



# Braddock Bay Raptor Research Bird of Prey Days

## Man-made Threats to Raptors

Bob Williams  
April 26, 2025





# Overview



- Electric Shock
- Landfill Flare
- Fishing Equipment
- Lead
- Shooting
- Windows/Glass
- Vehicle Collisions
- Rodenticide



This bald eagle is one of the 47 birds of prey that received electrical shocks from power lines and were brought to the O.W.L. Orphaned Wildlife Rehabilitation Society in Delta. (O.W.L. rescue centre)

# Electric Shock

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## Affects: Larger Birds of Prey

- Power Line Separation
  - › Wing-to-wing
  - › Wing-to-foot
- Nest on Transformers
- Necrosis
- Reference
  - › [B.C. raptor rehab treats birds of prey shocked by power lines | CBC News](#)
  - › [Bald Eagle Survives Electric Shock | Enoch Wildlife Rescue](#)
  - › [Swainson's Hawk shock victim | Santa Fe Raptor Center](#)





# Electric Shock

## Mitigation Measures

- Structure and Pylon Configuration
- Distances Between Components
  - › Wire-to-wire
  - › Energized Conductor to Grounded Hardware
- Insulators
- Diverters (Reflectors)
- Reference
  - › [Guidance for Preventing Electrocution Impacts on Birds | International Association for Falconry and Conservation of Birds of Prey](#)
  - › [Bird Diverters | P&R Tech](#)





# Landfill Flare

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# Landfill Flare

THREATS TO RAPTORS



## Treatment

- Natural Molt
- Feather Implants
- Mitigation
  - › Anti-Perching Devices
  - › Enclosed Burners
  - › Vent Covers
- Reference
  - › [Impacted Red-tailed Hawk | Tri-State Bird Rescue & Research](#)
  - › [Impacted Red-tailed Hawk | Blackland Prairie Raptor Center](#)
  - › [Feather Implanting Process | Toronto Wildlife Centre](#)
  - › [Threats to Birds: Gas Flares | U.S. Fish & Wildlife Service](#)
  - › [Methane Burner Impacts on Raptors | EDM International](#)







# Fishing Equipment

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# Fishing Equipment

## Discarded Fishing Line

- Use as Nesting Material
- Secondary Entanglement
  - › Resistance Injury
- Reference
  - › [Impacted Barn Owl | Badger Run Wildlife Rehab](#)
  - › [Impacted Eastern Screech Owl | Woodlands Wildlife Sanctuary](#)
  - › [Entanglement | OWL Rehabilitation Society](#)

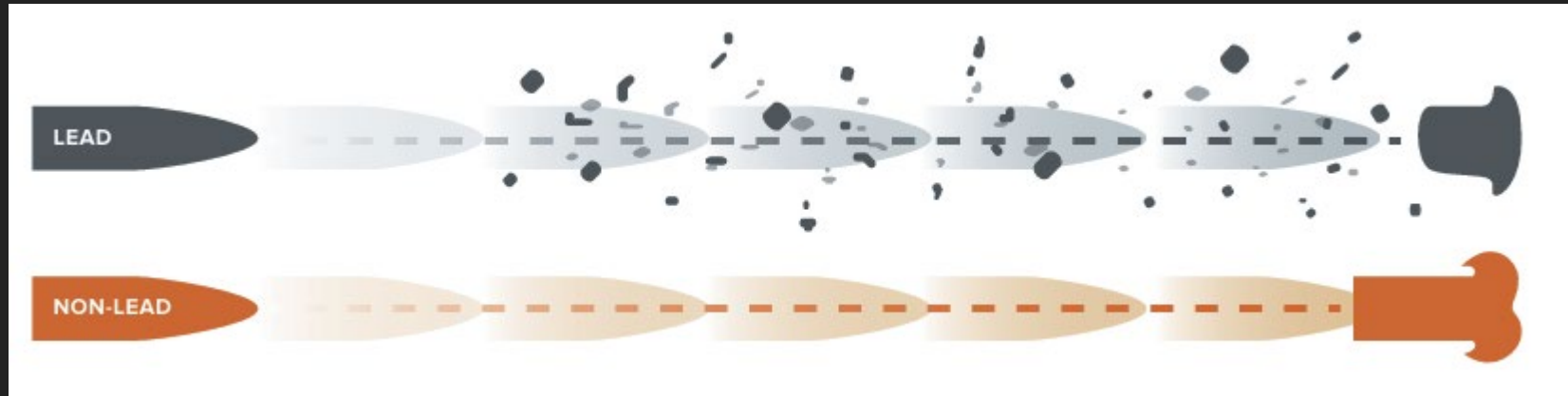




## Other Netting







# Lead Poisoning

# Lead Poisoning





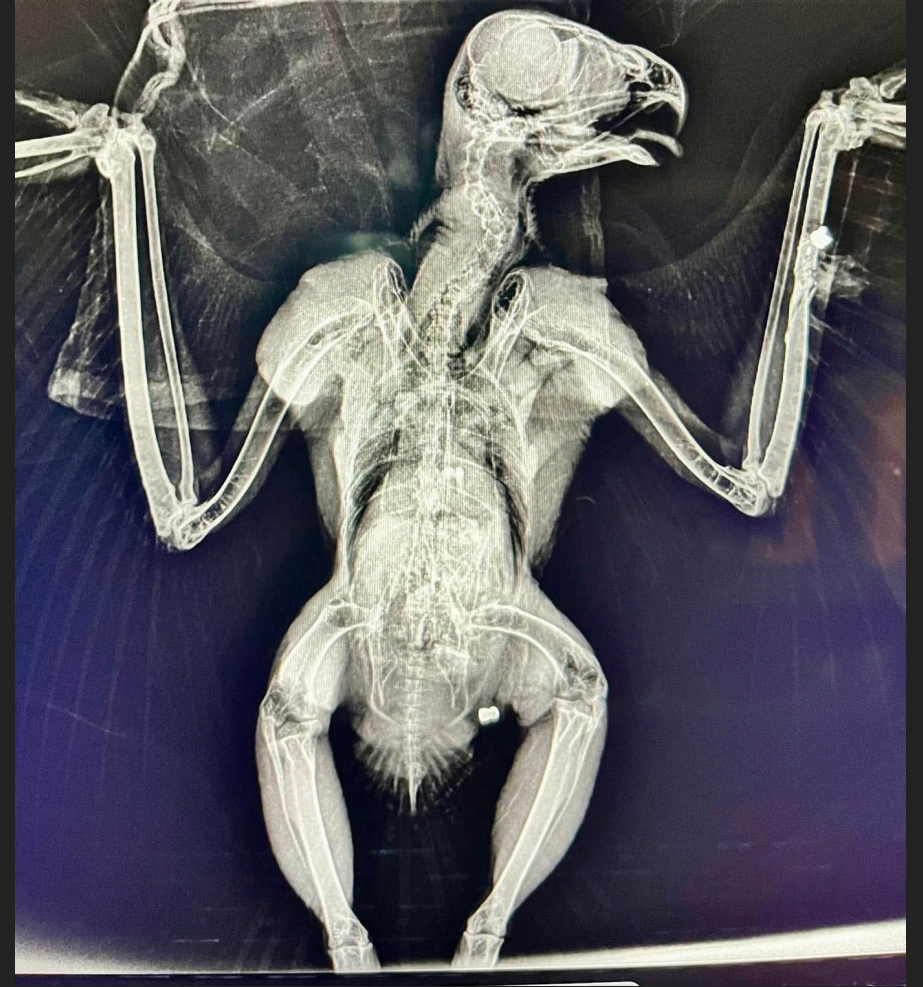
## Affects: Scavengers

- Symptoms
  - › Loss of Balance, Breathing Difficulty, Tremors/Seizures
- Alternatives
  - › Copper Bullets, Steel Shot, Bismuth Shot
- Treatment
  - › Chelation Therapy
- Reference
  - › [Afflicted Bald Eagle | A Place Called Hope](#)
  - › [To help eagles, NYS deer hunters can choose non-toxic ammo | Cornell Chronicle](#)
  - › [High Tech Bullets and Slugs | NYDEC](#)
  - › [Lead it Go | The Peregrine Fund](#)



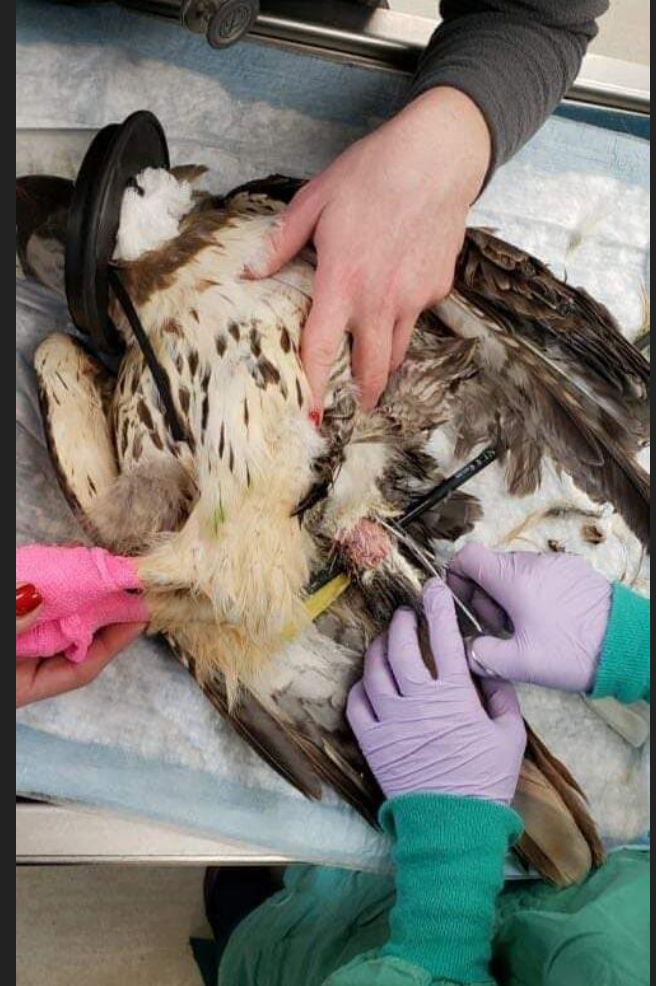


# Shooting





# Shooting



## Legal Consequences

- **Federal Statute**
  - › Class B Misdemeanor
  - › \$15,000 fine, 6 months jail time, or both per count
- **New York**
- **Reference**
  - › [Red-tailed Hawk | A Place Called Hope](#)
  - › [Red-tailed Hawk | Christine's Critters](#)
  - › [Red-Shouldered Hawk \(right\) | A Place Called Hope](#)
  - › [Portsmouth man faces federal charges for killing hawks | WJAR News](#)
  - › [Migratory Bird Treaty | U.S. Code](#)







## Window/Glass Collisions

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## Windows/Glass



# Windows/Glass

## Mitigation Measures

### ■ Glass Treatments

- › Window Decals/Film
- › Screens
- › Shades/Shutters
- › Bird Feeder Location

### ■ Reference

- › [Red tail hawk crashes into News 12 studio building in Bethpage](#)
- › [Juvenile Red-tailed Hawk \(1\) | Wildlife in Need of Rescue and Rehabilitation](#)
- › [Juvenile Red-tailed Hawk \(2\) | Wildlife in Need of Rescue and Rehabilitation](#)



**HAWK RESCUED AFTER CRASHING INTO WINDOW AT OUR BETHPAGE STUDIOS**





## Vehicle Collisions

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# Vehicle Collision

THREATS TO RAPTORS





## Be Prepared

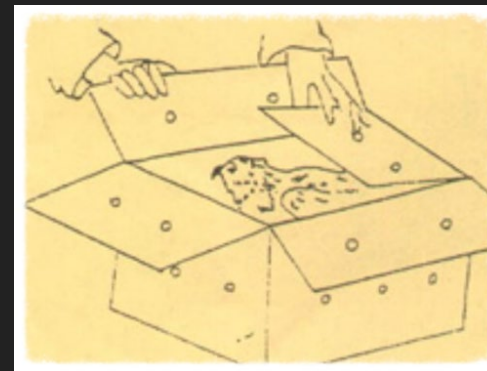
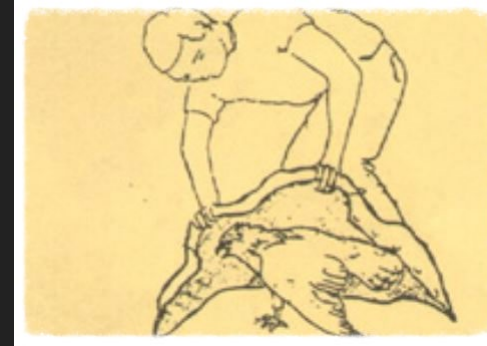
- **Know Who to Contact**
  - › [Finger Lakes Raptor Center](#)
  - › [WNY Raptor and Wildlife Care](#)
  - › [Lakeside Animal Hospital](#)
  - › [Fairport Animal Hospital](#)
- **Reference**
  - › [Emergency Resource | Animal Help Now](#)
  - › [Wildlife Rehabilitators | NYSDEC](#)
  - › [Wildlife Rehabbers | Rochester Birding Association](#)



# Help an Injured Raptor

## Be Prepared

- **Raptor Rescue Kit**
  - › Cardboard Box w Ventilation
  - › Towel/Blanket
  - › Heavy Duty Gloves
- **Reference**
  - › [Handling Injured Raptors | Rocky Mountain Raptor Program](#)
  - › [How to Handle an Injured Raptor | Raptor Education Group, Inc.](#)







## Secondary Rodenticide Poisoning

## What are rodenticides?

- **Acutely Toxic Compounds**
  - › Anticoagulants – Excessive Bleeding
  - › Nerve Toxins – Respiratory Distress
  - › Activated Vitamin D3 – Kidney Failure, Cardiovascular Abnormalities, Tissue Mineralization
  - › Zinc Phosphide – Inhibits Cell Energy Production





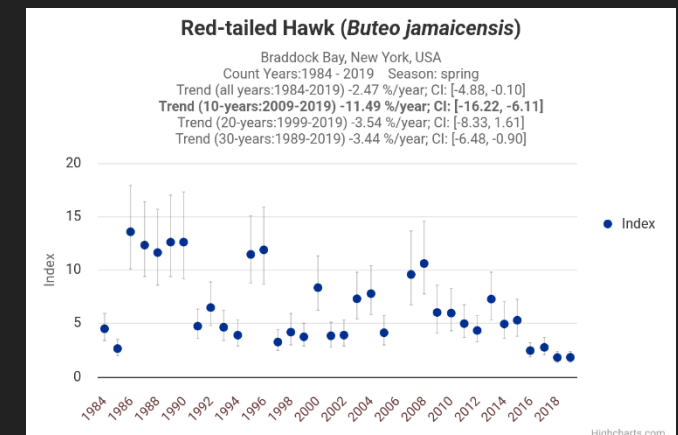
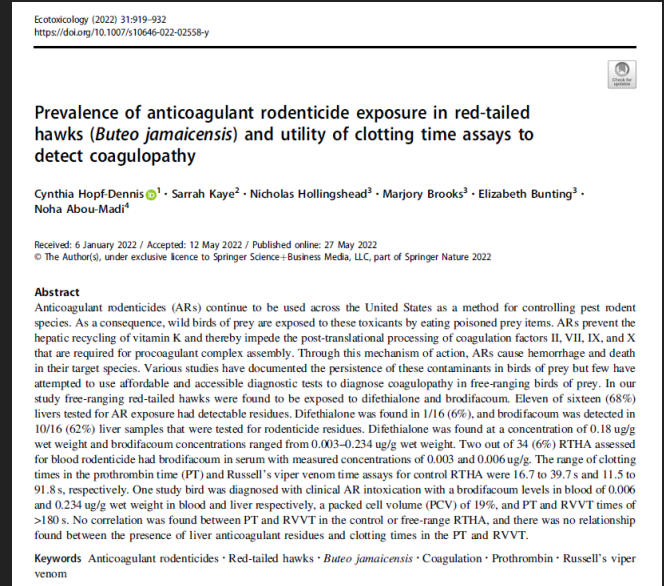
## Secondary Exposure/Ingestion

- **Poisoned Rodents are Weakened**
  - › Take days to die
  - › DO NOT remain in traps
  - › Make easy prey
- **Effects in Predators**
  - › Anemia, Lethargy, Compromised Immune System, Internal and External Hemorrhaging, others
- **Treatment Difficulty**
  - › Timeliness of discovery
  - › Arduous process



## Documented Impacts

- Odds of Great Horned Owls testing positive for rodenticide exposure were 10 times greater and Red-tailed Hawks 9 times greater than all other bird species studied. 62 percent overall exposure level
  - › *Anticoagulant Rodenticide Exposure in Raptors from Ontario, Canada. Thornton et al. 2022*
- 100 percent of the Red-tailed Hawks in the present study tested positive for exposure to anticoagulant rodenticides. 91 percent tested positive for two or more different types
  - › *Continued Anticoagulant Rodenticide Exposure of Red-tailed Hawks in the Northeastern United States with an Evaluation of Serum for Biomonitoring. Murray. 2020.*
- 68 percent of New York State Red-tailed Hawk livers tested for anticoagulant rodenticide exposure had detectable residues
  - › *Prevalence of anticoagulant rodenticide exposure in red-tailed hawks and utility of clotting time assays to detect coagulopathy. Hopf-Dennis et al. 2022.*





## Alternatives – Integrated Pest Management

- Reduce Attractants
  - › Food and waste management
- Shelter Exclusion
  - › Seal building entry points
- Removal
  - › One-way exit doors
  - › Traps
- Reference
  - › [Rodents | Frogger Wildlife](#)
  - › [Rats | Eviction Nuisance Wildlife Control](#)



# Legislative Efforts to Restrict Sale and Use

- Legislation in Effect
  - › Statewide/Provincial Restrictions
  - › Municipal Action
- Legislative Consideration
  - › Massachusetts
  - › Connecticut
- Legal Petition
  - › Harvard Law Review

## Rodenticide

HOUSE DOCKET, NO. 1721 FILED ON: 1/15/2025

**HOUSE . . . . . No.**

**The Commonwealth of Massachusetts**

PRESENTED BY:  
**James K. Hawkins**

*To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:*


The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act restricting the use of rodenticides in the environment.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
James K. Hawkins	2nd Bristol	1/15/2025
Carmine Lawrence Gentile	13th Middlesex	1/22/2025
David T. Vieira	3rd Barnstable	1/22/2025
Steven Owens	29th Middlesex	1/22/2025
Kristin E. Kassner	2nd Essex	1/22/2025
Angelo J. Puppalo, Jr.	13th Hampden	1/22/2025
Marc T. Lombardo		
Natalie M. Blais		
Simon Cataldo		
Mike Connolly		
Daniel M. Donahue		
Patricia A. Duffy		
Rodney M. Elliott		
Kimberly N. Ferguson		
Sean Garballey		
Colleen M. Garry		
John R. Gaskey		
Richard M. Haggerty		

**HARVARD LAW SCHOOL  
ANIMAL LAW & POLICY CLINIC**



May 13, 2024

Michael Moore, Director, Bureau of Climate and Environmental Health Food Protection Program  
Ashley E. Randle, Commissioner, Department of Agricultural Resources  
Brian Arrigo, Commissioner, Department of Conservation and Recreation  
Dr. Robert Goldstein, Commissioner, Department of Public Health  
Richard Berman, Public Member  
c/o Hotze Wijnja, Environmental Chemist  
Pesticide Board Subcommittee  
Massachusetts Department of Agricultural Resources

Via email: [Hotze.Wijnja@mass.gov](mailto:Hotze.Wijnja@mass.gov)

**Re: PETITION TO SUSPEND THE REGISTRATIONS OF ANTICOAGULANT  
RODENTICIDE PRODUCTS IN MASSACHUSETTS**



# Rodenticide

## Reference

- › [Owl on Death's Door Waits Outside Post Office, Hoping Someone Will Notice | The Dodo](#)
- › [Rodenticides Are Killing Massachusetts Wildlife; Will Authorities Step Up? | Harvard Law School](#)
- › [S. 644/H. 965: An Act Restricting the Use of Rodenticides in the Environment | MSPCA](#)
- › [Lowell, MA Ordinance Amendment](#)
- › [Petition - Ban The Use of SGARS in Massachusetts | Change.org](#)
- › [EwA Rat Poison \(ARs\) Brigade](#)
- › [Afflicted Red-tailed Hawk | Andrew Joslin – Cape Ann Wildlife](#)
- › [Red-Tailed Hawk \(Juvenile\) Rescue | James Joyce – Wakefield, MA](#)
- › [Afflicted Red-tailed Hawks | Newhouse Wildlife Rescue](#)





## More Information/Questions

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