

Airport Wildlife Hazard Management -The Basics-

Presented at: **CAR/SAM Regional
Bird/Wildlife Hazard Prevention
Workshop**

By: **Amy Anderson**

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**Federal Aviation
Administration**



Why is this important???



Wildlife Management: Passive

➤ Passive Management

- Grass/Turf Management
- Drainage
- Trees and Brush
- Facilities and Structures
- Airport Landscaping
- Waste Management
- Wildlife Hazard Working Group



Wildlife Management: Passive

➤ Grass/Turf Management

- FAA Guidelines: 6-12 inches
 - Perhaps the single MOST EFFECTIVE deterrent!!!
 - Grass is INDIGESTIBLE to majority of wildlife... they are eating seeds, weeds, insects, & mammals... NOT GRASS!
- #1 MOST IMPORTANT thing you can do!!



Wildlife Management: Passive

➤ Benefits of intermediate grass height:

1. Disrupts visual inter-flock communication
2. Obscures insect food sources
3. Limits predator detection
4. Impedes ease of movement
5. Out-competes weedy vegetation (edible)
6. Taller grass has slower growth rate
7. Less frequent mowing (saves \$\$\$)



➤ Often ignored for aesthetics



Wildlife Management: Passive



Wildlife Management: Passive

➤ Bare Areas

- Erosion
- Poor soils
- Old operating surfaces
- Access routes
- Mower ruts



➤ Highly attractive:

- Great visibility (gulls)
- Provides nesting habitat (killdeer)
- Food: weeds & grit (pigeons)

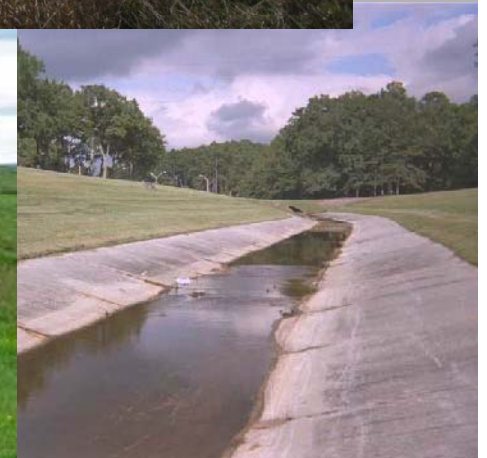


Wildlife Management: Passive

➤ Drainage

Ditches/Ponds

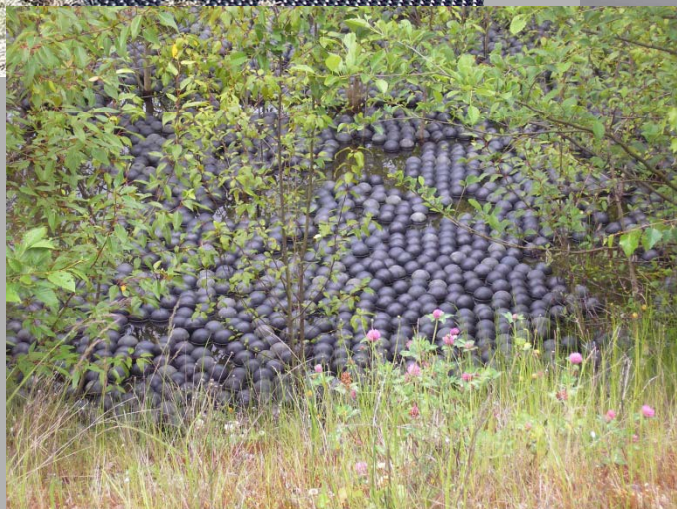
- Must maintain flow
- Clear vegetation
- Concrete linings when possible
- Maintain culverts
- Steep side slopes



Wildlife Management: Passive



Wildlife Management: Passive



Wildlife Management: Passive

➤ Trees & Brush

- Eliminate on AOA
- Perch sites
- Shelter for large mammals
- Add buffer zone around fences
- Eliminate brush under trees



Wildlife Management: Passive

➤ Facilities & Structures

- Airport buildings & hangars
- Signage & Lights
- Good places to use exclusion techniques
 - Netting
 - Closing doors
 - Anti-perching devices
 - Tubular beams



Wildlife Management: Passive



Wildlife Management: Passive

➤ Airport Landscaping

- Ornamental trees
 - Eliminate food sources
 - Eliminate roost sites
 - Eliminate nesting sites
- Water features



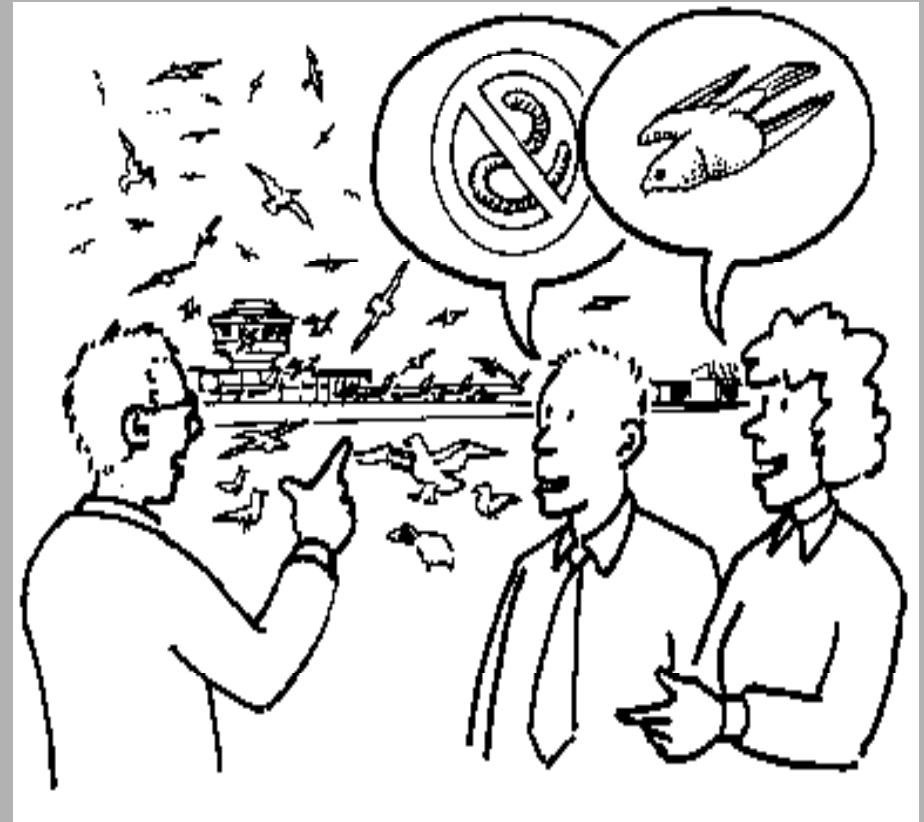
Wildlife Management: Passive

- Waste Management
 - Close dumpsters/containers
 - Public awareness
 - Talk to your neighbors



Wildlife Management: Passive

- Wildlife Hazards Working Groups
 - For many airports, the establishment of a Wildlife Hazards Working Group (WHWG) will greatly facilitate necessary communication, cooperation, and coordination



Wildlife Management: Active

- Dispersing/repelling wildlife
- Trap & translocation of wildlife
- Lethal control



Wildlife Management: Active

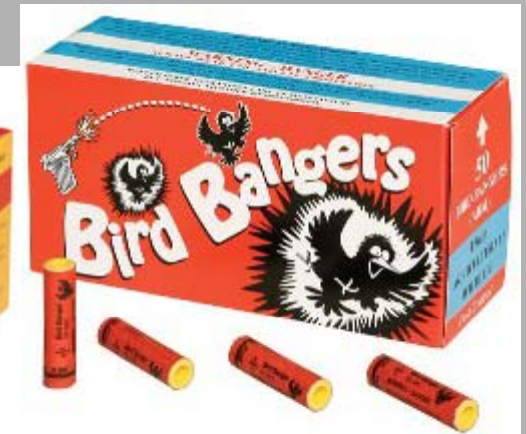
- Dispersing/repelling wildlife
 - Chemical repellents

 **Avipel**
**BIRD REPELLENT
SEED TREATMENT**



Wildlife Management: Active

➤ Auditory Repellents



Wildlife Management: Active

➤ Visual Repellents



Wildlife Management: Active

➤ Problem?!? HABITUATION!!



Wildlife Management: Active

➤ Trap & Translocation of Wildlife

- Live trapping benefits:
 - Gives the public “warm fuzzies”
 - Sometimes it’s the law (Gopher Tortoises)



Wildlife Management: Active

➤ Lethal Control

- Shooting
- Trapping
- Poisoning

BE PREPARED

FOR BAD

PRESS!

Sacramento International Airport officials flock to support bird-killing bill - Sacramento ... Page 1 of 2

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Sacramento Business Journal - April 6, 2009
[Sacramento/stories/2009/04/06/story9.html](#)

SACRAMENTO BUSINESS JOURNAL
Friday, April 3, 2009

Sacramento International Airport officials flock to support bird-killing bill

In 2007, Sacramento International had most bird strikes in West
Sacramento Business Journal - by [Melanie Turner](#), Staff writer

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Aviation Administration
Senate Bill 481, introduced Feb. 26 by Cox, aims to enable airports with Federal certification to keep killing or removing wildlife in the name of public safety without violating state law.

Birds pose the greatest potential wildlife hazard to aircraft. When US Airways Flight 1549 landed in the Hudson River on Jan. 15, it was a vivid example of the dangers that birds pose to passenger jets. The Airbus A320 struck a flock of Canada geese, disabling both engines.

Cox said he was contacted by the **Sacramento County Airport System** about two weeks earlier.

"The state of California, frankly, was threatening to arrest anyone who violated the state requirement, even though it was allowed under the federal depredation permit," he said. "Hopefully my colleagues will recognize that bird strikes are a serious issue."

Sacramento International sits in a major north-south route of travel for migratory birds known as the Pacific Flyway. The airport also is within the Sacramento River riparian corridor.

The airport had the highest number of bird strikes in the FAA's Western-Pacific region, and the sixth-highest in the nation, in 2007, the most recent year for which data was available. The region includes California, Arizona, Nevada, Hawaii and the Pacific Territories.

More than 1,300 bird strikes were recorded at Sacramento International between 1990 and 2007. Since 1990, the cost of repairs to aircraft damaged by wildlife at the airport has exceeded \$1.6 million, according to airport records. No crashes or injuries have occurred there as a result of a bird strike.

Under the airport's Wildlife Hazard Management Plan, non-lethal methods are used first to keep wildlife at bay. For example, the airport only plants trees with mostly vertical branches to discourage birds from hanging around. Grasses are mowed, and harassment techniques, such as canon, motorcycle and gunshot sounds, are deployed.

"Having a safe airport is our No. 1 priority," airport spokeswoman Gina Swankie said.

FAA-certified airports are responsible for managing wildlife hazards and can, as a last resort, kill problem birds when harassment and other attempts to scare them off airport runways don't work.


The removal of migratory birds and other wildlife -- by trapping or shooting them -- is governed by the terms of federal permits issued annually by the U.S. Fish and Wildlife Service. Sacramento's current permit expires in September.

Sacramento officials began pushing for legislation to exempt federally certified airports from prosecution under the state Fish and Game code when it came to their attention in July 2007 that the code did not allow airports to implement last-resort wildlife control methods prescribed by the FAA.

Sacramento airport officials were temporarily forced to stop killing birds after a neighbor called the Cal-TIP line to report poaching, and Fish and Game told airport officials they were violating state codes.

Swankie said U.S. Department of Agriculture-contracted biologists, who are part of the airport wildlife team, will still kill birds, however, if they must.

<http://www.bizjournals.com/sacramento/stories/2009/04/06/story9.html?printable> 8/21/2009



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Wildlife Management: Active

➤ Shooting

- Trained personnel
- Appropriate gun & ammo
- Have necessary permits
- Notify local law enforcement when necessary



Wildlife Management: Active

➤ Trapping



Wildlife Management: Active

➤ Poisoning

- Very limited use at airports
- Toxicants registered for birds (starlings, blackbirds, pigeons, & gulls)
 - DRC-1339/Starlicide – Only oral toxicant for birds registered by EPA
 - Best to control pigeons/starlings around airport buildings



Wildlife Management: Active

➤ Poisoning

- Acute toxicant for rodents (die immediately)
 - Zinc phosphide
 - Expensive!
- Anticoagulant (chronic poison) bait stations
- Asphyxiation in burrow (CO cartridge)



Wildlife Management: Active

➤ Destroying Nest & Eggs

- Eggs can be oiled or pricked and left in nest
- Eggs can be removed
- Nests can be removed (before eggs are laid is best!)



Wildlife Management

- Successful airport wildlife management must integrate management techniques:
 - Habitat modification/exclusion
 - Repelling and harassment
 - Wildlife removal
 - Trap & translocation
 - Lethal control



Wildlife Management

- The importance of accurate monitoring and record keeping cannot be overemphasized!!!
 - Key to program evaluation
 - Allows for assessment of effectiveness
 - Provides justification for management actions e.g. lethal removal of wildlife
 - Used in litigation if necessary



Wildlife Management

- Landfills
- Golf courses
- Industrial parks
- Residential areas
- Nature preserves/parks
- Cemeteries
- Wetlands/retention ponds
- Agriculture/livestock



QUESTIONS?

