Florida Airport Wildlife Hazard Resources

Wildlife-aircraft strikes have caused billions of dollars of aircraft damage, downtime, and hundreds of deaths worldwide. To address this important safety concern, the Federal Aviation Administration (FAA) maintains a comprehensive program of policies, guidance, research, and outreach dedicated to mitigating these hazards. **The Florida Department of Transportation Aviation Office (FDOT AO) is dedicated to providing support for Florida airports as they strive to comply with FAA guidance and improve safety at their facilities**. This handout is intended to provide Florida airports with basic information on the FAA wildlife hazard program, as well as links to other valuable guidance and helpful resources.

FAA Regulations and Guidance

The FAA regulations for wildlife hazard are directed toward Part 139 Certificated airports; however, GA airports have been expected to comply with the program through a variety of mechanisms. Sometimes this has been through direction from the Airports District Office (ADO) or perhaps when a "triggering event [1]" occurs at a specific facility. The guidance begins with the directives in 14 CFR 139.337 specific to certificated airports, and is supported by a number of Advisory Circulars and CertAlerts which can all be found on the FAA's website at https://www.faa.gov/airports/airport_safety/wildlife/resources/#FAA

> **As there is no adopted regulatory guidance specific to GA facilities, the regulations for certificated airports are typically applied to GA airports.**

Wildlife-Related Advisory Circulars	
Number	**Title and Link**
70-1	Outdoor Laser Operations https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC70-1.pdf
150/5200-32	Reporting Wildlife Aircraft Strikes https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_150_5200-32B.pdf
150/5200-33	Hazardous Wildlife Attractants On or Near Airports https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_150_5200-33B.pdf
150/5200-34	Construction or Establishment of Landfills near Public Airports https://www.faa.gov/documentLibrary/media/Advisory_Circular/150_5200_34a.pdf
150/5200-36	Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports https://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5200-36B.pdf
150/5200-38	Protocol for the Conduct and Review of Wildlife Hazard Site Visits, Wildlife Hazard Assessments, and Wildlife Hazard Management Plans https://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5200-38.pdf
150/5220-25	Airport Avian Radar Systems https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_150_5220-25.pdf

1 **Triggering Event** is when one of the following occurs: 1) air carrier aircraft experiences multiple wildlife strikes; 2) air carrier aircraft experiences substantial damage from striking wildlife, 3) air carrier aircraft experiences an engine ingestion of wildlife; or 4) wildlife of a size, or in numbers, capable of causing an event is observed to have access to any airport flight pattern or aircraft movement area.

Strike Reporting

Even the most stringent wildlife hazard program cannot completely prevent strikes from occurring. In fact, the FAA and USDA have described strikes as "rare events that occur every day. [2]" While strike reporting is not yet mandatory, it does help the FAA and USDA gain a better understanding of the trends in wildlife strikes across the country. Submitting a wildlife strike report has no negative impact on the airport and demonstrates that airport's dedication to documentation of wildlife hazards. The FAA maintains a national database of strike data that is both searchable and user friendly. Airports can submit strike reports directly through the site (https://wildlife.faa.gov/home) or by hard copy using FAA Form 5200-7. Though strike reporting is voluntary, better data provides a scientific foundation for the development of guidance and programs to mitigate risk. To support the FAA data collection, the USDA and Smithsonian Institution provide additional resources to assist airports in the collection of better data. This USDA instructional video provides guidance on collection of materials (wildlife strike remains) as does the Smithsonian Institution Feather Identification Lab (see "Resources" box at this link).

Methods of Wildlife Control

There are five (5) primary methods of wildlife control, each having their own advantages, limitations, and challenges. The following table details these methods in order of effectiveness.

Methods of Wildlife Control	
Habitat Modification	The most effective means of wildlife control. Involves limiting or eliminating available wildlife habitat on or near the airport.
Exclusion	Physical barriers and structural modifications that prevent wildlife from entering and inhabiting areas on the airport. This could include exclusionary fencing around the airport property itself or installation of anti-perching devices or other barriers to prevent wildlife usage.
Harassment	Harassment includes any activities designed to scare or haze wildlife from the area. This can involve the use of noise (pyrotechnics, horns, or sirens), or visual deterrents (lasers). Harassment typically requires permits (state and/or federal). Please consult FAA CertAlert 13-01 for information regarding FAA assistance with the acquisition of state and federal permits.
Capture / Relocation	With the assistance of a licensed trapper, wildlife (specifically mammals) may be live captured and relocated off-site. The Florida Fish and Wildlife Conservation Commission (FWC) has specific rules regarding handling wildlife that is live captured on airports. The rule is summarized here: https://myfwc.com/media/1275/airportsafetyandwildlife.pdf
Depredation	Depredation is a last resort effort for wildlife control that is only to be implemented when the previously listed efforts have been documented as ineffective. The Take of Wildlife on Airport Property Rule at 68A-9.012, Florida Administrative Code (F.A.C.) identifies how and when wildlife may be taken through depredation at Florida airports. A federal depredation permit is also required. Application is located at https://www.fws.gov/forms/3-200-13.pdf

2 Federal Aviation Administration, "Wildlife Strikes to Civil Aircraft in the United States, 1990 – 2018," July 2019, p. ix.

Other Resources

While the FAA provides the most direct regulatory guidance, there are many other resources and tools available to airports. The Airport Cooperative Research Program (ACRP) has published a number of reports that are free to the public and available for review and download.

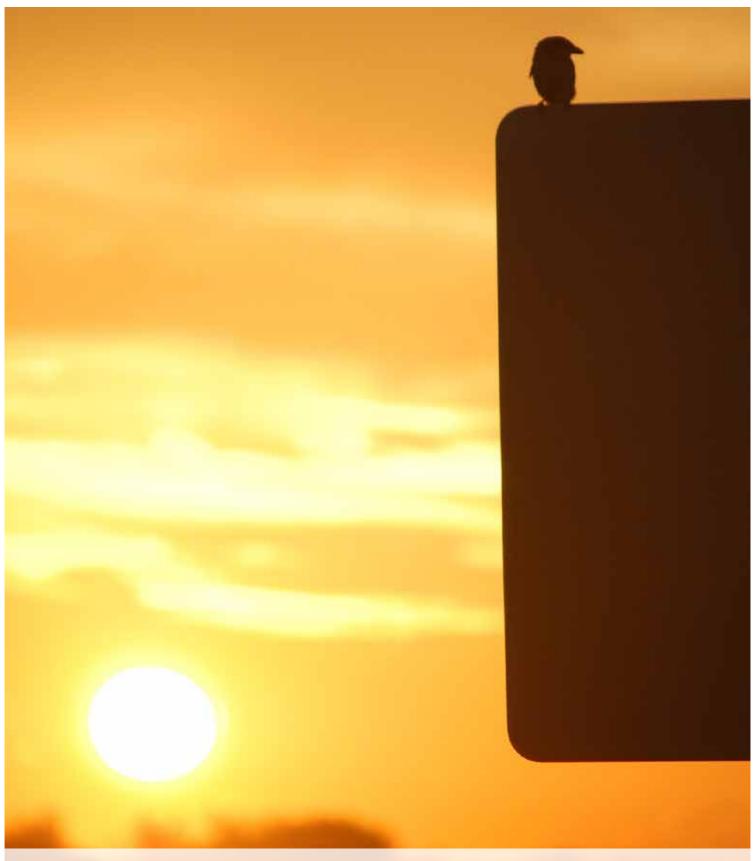| ACRP Publications and Web Links |
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| ACRP Report 32: Guidebook for Addressing Aircraft/Wildlife Hazards at General Aviation Airports
http://www.trb.org/main/blurbs/163690.aspx |
| ACRP Report 122: Innovative Airport Responses to Threatened and Endangered Species
http://www.trb.org/Publications/Blurbs/171975.aspx |
| ACRP Report 125: Balancing Airport Stormwater and Bird Hazard Management
http://www.trb.org/Publications/Blurbs/172035.aspx |
| ACRP Report 145: Applying an SMS Approach to Wildlife Hazard Management
http://www.trb.org/main/blurbs/173318.aspx |
| Synthesis 23: Bird Harassment, Repellent, and Deterrent Techniques for Use on Airports
http://www.trb.org/main/blurbs/165829.aspx |
| Synthesis 39: Airport Wildlife Population Management
http://www.trb.org/main/blurbs/168836.aspx |
| Synthesis 52: Habitat Management to Deter Wildlife at Airports
http://www.trb.org/main/blurbs/170766.aspx |
| Legal Research Digest 20: Airport Responsibility for Wildlife Management
http://www.trb.org/main/blurbs/169414.aspx |