





Presentation Outline

- 1. Introduction
- 2. Pest Bird Species
- 3. Integrated Pest Management
- 4. Bird Biology and Reproductive Physiology
- 5. Mitigation Techniques
- 6. Contraception for Birds
- 7. Questions





Common Pest Birds



- House sparrows
- o Crows*
- Starlings
- o Geese*
- Muscovy ducks
- Pigeons
- o Gulls*











^{*} Protected by MBTA



Integrated Pest Management "IPM" for Pests*

- Set Action Thresholds
- Monitor and Identify Pests
- ✓ Prevention
- ✓ Control

^{*}www.epa.gov/pesticides/factsheets/ipm.htm



IPM - EPA Definition

"Integrated Pest Management ("IPM") is an effective and environmentally sensitive approach to pest management that relies on a combination of commonsense practices....in combination with available pest control methods, to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment."



Bird DamagePoop and disease vectors









Resident Canada Geese

Low cut grass + a body of water = fast food for a goose



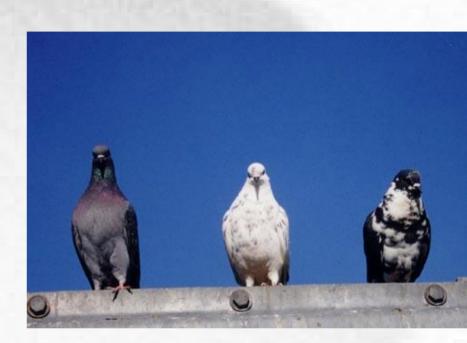


Evidence of a Significant Resident Canada Goose Problem at US Airports



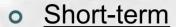
Pigeon Biology

- ✓ Clutch: 1 to 3 eggs
- ✓ Breeding season: Year round
- ✓ <u>Diet</u>: Seeds, Fruits, Pizza
- ✓ Feeding: Flocks
- ✓ Territories: Soft boundaries
- ✓ Sex: Look identical
- ✓ Juveniles: Look like adults
- ✓ Life expectancy: 2-4 years in urban areas

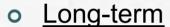




Pigeon Mitigation Techniques



- <u>Ineffective</u>
- Effective
 - Removal trap, shoot, poison
 - Harassment, effigies, noise
 - Repellents goo



- Ineffective
 - Most visual, sound or tactile devices or harassment
 - Trap, shoot, poison
- Effective
 - Habitat modification
 - Nets, spikes, electrical strips
 - Contraception

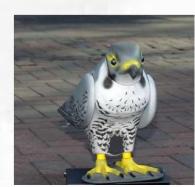


















OvoControl® P

- Nicarbazin approved by <u>FDA</u> for use in chickens
- OvoControl approved by <u>EPA</u> for resident geese, ducks and pigeons
- Restricted use pesticide
- ✓ Bite size, extruded kibbles



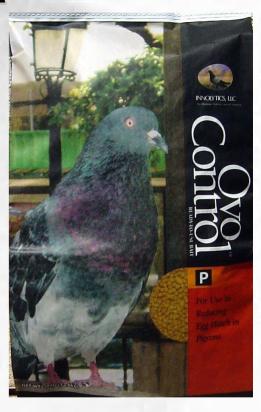


OvoControl Program

- Use automatic feeder
- Establish baiting site(s) pre-bait birds
- Feed on rooftops or other flat surface
- Evaluate bait acceptance
- Condition birds to the daily feeding routine















Field Efficacy of OvoControl

- OvoControl will interfere with ~95% of eggs if bird consumes the bait¹
- Field data shows 53% population reduction within 12 months^{2, 3}
- Field data shows 88% reduction over 28 months³
- ¹ Barbato, 2006
- ² Freedom Co, Spl., Rimini, Italy, 2006
- ³ San Diego field study, 2010





Population Attrition of Pigeons With Contraception





Representative Sites and Users

- City of Santa Monica, CA Pier
- Hollywood, CA ACA
- Walla Walla, WA BID
- University of Arizona, Tucson (new)
- San Diego, Linda Vista MAD
- St. Paul, MN Downtown
- Florence, SC Medical Center
- San Francisco, DPW Downtown (pending)
- Pala Hotel and Casino, Pala, CA



Costs

- ✓ Cost of bait = \$6.25/lb
- ✓ 1lb of bait = 80 birds
- ✓ Average site with 160 birds = \$12.50/day
- ✓ Feeder = \$153/unit



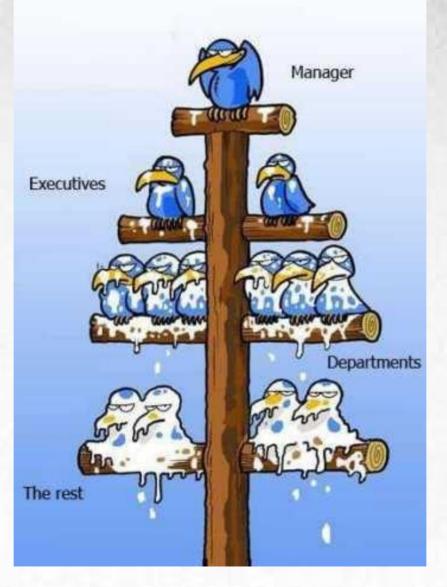


Further Reading & Education

- http://www.humanesociety.org/animal s/pigeons/tips/solving_problems_pige ons.html
- www.epa.gov/pesticides/factsheets/ip m.htm
- o www.ipminstitute.org/
- o www.ovocontrol.com



Academic Hierarchy



Chancellor

Dean

Administrators

Professors

Students



?? Questions ??

www.OvoControl.com

