport, the airplane struck a flock of Canada geese at about 3,000 feet, sucking birds into both engines. Subsequently, the aircraft lost power in both engines and was forced to land in the Hudson River. While the aircraft was lost, thankfully all passengers and crew survived.

This crash demonstrated the real hazard that wildlife presents to aircraft. While most wildlife strikes are with birds, they could also include mammals and, on rare occasions, reptiles. Texas ranked second behind California in reported wildlife strikes between 1990 and 2010. Of these strikes, 97% were bird-related. The remaining 3% consisted of mammals (e.g. deer, coyotes, and bats).

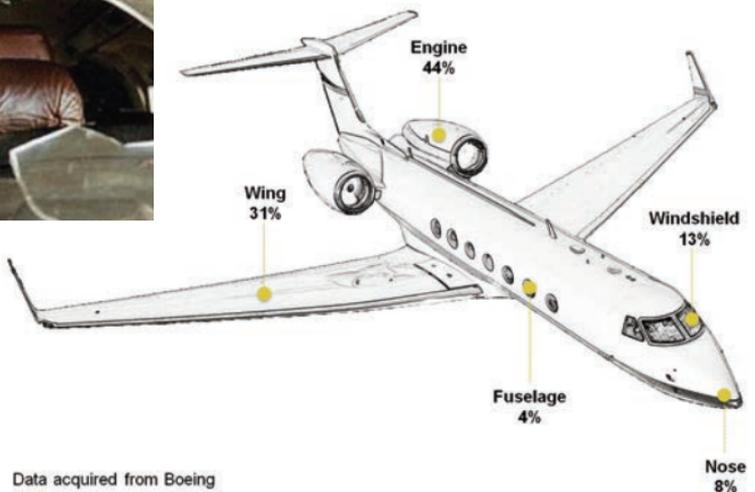
You may wonder: ***“What is my local airport community doing to prevent a wildlife strike?”***

Airport sponsors and managers have a legal responsibility under federal regulations to ensure a safe operating environment. Airport sponsors and managers must assess the risk and magnitude of the wildlife strike problems for their airport.



Photo courtesy FAA

Location of Bird-strike Damage on Aircraft



Data acquired from Boeing

Common Regional Species



Ducks and geese both share an affinity for water, and mitigation techniques for these species are similar. Ducks are typically aquatic feeders, while geese are terrestrial grazers. Waterfowl will often move between feeding areas. North Central Texas is within the migration route of multiple species of waterfowl although many species, such as the mallard duck and Canada goose, remain as year-round inhabitants. Waterfowl are the most damaging bird group to aircraft.

White-tailed deer can be found throughout North Central Texas, although they are more common in rural areas. Leaves, stems and buds provide a year-round staple for deer. In the spring and summer, deer can be found grazing on wildflowers and, when seasonally available, berries and fruits. Deer are often most active during the early morning and evening. Deer are involved in the majority of mammal strikes.

Blackbird is a common term for a variety of bird species in this region that includes red-winged blackbirds, common and great-tailed grackles, and European starlings. These species are commonly found together in flocks and roosting congregations. Blackbirds are very adaptable and can be found in both rural and urban environments. Blackbirds feed on a variety of sources including seeds, fruit and insects.

Resources

ACRP: Guidebook for Addressing Aircraft/Wildlife Hazards at General Aviation Airports <http://pubsindex.trb.org/view/2010/M/920545>

FAA Wildlife Hazard Mitigation Program Fact Sheet
https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=14393

Internet Center for Wildlife Damage Management
www.icwdm.org

Texas Wildlife Services
1-866-4USDAWS

USDA Wildlife Services
www.aphis.usda.gov

Common Regional Species



Gulls feed over land and water, generally for terrestrial invertebrates and small vertebrates, plant remains, carrion and trash. They are highly adaptive in using a wide variety of foods. North Central Texas is within the winter range and migratory path of several species of gulls. Gulls are involved in the majority of bird strikes.

Coyotes are highly adaptable and live in just about any habitat. Their diet ranges from small mammals and rodents to insects, carrion, livestock, poultry, berries, fruit and, where available, trash. In warmer climates, coyotes are most active during the night and early morning hours. When the weather is more favorable, they can be found during the day.

Doves and pigeons are primarily seed and grain eaters; however pigeons will also feed on trash and human handouts. Pigeons are highly adaptable and typically rely on humans to provide food and shelter. Doves and pigeons are primarily year-round residents of North Central Texas.

Federal Regulations & Advisories

Airports must follow federal, state and local laws and ordinances while performing wildlife hazard mitigation including:

- Migratory Bird Treaty Act
- Endangered Species Act
- National Environmental Policy Act (NEPA)
- Clean Water Act (wetlands protection)
- Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)
- US Fish and Wildlife Service Depredation Permit
- Texas Parks and Wildlife Code Chapters 43 & 65
- Federal Aviation Administration Advisory Circulars (AC)

How Do Airports Mitigate Wildlife?

Airports must assess the risk that a wildlife strike may occur. Through conducting an assessment of potential habitats or activities that may attract potentially hazardous wildlife, airports identify problem areas that need modification or elimination. If the problem area cannot be removed, deterrents are used to repel or disperse wildlife. It is the airport's goal to make its property as unattractive as possible to wildlife by removing food, water and shelter. By minimizing the amount of wildlife near an airport, the risk of wildlife colliding with an airplane is greatly reduced.

Texas airports reported 15,231 wildlife strikes to the FAA Strike Database between 1990 and 2015.

Many airports conduct a Wildlife Hazard Assessment, an ecological study that examines the potential for a wildlife strike. These assessments are conducted by a Qualified Airport Wildlife Biologist and usually take between one and two years to complete, based on the size of the airport.

Making an airport less attractive to wildlife is fundamental in controlling wildlife and preventing a strike. If an airport provides easy access to resources, such as food, water and habitat, wildlife will continue to call it home. Appropriate action includes identifying all attractive features on or adjacent to the airport and then making changes to remove the attraction or to deter wildlife access to it.

Wildlife strikes in the US account for hundreds of millions of dollars in damage and losses to aircraft annually.

Habitat modifications and deterrents may require approval from the appropriate FAA regional office, coordination with various state and federal agencies (Texas Parks and Wildlife, US Fish and Wildlife Service, and US Army Corps of Engineers), or the hiring of a trained or permitted professional.

Note to Pilots:

Please report any birdstrikes to the FAA database at:
<https://wildlife.faa.gov/strikenew.aspx>

Prevention and Repellent Techniques

Wildlife can be discouraged by removing food, resting sites and water. Screens for small openings, porcupine wires and other exclusion devices can be used at potential roosting and nesting sites. Wire grids can be placed over water to prevent use.

Reducing agricultural practices around an airport and regular mowing will make the grass less appealing to feeding birds and mammals. Habitats surrounding water features should be mowed to eliminate aquatic and wetland vegetation that may attract waterfowl. Closing trash cans will also deter birds and mammals. The best way to keep mammals from aircraft operations areas is high woven wire fences.

Auditory and visual frightening devices can be effective when used as part of a wildlife habitat mitigation plan. When all mitigation options are exhausted, it may be necessary to remove wildlife, which requires a permit from the US Fish and Wildlife Services and Texas Parks and Wildlife.



Photos courtesy Cathy Boyles, DFW Airport

How Can I Help?

The public can help prevent a wildlife strike. Sometimes, airports are located near parks, restaurants or other high-traffic pedestrian areas where people may enjoy watching planes take off and land. Feeding the ducks and other birds encourages wildlife to congregate in these areas and can attract large flocks of pigeons or gulls. Make sure trash is properly disposed of. If you see large animals on the airport, inform staff. Your help reducing strikes is integral to a successful wildlife management policy.

DO

- Inform airport staff of wildlife
- Cover trash cans
- Pick up trash

DON'T

- Feed the birds near an airport
- Litter
- Abandon pets at the airport



North Central Texas Council of Governments
www.nctcog.org/aviation

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