

View from Above: A National Look at Invasive Species

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Amphibian, Reptile & Invasive
Species Program Manager



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Our Mission



To support and advocate for State, Provincial, and
Territorial responsibility for science-based fish & wildlife
conservation.

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Strategic Focus Areas

1. Fish & Wildlife Funding, Policy & Legislative Advocacy
2. Relevancy, Diversity & Inclusiveness
3. Coordinated Conservation Initiatives
4. Member Fiscal Support
5. Communication, Training & Capacity Building
6. Fiscal & Operational Excellence



By: K. Wixted

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Committee-Driven Conservation

Over 70 committees, subcommittees, & working groups

- Amphibian & Reptile Conservation
- Invasive Species
- Law Enforcement
- Legal
- National Fish & Wildlife Health

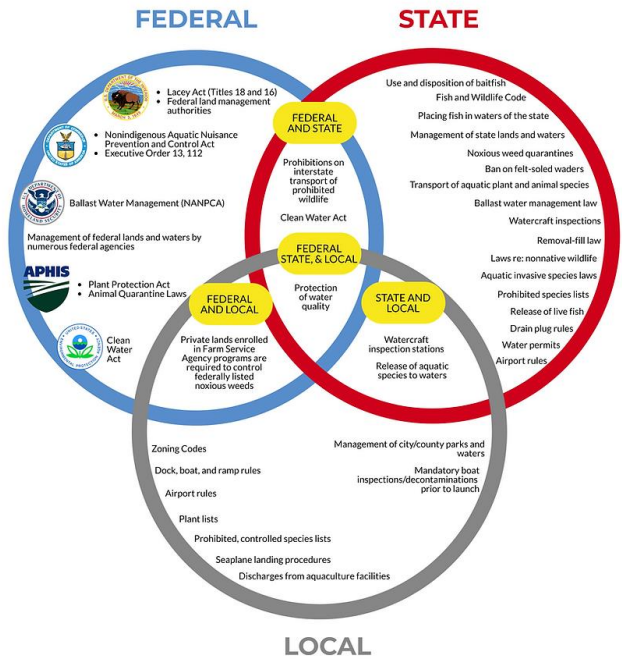


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Invasive species are regulated at multiple levels



Photo Credit: Mark Yokoyama CC by NC ND 2.0



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By USDA APHIS

Invasive Species Committee

Dr. Nicole Angeli (VI)- Chair
 Kim Bogenschutz (IA)- Vice Chair

Objectives:

- to provide a national forum for exchange of information
- to identify and coordinate needs and actions among stakeholders to strategically address high priority invasive species threats
- to promote sound policies

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Sample of Our MANY Partners



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Invasive Species Committee

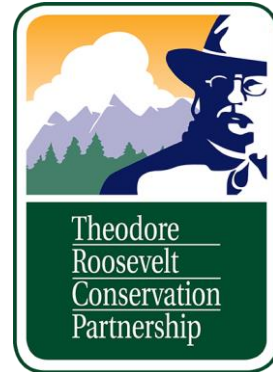
- AIS Commission
- Invasive Species Advisory Committee (ISAC)
- Organisms in Trade (OiT)
- NEDRRIS
- IS Laws
 - Government Affairs
 - VT Webinar

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Aquatic Invasive Species Commission Report

YETI®, Yamaha Marine, Boat U.S., B.A.S.S., the American Sportfishing Association, National Marine Manufacturing Association, Theodore Roosevelt Conservation Partnership, & AFWA

1. Update federal law & policy
2. Increase federal funding
3. Enhance collaboration
4. Maintain water access
5. Increase education and outreach



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Photo Credit: USGS

Organisms in the Trade

Engage with the aquaculture & pet industry to explore opportunities to manage risks within supply chains and retail settings to reduce the invasion risks of hitchhiking organisms within pet commodities



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Crayfish Hitchhikers

- North Carolina, Idaho, Wisconsin, Pennsylvania, Alaska, Vermont, Nebraska & South and North Dakota had crayfish
- Oregon, Idaho, Wisconsin had bullfrog tadpoles



Photo Credit: PA Game Commission

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AIS in Commerce

- Industry Best Practices & Guidelines
- Inspection & Monitoring
- Information & Education
- E-Commerce
- Labeling & Recordkeeping
- Regulations & Enforcement
- Information Access & Sharing

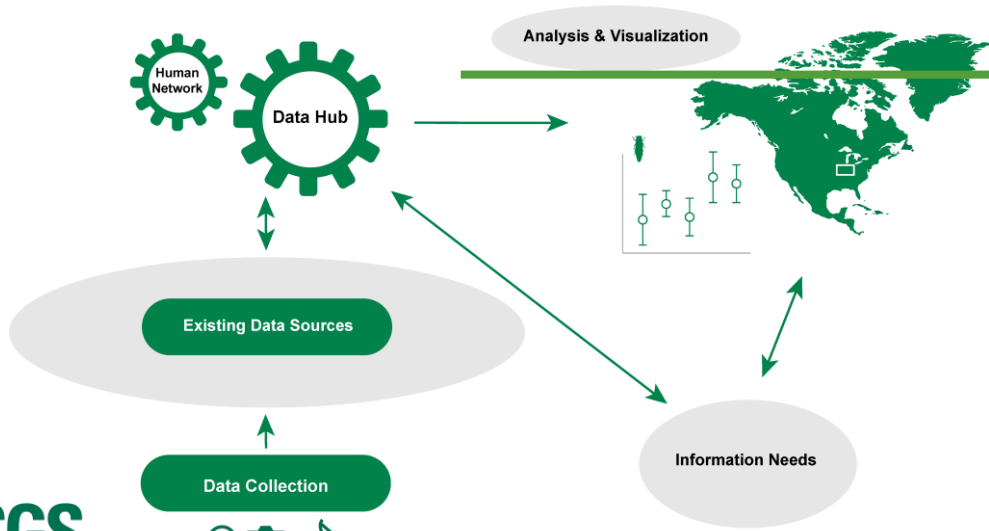
Contact: Leah Elwell;
leah@conservationcollaborations.com

Aquatic Invasive Species in Commerce Summit

Developing Solutions to Mitigate Risks
 March 8, 2023 10am-1pm Pacific Time

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National Early Detection, Rapid Response



Contact: James English; jjenglish@usgs.gov

National Early Detection & Rapid Response

HORIZON SCANS/ WATCHLISTS

INVASION HOTSPOTS

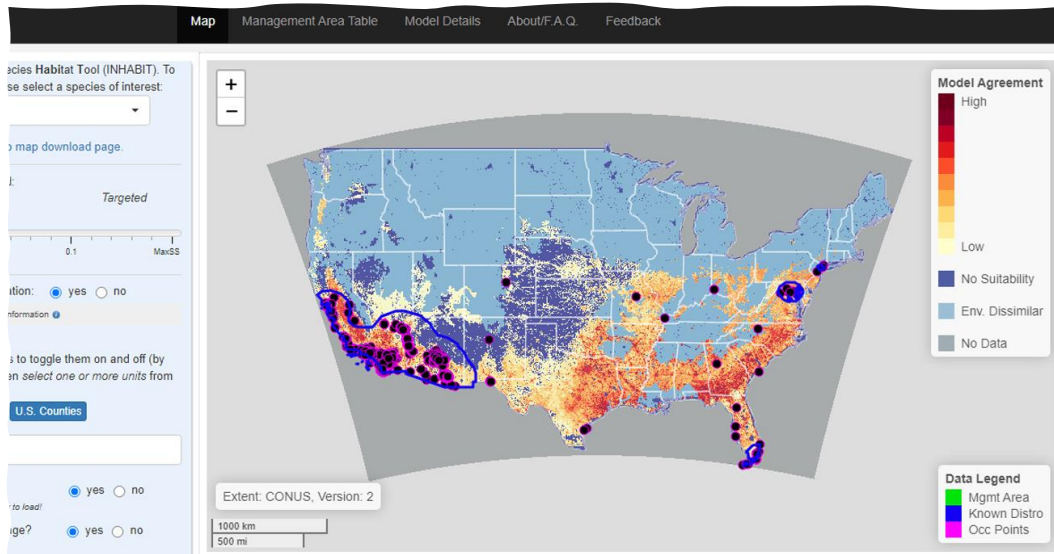
ANALYZE/ DETECT/ ID



INFORMATION SYSTEM

Contact: James English; jjenglish@usgs.gov

INHABIT Tool



Contact: Catherine Jarnevich; jarnevichc@usgs.gov

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WILD SPOTTER
Mapping Invasives in America's Wild Places

INVASIVES FREE USA

Wild Spotter Invasive Species Ambassador Training Course

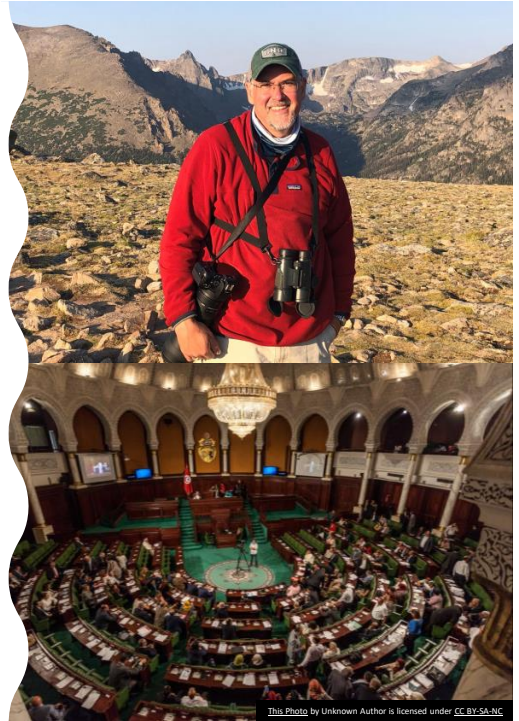
December 5th - 7th, 2023
<https://invasivesfree.org/>

Coeur d'Alene Lake Resort
Northern Idaho

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Government Affairs

- Lacey Act Amendments of 2021 (S.626)
- COMPETES Act (H.R. 4521 and S.1260)
- Recovering America's Wildlife Act (RAWA)



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Injurious Wildlife & the Lacey Act

Title 18 (18 U.S.C. 42) allows the Secretary of the Interior to prohibit importation and some shipment of wildlife species that are officially designated as injurious



By Connecticut River Museum

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Injurious Wildlife



By: OpenCage CC by SA 2.5



96 mammals



4 birds



431 fish*



236 amphibians*



8 mollusks & crustaceans



10 reptiles

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Injurious Reptile Species

Common Name	Family, Genus, or Species	Effective Date
Anaconda, Beni	<i>Eunectes beniensis</i>	April 9, 2015
Anaconda, DeSchaunsee's	<i>Eunectes deschauenseei</i>	April 9, 2015
Anaconda, green	<i>Eunectes murinus</i>	April 9, 2015
Anaconda, yellow	<i>Eunectes notaeus</i>	March 23, 2012
Python, Burmese	<i>Python bivittatus</i> (originally listed as <i>Python molurus</i>)	March 23, 2012
Python, Indian	<i>Python molurus</i>	March 23, 2012
Python, northern African	<i>Python sebae</i>	March 23, 2012
Python, reticulated	<i>Python reticulatus</i> (or <i>Broghammerus reticulatus</i> , or <i>Malayopython, reticulatus</i>)	April 9, 2015
Python, southern African	<i>Python natalensis</i>	March 23, 2012
Snake, brown tree	<i>Boiga irregularis</i>	May 25, 1990; December 13, 1991 C

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History of Success



Management of Biological Invasions (2020) Volume 11, Issue 3: 356–371

Viewpoint

A century of injurious wildlife listing under the Lacey Act: a history

Susan D. Jewell

U.S. Fish and Wildlife Service, Fish and Aquatic Conservation, 5275 Leesburg Pike, Falls Church, VA 22041, USA

E-mail: susan_jewell@fws.gov

Citation: Jewell SD (2020) A century of injurious wildlife listing under the Lacey Act: a history. *Management of Biological Invasions* 11(3): 356–371, <https://doi.org/10.3391/mibi.2020.11.3.01>

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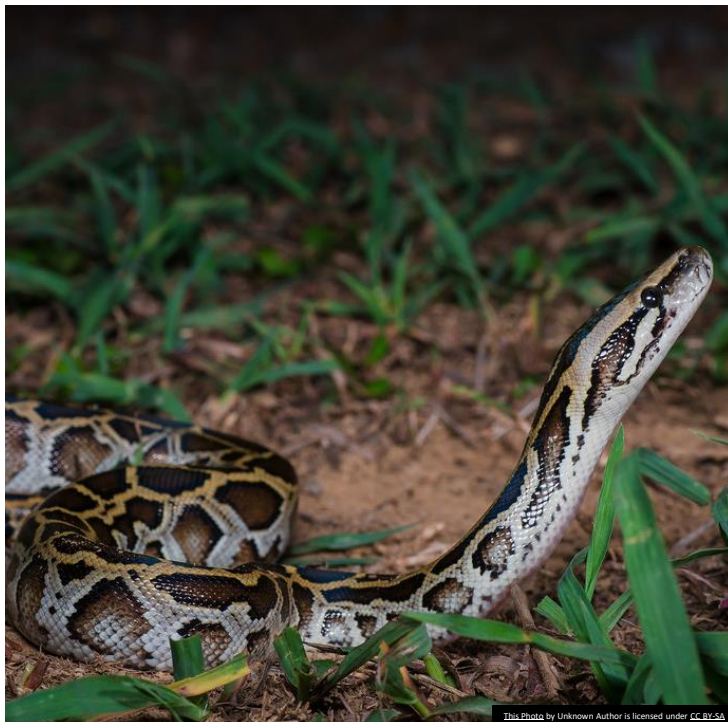
Abstract

In its 120-year history, the major injurious wildlife provision of the Lacey Act has remained nearly intact. The purpose of the Federal law has always been to protect the United States from the introduction of invasive and otherwise harmful species. Amendments along the way have transformed the law, sometimes narrowing and sometimes broadening. Here for the first time, the major changes to the injurious wildlife law from 1900 to the current law are compiled to provide a history that is critical to understanding how the nation's oldest invasive species law has varied in its ability to prevent wildlife invasions. In 1900, under the oversight of the U.S. Department of Agriculture, the newly enacted law prohibited the importation of any

~94% species listed preemptively

None of those have become established

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Updates

- 2017 USARK v. Zinke
 - Allows interstate transport in continental U.S.
- S. 626- **Not passed**
 - Prevent interstate transport
 - Emergency listing
 - Presumptive prohibition

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COMPETES Act- Lacey Act provisions

- Prevent interstate transport
- Change liability by adding “knowingly”
- Emergency listing
- Presumptive prohibition



By: Sam Stukel/ USFWS

CHIPS and Science Act (H.R.4346)
Lacey Act Provisions Removed

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Recovering America’s Wildlife Act



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Recovering America's Wildlife Act

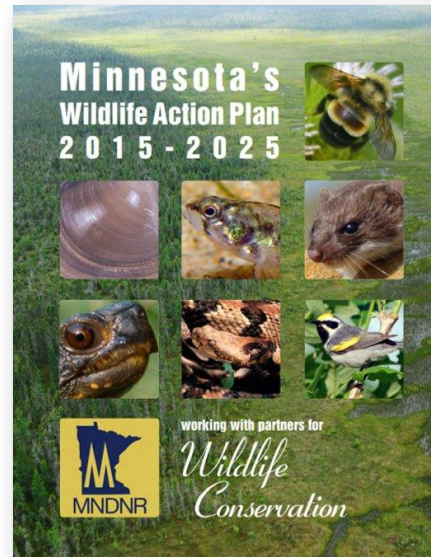
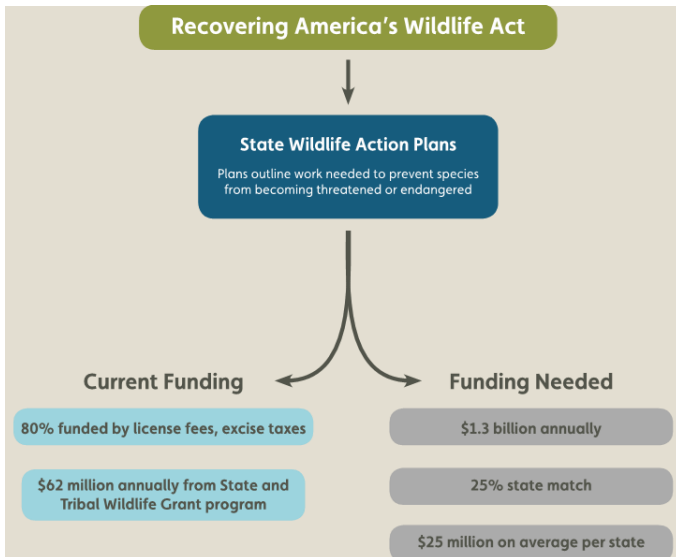


- \$1.4 billion state/territory funding & \$97.5 million tribal funding
 - 25% partner match
- Competitive Innovation Grants
- Funding can go to:
 - Conservation Education
 - Law Enforcement
 - Disease Prevention & Management
 - Invasive Species



By: K. Wixted

A Legislative Solution



Current Progress & Next Steps



- Introduced into Senate
- Sign-on Letter
- SWAP Revisions



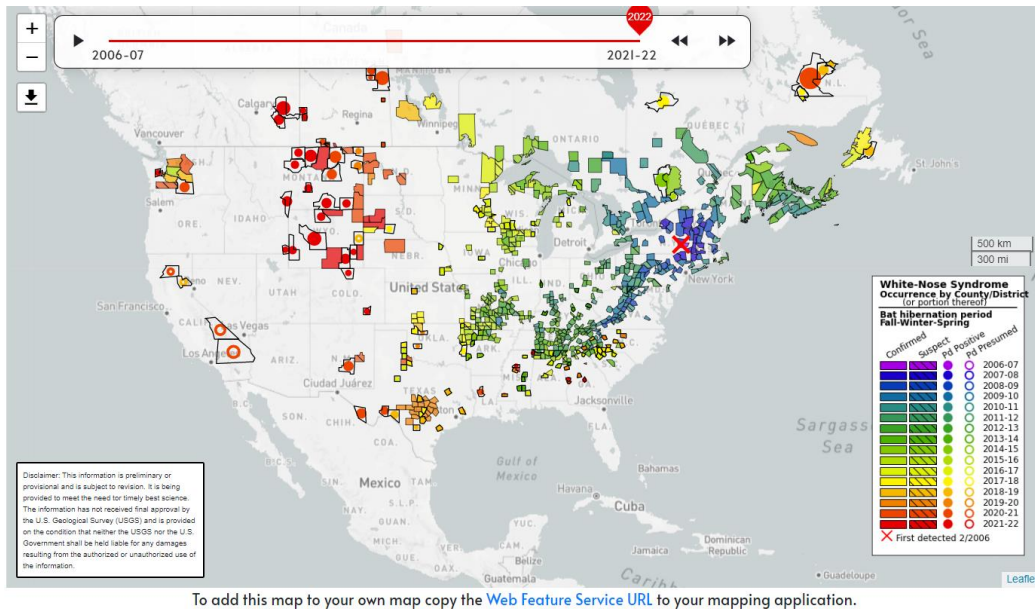
FWC/ Justin Davis



Wildlife Diseases

USFWS/Ann Froschauer

Whitnose Syndrome



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Whitnose Syndrome

- State of the Bats- just released!
- Ongoing research:
 - hosts, pathogen, environment and disease
 - variation in susceptibility and impacts
 - mechanisms of survival
 - identify and develop tools to disrupt disease triad
 - support populations



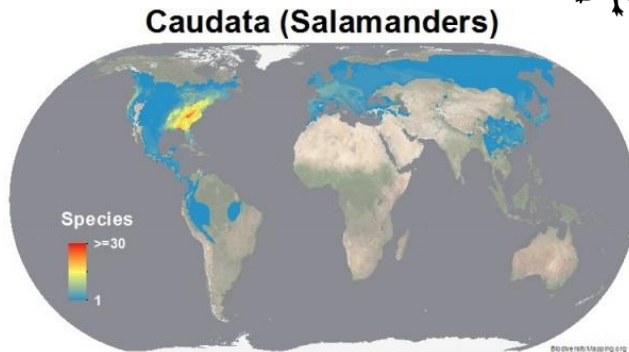
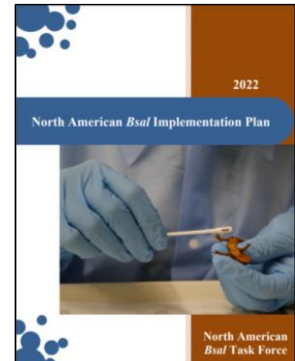
Pete Pattavina/ USFWS

Contact: Leanne Burns; lburns@fishwildlife.org

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Batrachochytrium salamandrivorans (Bsal)

- Appalachia= global salamander hotspot
- Proactive vs reactive



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Highly Pathogenic Avian Influenza (HPAI)

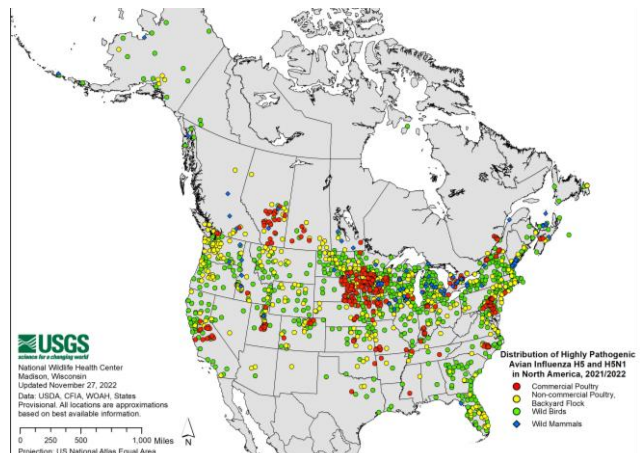
- Detected in 49 states
- Mammalian & avian hosts
- Impact research ongoing
- Emphasis on biosecurity
- Vaccine development

HPAI BIOSECURITY BEST PRACTICES

KEEP WILD BIRDS AWAY FROM POULTRY HOUSES, FARM PONDS, AND COMPOST.

- Secure composting material with bird wire and gates.
- Keep houses closed in between flocks. Hang a bird deterrent in the doorway to keep starlings, songbirds and vultures away.
- Install bird deterrents like spikes, noise makers and fake predators near ponds and drainage areas.

 de.gov/poultry

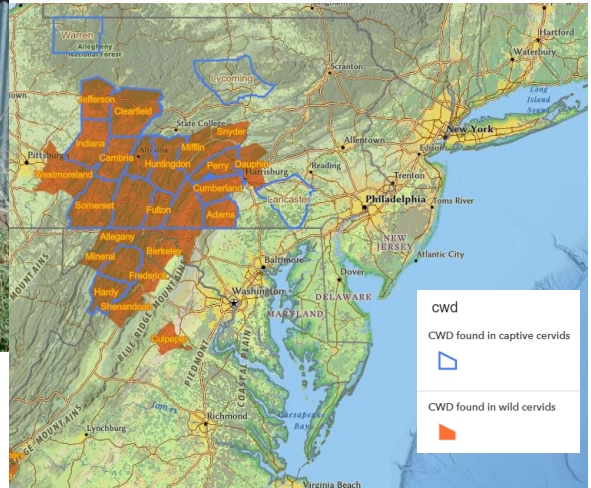


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Chronic Wasting Disease



Terry Kreeger, Wyoming Game and Fish and Chronic Wasting Disease Alliance.



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OneHealth

- Focuses on interconnection between people, animals, plants, & shared environment
- Regional disease coordinators
- AFWA
 - Resolution
 - Incorporating state agency expertise & resources



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Upcoming Webinars



Apr 27, 2023 03:00 PM ET



May 24th, 4:00 PM Eastern Time

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Questions?



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