



# The Role of Contraception in Integrated Pigeon Management ("IPM")



***"Planned  
Pigeon-hood"***



# ***Pigeon Biology***

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



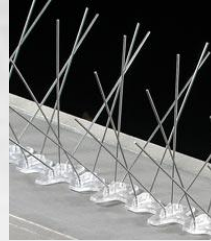


# Pigeon Mitigation Techniques

- **Short-term**

- **Effective**

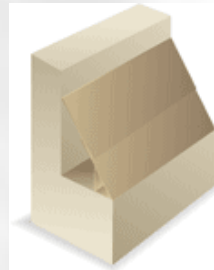
- Removal – trap, shoot, poison
    - Harassment, effigies, noise
    - Repellents – goo



- **Long-term**

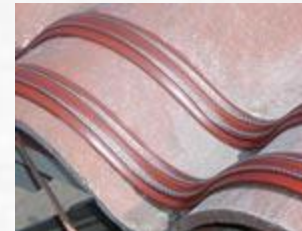
- **Ineffective**

- Most visual, sound or tactile devices or harassment
    - Removal - trap, shoot, poison



- **Effective**

- Habitat modification
    - Nets, spikes, electrical strips
    - Contraception





# OvoControl<sup>®</sup> P

*(Brand of nicarbazin)*

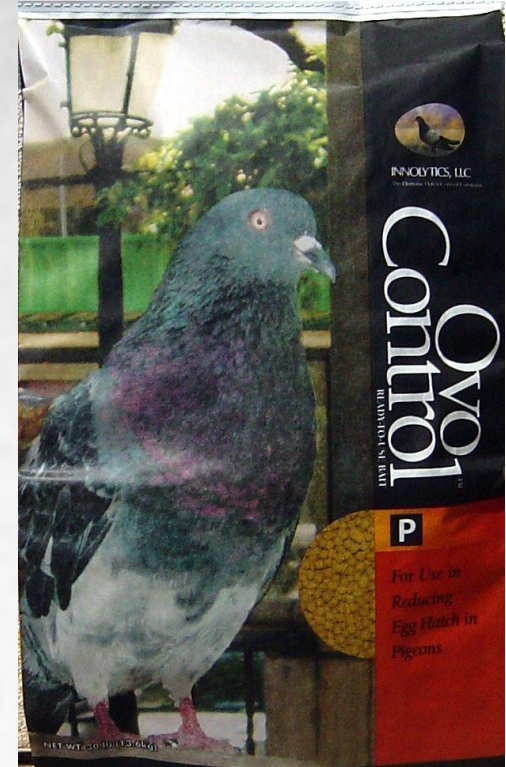
- ✓ Nicarbazin registered by FDA for use in chickens
- ✓ OvoControl registered by EPA for resident geese, ducks and pigeons
- ✓ Bite size, extruded kibbles





# 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



# Non-Target Species



- Birds
  - Same effect in all birds
  - No secondary effect in raptors
- All other – No Effects
  - Mammals, dogs
  - Children
  - Amphibians
  - Reptiles
  - Fish
  - Insects
  - Worms
  - Plants



# Field Efficacy of OvoControl

- OvoControl will interfere with ~95% of eggs if bird consumes the bait<sup>1</sup>
- Field data shows 53% population reduction within 12 months<sup>2, 3</sup>
- Field data shows 88% reduction over 28 months<sup>3</sup>

<sup>1</sup> Barbato, 2006

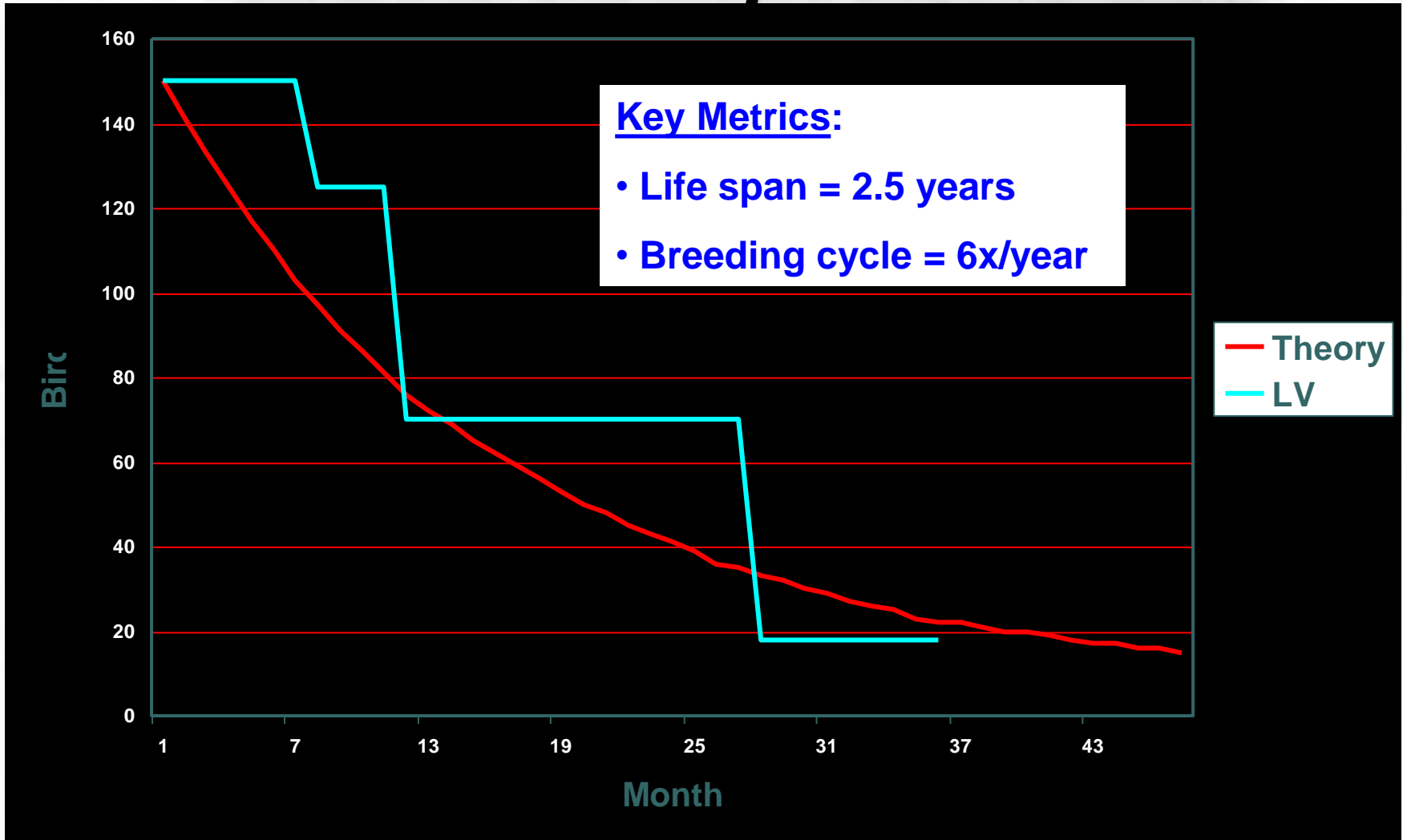
<sup>2</sup> Freedom Co, Spl., Rimini, Italy, 2006

<sup>3</sup> San Diego field study, 2010





# Population Attrition of Pigeons With Contraception





# ***Representative Sites and Users***

- City of Santa Monica, CA – Pier
- Paper manufacturing plant - ID
- Hollywood, CA – ACA
- Walla Walla, WA – Business Improvement District
- Power Utility - AZ
- Las Vegas, Parks & Recreation
- San Diego – Maintenance Assessment District
- St. Paul, MN – Downtown
- Oil refinery – Bay area
- San Francisco, DPW – Downtown
- Laughlin, NV – Casino/Hotel



# Costs

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

