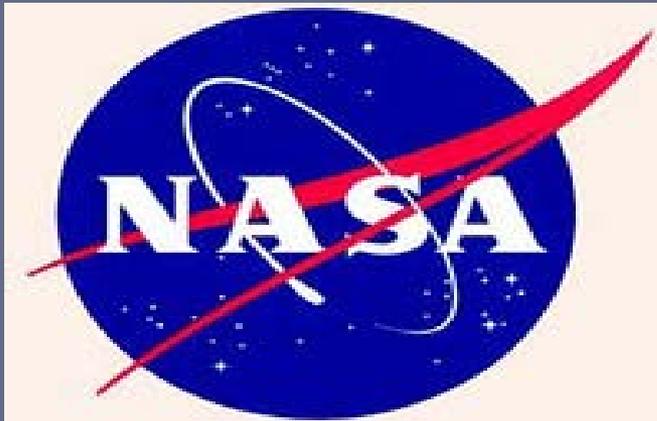


Wildlife Management at Wallops Flight Facility (WFF)



USDA – APHIS – WILDLIFE SERVICES



WS Wildlife
Services

Protecting People | Protecting Agriculture | Protecting Wildlife

Wildlife Services (WS)



The WS program in Virginia helps residents, industries, organizations and governments resolve conflicts with wildlife that affect agriculture, human health and safety, other natural resources, public infrastructure, and private property.

Biologists are trained to manage wildlife conflicts with effective, selective, and humane strategies that value the integrity of the wildlife resource and the resources protected.

NASA & Wildlife Services



Entered into an inter-agency agreement in 1999 for the protection of human health and safety and aviation safety. A Wildlife Hazard Assessment (WHA) was begun in 2000 to document birds and mammals inhabiting the airfield and surrounding area. Required by NASA under NPR 7900.3C WHA also evaluated wildlife strike potential with aircraft and provided recommendations to mitigate the presence of hazardous wildlife for the protection of aviation safety. Since the initial WHA completion in 2001, a monitoring report is completed yearly providing updated information for the WHA.

Protecting Aviation Safety – Why is this important?!



Nationally, between 1990 – 2009, 99,411 wildlife strikes with aircraft have been reported.*

- These strikes have resulted in:
 - ✦ 424,936 hours of aircraft downtime
 - ✦ \$374.9 million in monetary losses
 - ✦ 55 aircraft destroyed or deemed damaged beyond repair
 - ✦ Human fatalities and injuries



* Wildlife Strikes to Civil Aircraft in the United States 1990 -2009

Protecting Aviation Safety



14% of bird strikes and 61% of mammal strikes with aircraft have resulted in damage to the aircraft.*

72% of all reported strikes occur between ground level and 500 feet.*

Actions to reduce the risks of wildlife strikes have been implemented by the FAA, USDA, and by airports throughout the country

○ Visit: <http://wildlife.faa.gov> for more information on wildlife strikes

Protecting Aviation Safety - Reducing the Risk at WFF



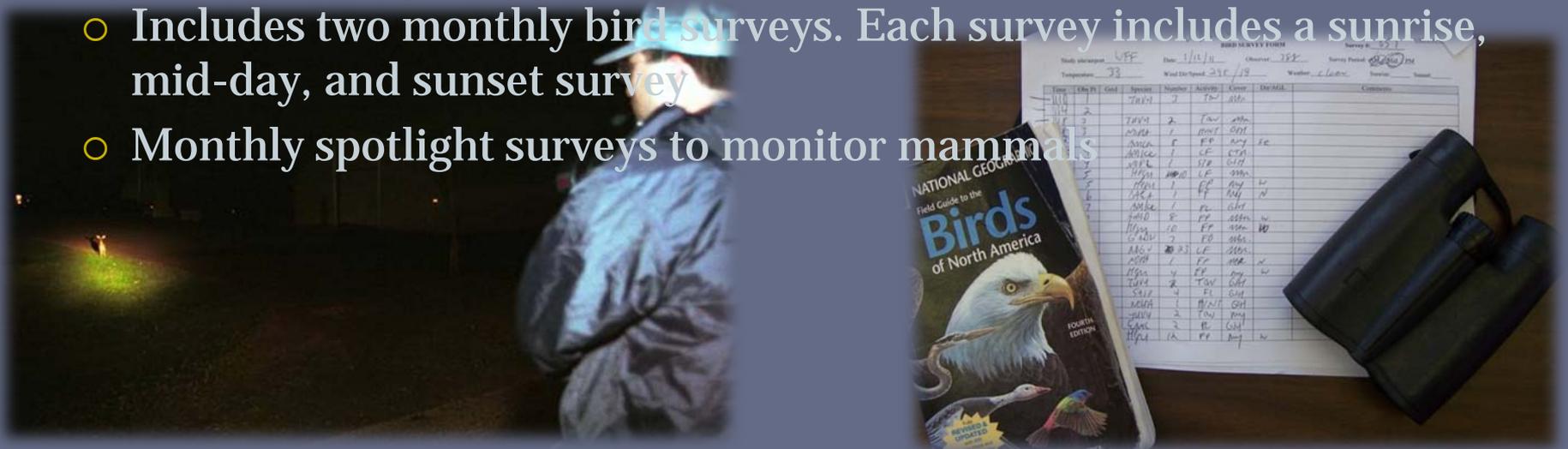
Wildlife Services:

Maintains a Wildlife Hazard Management Plan

- This defines management activities and responsibilities of personnel involved

Updates the Wildlife Hazard Assessment

- Completed yearly
- Includes two monthly bird surveys. Each survey includes a sunrise, mid-day, and sunset survey
- Monthly spotlight surveys to monitor mammals



Protecting Aviation Safety - Reducing the Risk at WFF



Habitat Management – remove food, water and cover

- Goal is to make the airfield and surrounding areas as least attractive to wildlife as possible!



Protecting Aviation Safety - Reducing the Risk at WFF



Active harassment and dispersal during flight operations

- Propane cannons, pyrotechnics, vehicles, sirens/horns, etc.
- Lethal removal, when necessary, to reinforce harassment



Protecting Aviation Safety - Reducing the Risk at WFF



Zero tolerance for white-tailed deer on the airfield

- 84% of strikes with white-tailed deer cause damage

Best way to keep deer out is through exclusion; WFF's perimeter is completely fenced.



Protecting Aviation Safety - Reducing the Risk at WFF



Mammal damage management

- Raccoon, Red Fox, Opossum, and Feral Cat

Reduce mammalian strike risk

Reduce damage to airfield infrastructure caused by mammals denning and digging.

Added benefit of reducing possible contact with facility employees and potential disease transmission.



Protecting Aviation Safety - Reducing the Risk at WFF



Reporting wildlife strikes with aircraft:

- Identify species that threaten aviation safety
- Prioritize management plans
- Provide an understanding of species behavior to prevent future strikes
- Identify trends of threatening wildlife that use the airport environment



Form Approved OMB NO. 3125-0018

BIRD/OTHER WILDLIFE STRIKE REPORT

U.S. Department of Transportation
Federal Aviation Administration

1. Name of Operator		2. Aircraft Make/Model		3. Engine Make/Model			
4. Aircraft Registration		5. Date of Incident		6. Local Time of Incident			
7. Pilot Name		8. Pilot License No.		9. Pilot License Expiration Date			
10. Height (AGL)		11. Speed (KAS)					
12. Phase of Flight		13. Part(s) of Aircraft Struck or Damaged					
<input type="checkbox"/> A. Parked <input type="checkbox"/> B. Taxi <input type="checkbox"/> C. Take-off Run <input type="checkbox"/> D. Climb <input type="checkbox"/> E. En Route <input type="checkbox"/> F. Descent <input type="checkbox"/> G. Approach <input type="checkbox"/> H. Landing		Struck (Damaged) A. Radome <input type="checkbox"/> <input type="checkbox"/> B. Windshield <input type="checkbox"/> <input type="checkbox"/> C. Nose <input type="checkbox"/> <input type="checkbox"/> D. Engine No. 1 <input type="checkbox"/> <input type="checkbox"/> E. Engine No. 2 <input type="checkbox"/> <input type="checkbox"/> F. Engine No. 3 <input type="checkbox"/> <input type="checkbox"/> G. Propeller <input type="checkbox"/> <input type="checkbox"/> H. Other: <input type="checkbox"/> <input type="checkbox"/>		Struck (Damaged) H. Propeller <input type="checkbox"/> <input type="checkbox"/> I. Wing/Rotor <input type="checkbox"/> <input type="checkbox"/> J. Fuselage <input type="checkbox"/> <input type="checkbox"/> K. Landing Gear <input type="checkbox"/> <input type="checkbox"/> L. Tail <input type="checkbox"/> <input type="checkbox"/> M. Lights <input type="checkbox"/> <input type="checkbox"/> N. Other: <input type="checkbox"/> <input type="checkbox"/>			
14. Effect on Flight		15. Sky Condition		16. Precipitation			
<input type="checkbox"/> None <input type="checkbox"/> Aborted Take-Off <input type="checkbox"/> Precautionary Landing <input type="checkbox"/> Engines Shut Down <input type="checkbox"/> Other: (Specify)		<input type="checkbox"/> No Cloud <input type="checkbox"/> Some Cloud <input type="checkbox"/> Overcast		<input type="checkbox"/> Fog <input type="checkbox"/> Rain <input type="checkbox"/> Snow <input type="checkbox"/> None			
17. Bird/Other Wildlife Species		18. Number of birds seen and/or struck		19. Size of Bird(s)			
		Number of birds: Seen Struck 1 <input type="checkbox"/> <input type="checkbox"/> 2-10 <input type="checkbox"/> <input type="checkbox"/> 11-100 <input type="checkbox"/> <input type="checkbox"/> more than 100 <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> Small <input type="checkbox"/> Medium <input type="checkbox"/> Large			
20. Pilot Warned of Birds <input type="checkbox"/> Yes <input type="checkbox"/> No							
21. Remarks (Describe damage, injuries and other pertinent information)							
DAMAGE / COST INFORMATION							
22. Aircraft time out of service: _____ hours		23. Estimated cost of repairs or replacement (U.S. \$): _____ \$		24. Estimated other cost (U.S. \$) (e.g. loss of revenue, fuel, etc.): _____ \$			
Reported by: (Optional)		Title		Date			
<p>Operator Reduction Act Statement: The information collected on this form is necessary to allow the Federal Aviation Administration to assess the magnitude and severity of the wildlife-aircraft strike problem in the U.S. The information is used in determining the best management practices for reducing the hazard to aviation safety caused by wildlife-aircraft strikes. We estimate that it will take approximately 15 minutes to complete this form. If you wish to make any comments concerning the accuracy of this burden estimate and any suggestions for reducing this burden, send those comments to the Federal Aviation Administration, Management Staff, AFB-10, 800 Independence Avenue, SW, Washington, DC 20591. The information collected is voluntary. Please note that an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control number associated with this collection is 3125-0018.</p>							
FAA Form 8200-7 (3-7) Supplement Previous Edition. © U.S. GPO: 1997-1-118-081/5-0203 N501002-00-001-9020							

Protecting Aviation Safety - Reducing the Risk at WFF



WS maintains appropriate federal and state control permits for wildlife damage.



Protecting Threatened and Endangered Shorebirds



Predator management is conducted to protect sensitive shorebird nesting areas along Wallops Island beach. Nesting shorebirds of interest are: American Oystercatcher, Piping Plover (federal & state threatened), and Wilson's Plover (state endangered).



Protecting Threatened and Endangered Shorebirds



Predator management also benefits several sea turtle species and terrapins known to nest on Wallops Island beach.

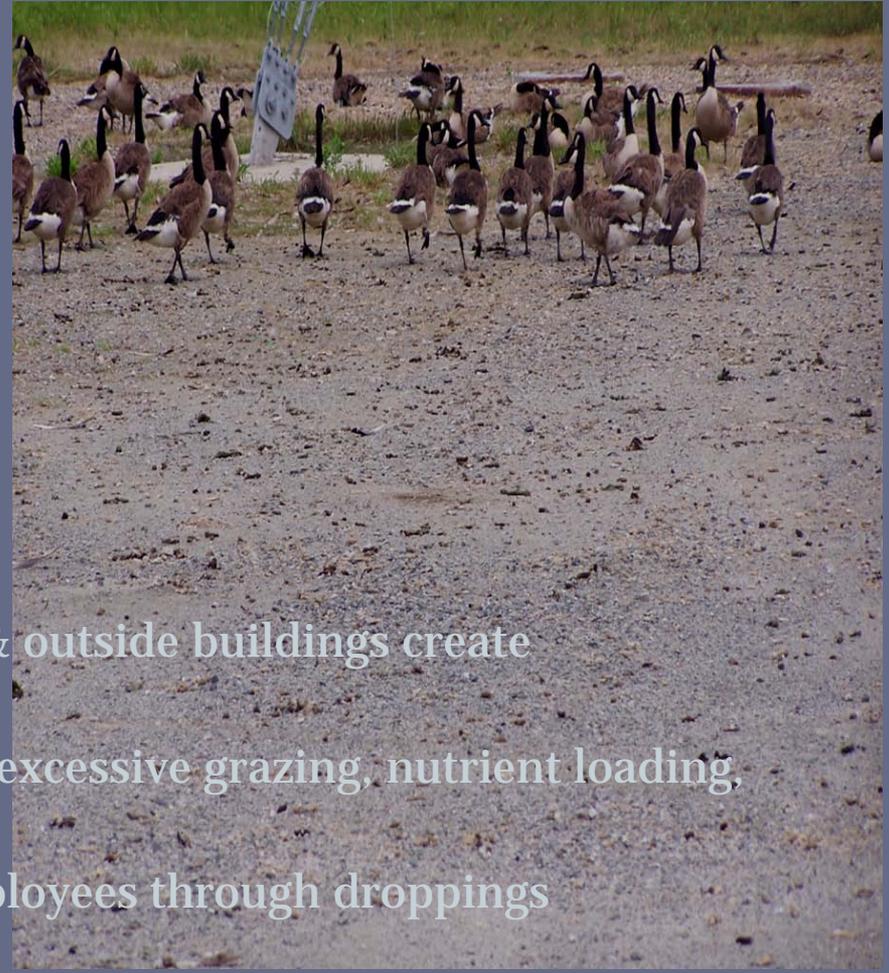


Resident Canada Goose Management on Wallops Island

Goal: maintain a population of resident Canada geese and the damage they create to an acceptable level.

Reasoning:

- Aviation safety
- Excessive droppings on launch pads & outside buildings create unsanitary working conditions
- Damage to island ecosystem through excessive grazing, nutrient loading, & trampling
- Potential disease transmission to employees through droppings
- Increasing population numbers



White-tailed Deer Management on Wallops Island



Goal: develop a long-term management program to maintain the population at an acceptable level.

Reasoning:

- Hunting not allowed on Wallops Island Facility since 2001 leading to an increase in population numbers
- Damage to island ecosystem through excessive grazing
- Concerns of disease transmission from ticks /parasites carried by deer
- Increased deer/vehicle collisions
- Help maintain a healthy herd by removing sick and/or wounded deer



Assisting with General Wildlife Damage



WS also assists base wide with calls about wildlife damage: everything from raccoons and starlings to snakes, squirrels, and just about anything else that wiggles, crawls, or flies.



European starling nest

Further Information



Contact:

NASA/GSFC/Wallops Flight Facility
USDA-APHIS- Wildlife Services
Building A-1, Room 301
Wallops Island, VA 23337
(757) 824-1254 or -1306

Or contact the WS VA State Office at:
PO Box 130 Moseley, VA 23120
(804) 739-7739

http://www.aphis.usda.gov/wildlife_damage