



United States Department of Agriculture



Influenza in Wild Birds

USDA WS National Wildlife Disease Program
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Methods



TARGETED MONITORING
OF DABBLING AND
DIVING DUCKS



MORBIDITY/MORTALITY
INVESTIGATIONS



SPRING ENHANCED
MONITORING



SURVEILLANCE OF PERI-
DOMESTIC WILDLIFE ON
INFECTED PREMISES



WILDLIFE BIOSECURITY
ASSESSMENTS



Sample Collection – Live Capture





Sample Collection – Hunter Harvest



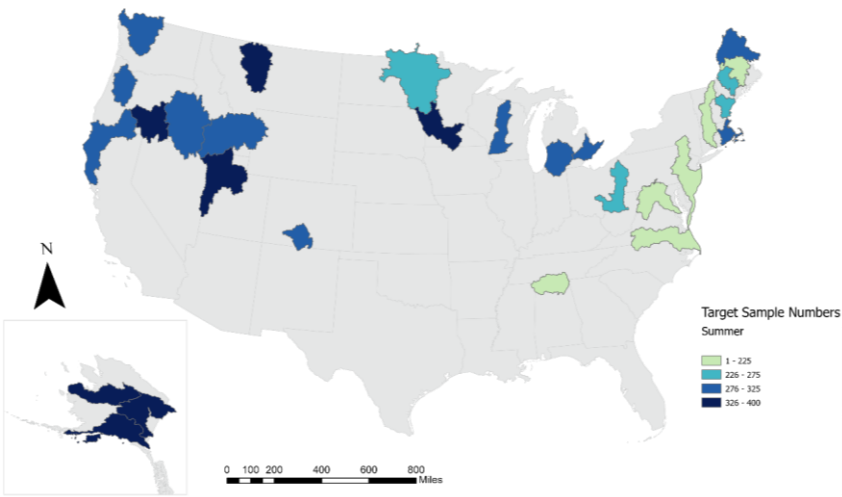
Targeted monitoring of healthy ducks - goals

- Monitor introductions of new viruses
 - Provide early warning system
 - Realtime data
 - Help producers make decisions
- Detect spread into new areas
- Ensure confidence of trading partners
- Better understanding of spillover risk/ interspecies spread



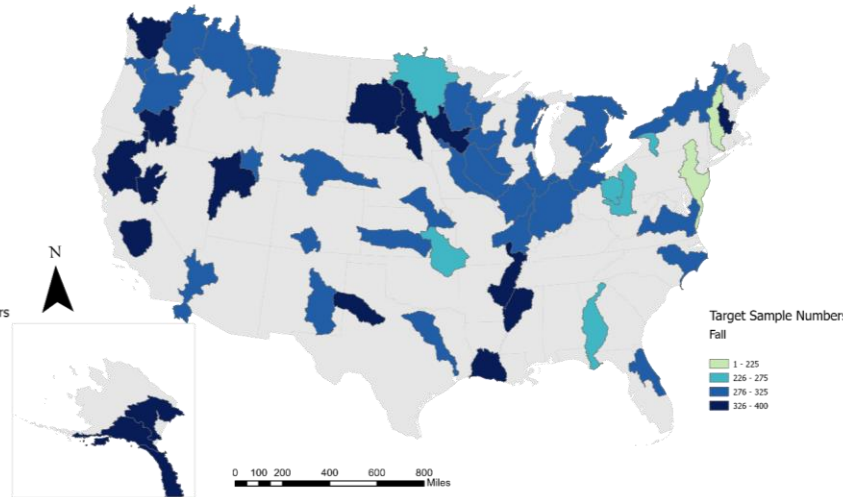
2024 – 2025 Seasonal Targets

Summer



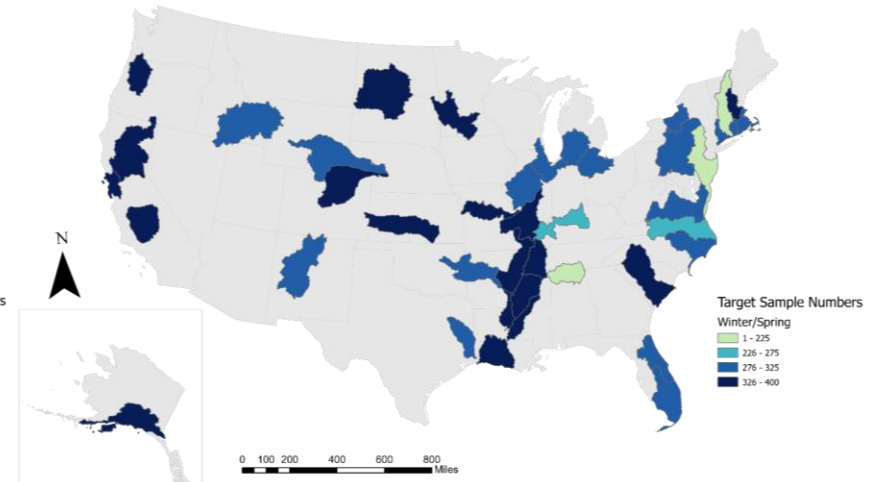
Target: 7,824

Fall



Target: 17,676

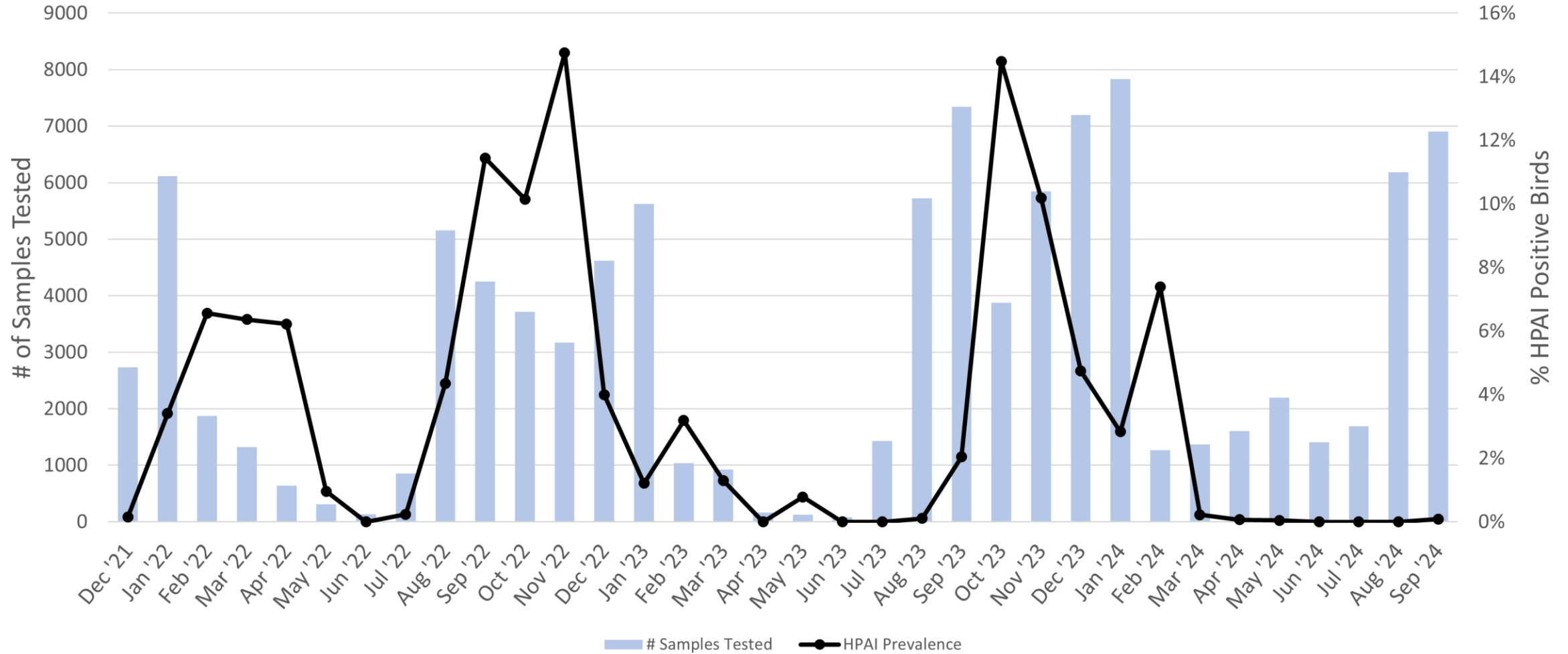
Winter/Spring



Target: 12,802



HPAI Detections Over Time in Apparently Healthy Wild Birds



U.S. HPAI Detections

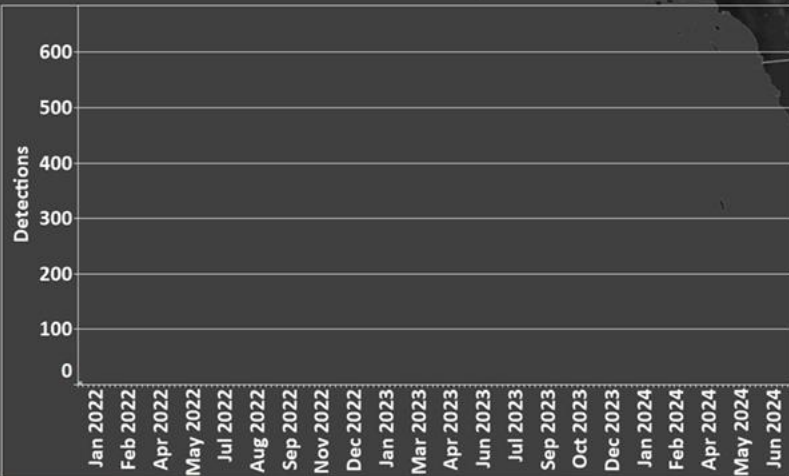
No data or actual locations are included in the depiction of events in this time lapse. (Updated 09/22/2024)

Week of: December 26, 2021



- Domestic ●
- Wild Bird - NWDP ●
- Wild Bird - Other Agency ●

Running Totals	
Category	
Domestic	
Wild Bird - NWDP	6
Wild Bird - Other Agency	

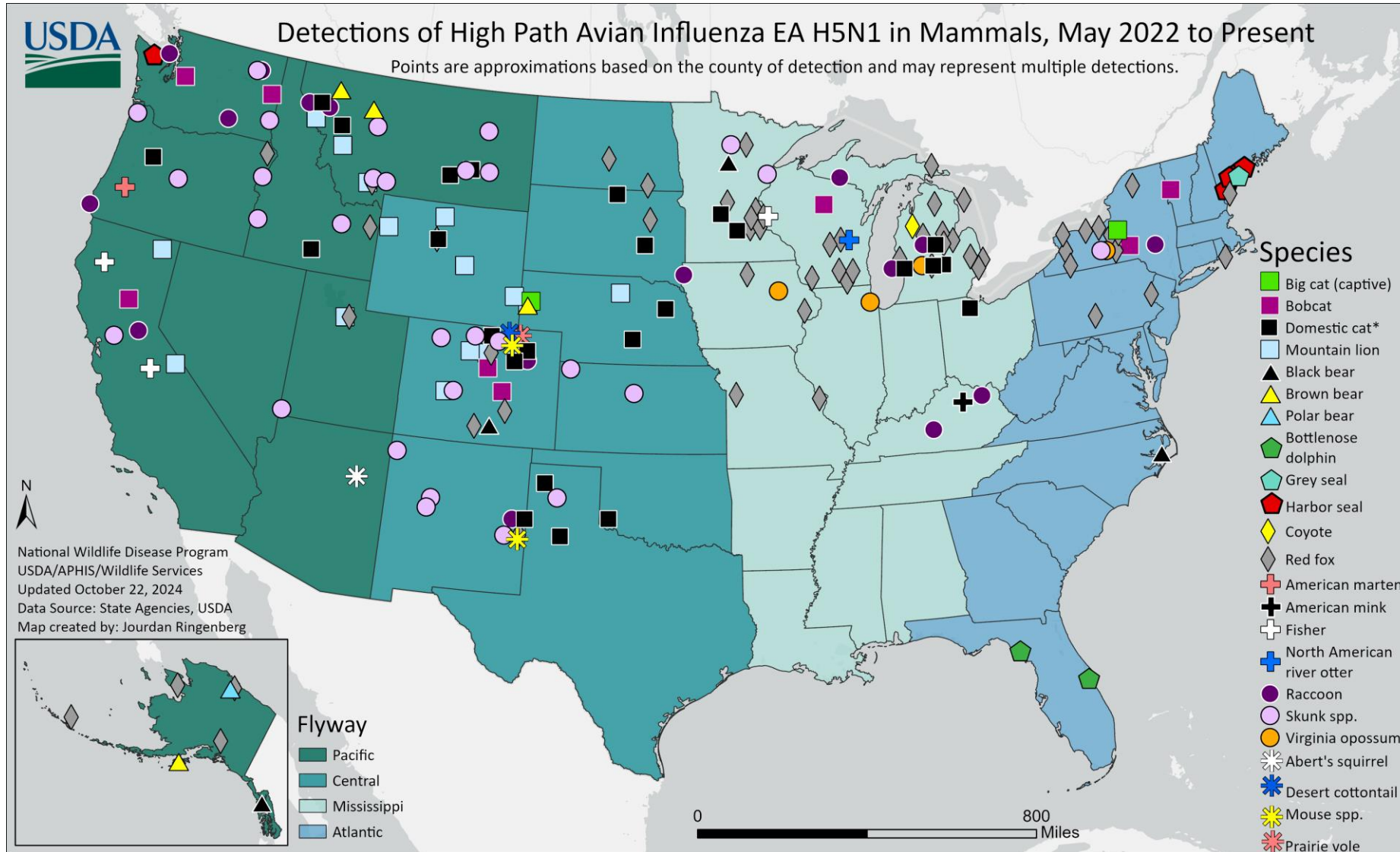


Morbidity/Mortality Investigations

- Sick or dead wild birds and mammals
- Neurologic signs
 - Swimming in circles
 - Head tilt
 - Lack of coordination
 - Tremors
 - Respiratory distress
 - Paresis
- Sample is conservative
 - Limited to a few individuals per event



Morbidity/mortality investigations



H5N1 B3.13

- HPAI EA H5N1 2.3.4.4b detected in dairy cattle
 - March 2024 in TX

Wildlife Surveillance Efforts

- Enhanced sampling of birds and mammals across US, April 1 – June 30
- Wild bird and mammal sampling on infected premises



Spring Enhanced Surveillance

- Question: How widespread is B3.13 virus
- April 1 – June 30, 2024
- Opportunistic sampling
 - Agency harvest
 - Live animal
 - M/M investigations
- Bird and mammal species
- 5,343 animals sampled
- No B3.13 detections
- HP H5 detections = 2



Emergency Response – Influenza in livestock

- Wildlife Services
 - Sampling around infected dairy and poultry farms
 - Any bird and mammal species
- Questions
 - Are wildlife bringing B3.13 onto livestock/poultry premises?
 - Is the virus spilling over from livestock/poultry into wildlife?
 - Is the virus moving off of infected premises?
- Answers help inform risk



Targeted Wildlife Surveillance

- WS response to dairy cattle detections
- Sampling around infected dairy and poultry farms
 - Any bird and mammal species
- 32 positive farms
 - Dairy = 23
 - Poultry = 9
- At least 109 species

State	# Prems	Collected
CA	6	1,366
CO	8	1,277
IA	6	1,002
ID	1	250
MI	5	859
MN	3	351
NM	3	549
Total	32	5,604



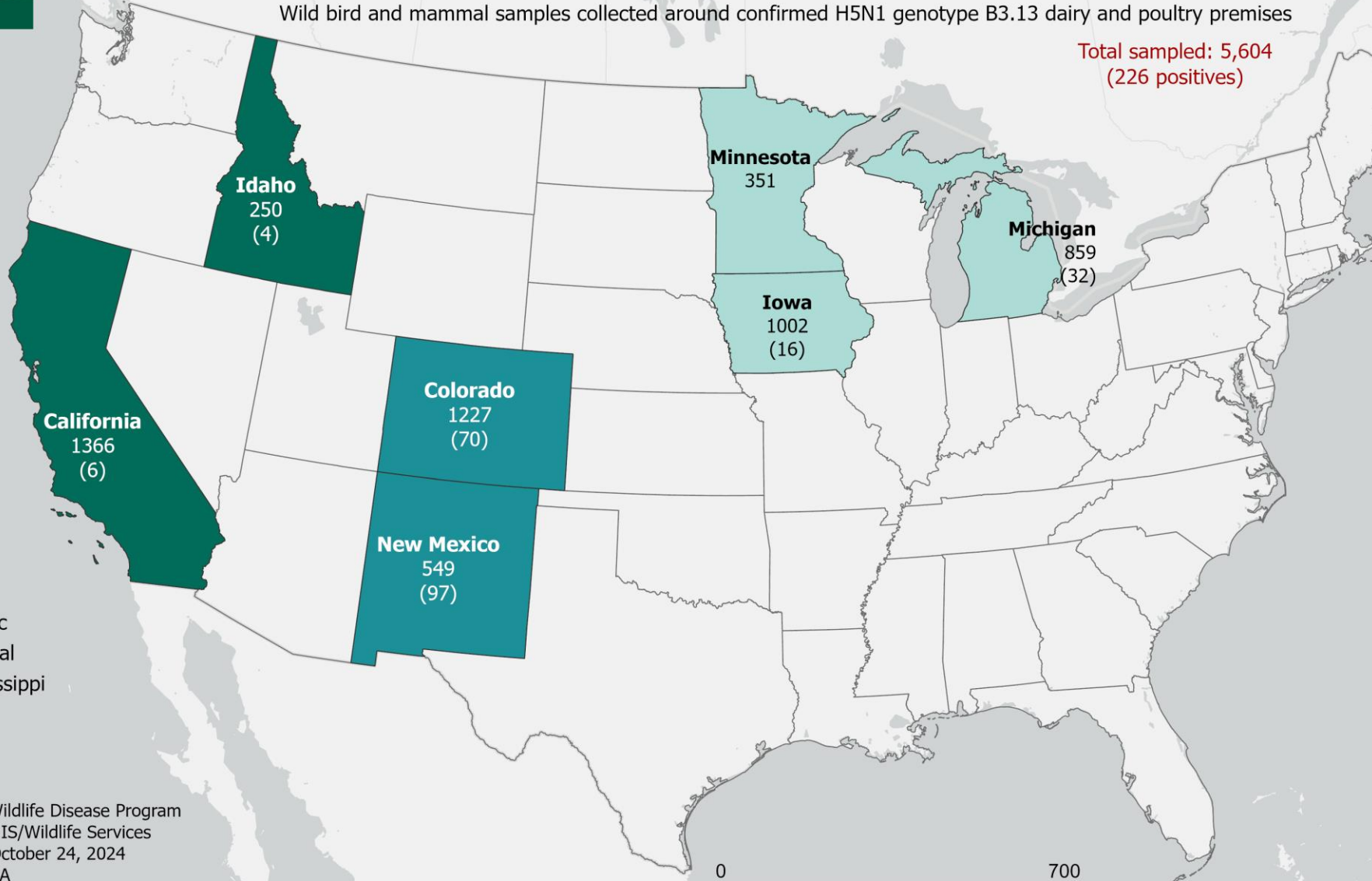


Wildlife Services Targeted Wildlife Surveillance

Wild bird and mammal samples collected around confirmed H5N1 genotype B3.13 dairy and poultry premises

Total sampled: 5,604
(226 positives)

- Flyway
- Pacific
 - Central
 - Mississippi





Genotype B3.13 Summary

Targeted Wildlife Surveillance

21 sequences confirmed at NVSL

6 bird species

4 mammal species

State	H5 Det	B3.13
CA	7	0
CO	70	3
IA	16	5
ID	4	2
MI	32	7
MN	0	0
NM	97	4
Total	226	21

Data updated through 10/24/24



Questions

- Are wildlife bringing B3.13 onto livestock/poultry premises? **No**
- Is the virus spilling over from livestock/poultry into wildlife? **Yes**
- Is the virus moving off farm and persisting in wildlife?
No





Detections of Highly Pathogenic Avian Influenza in Wild Birds

Last Modified: July 31, 2024

Wild birds can be infected with highly pathogenic avian influenza (HPAI) and show no signs of illness. They can carry the disease to new areas when migrating, potentially exposing domestic poultry to the virus.



APHIS' wild bird surveillance program provides an early warning system for the introduction and distribution of avian influenza viruses of concern in the United States, allowing APHIS and the poultry industry to take timely and rapid action to reduce the risk of spread to our poultry industry and other populations of concern.

[CSV](#) [Print](#) Search:

State	County	Collection Date	Date Detected	HPAI Strain	Bird Species	WOAH Classification	Sampling Method
California	Santa Clara	07/18/2024	07/25/2024	EA H5N1	Gull (unidentified)	Wild bird	Morbidity/Mortality
Colorado	Weld	07/12/2024	07/25/2024	EA H5N1	Eurasian collared dove	Wild bird	Agency harvest

Detections of Highly Pathogenic Avian Influenza in Mammals

Last Modified: July 31, 2024

There are many species that are potentially susceptible to highly pathogenic avian influenza (HPAI). In addition to birds and poultry, H5N1 viruses have been detected in some mammals (see list below). Infection may cause illness, including severe disease and death in some cases.



Reporting

[USDA APHIS | HPAI Detections in Wild Birds](#)

[USDA APHIS | HPAI Detections in Mammals](#)

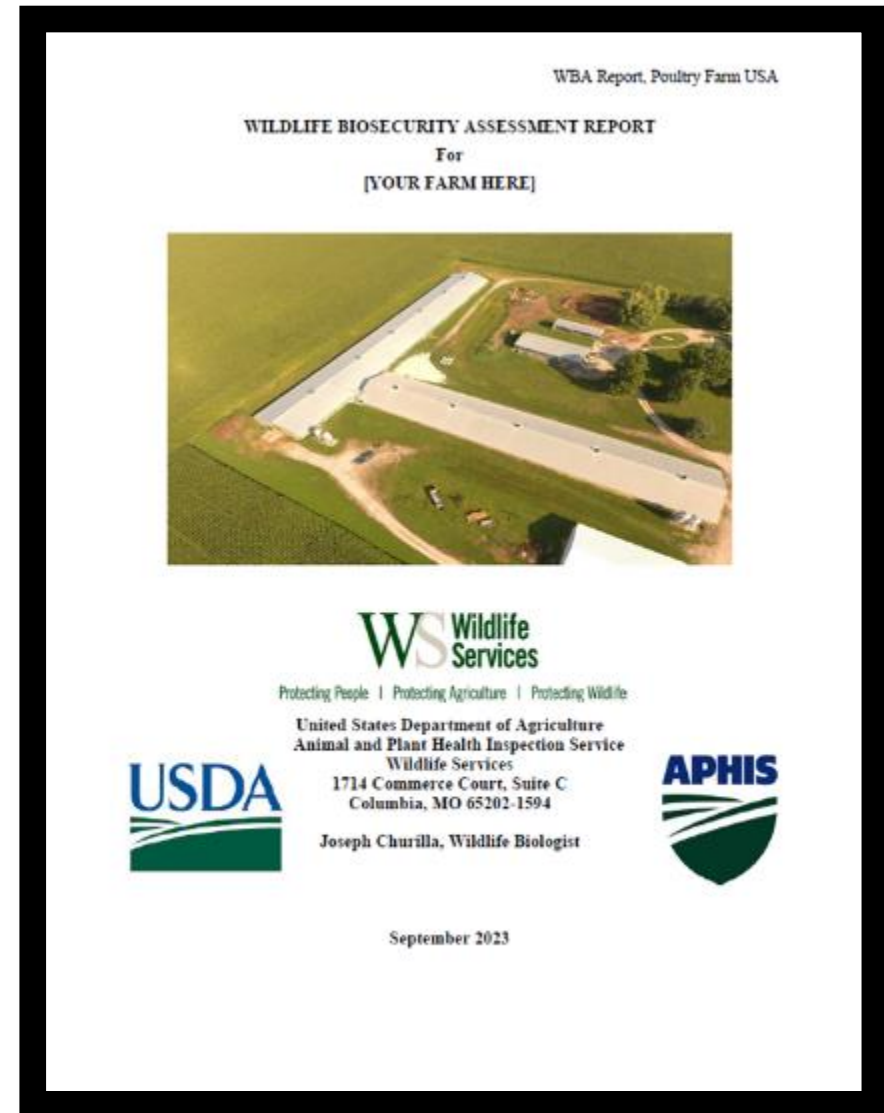
[Avian Influenza - WAHIS – WOA Events](#)

The screenshot shows the WAHIS interface for reporting events. It includes a search bar, navigation tabs for 'Analytics' and 'Reports', and a 'WOAH 71' indicator. The main content area displays a list of events with columns for Country, Report number, Disease, Genotype/Serotype/Subtype, Reason, and Start date. A 'Filters' sidebar is open on the left, showing options for 'Event ID', 'Event status', 'Animal type', 'Report type', 'Country', 'Disease', and 'Subtype'. The event list includes entries for the United States of America, Mexico, Peru, Canada, Ecuador, and Mexico, all reporting 'High pathogenicity avian influenza viruses (poultry) (Inf. with)'.

Event ID	Country	Report number	Disease	Genotype/Serotype/Subtype	Reason	Start date
	United States of America	FUR_127	High pathogenicity avian influenza viruses (poultry) (Inf. with)	H5N1	Recurrence of an eradicated disease	2022/02/07
	Mexico	FUR_4	High pathogenicity avian influenza viruses (poultry) (Inf. with)	H5N1	Recurrence of an eradicated strain	2023/10/25
	Peru	FUR_1	High pathogenicity avian influenza viruses (poultry) (Inf. with)	H5 (N untyped)	Recurrence of an eradicated disease	2024/02/01
	Canada	FUR_33	High pathogenicity avian influenza viruses (poultry) (Inf. with)	H5N1	Recurrence of an eradicated disease	2023/09/07
	Ecuador	FUR_17	High pathogenicity avian influenza viruses (poultry) (Inf. with)	H5N1	First occurrence in the country	2022/11/25
	Mexico	IN	High pathogenicity avian influenza viruses (poultry) (Inf. with)	H7N3	Recurrence of an eradicated strain	2023/03/07

Wildlife Biosecurity Assessments

- USDA Wildlife Services
- Pilot project in 4 states: Iowa, Minnesota, North Dakota, South Dakota
 - Identify wildlife presence on premises
 - Recommend mitigation strategies
 - Provided at no cost to producers



Wildlife Biosecurity Assessments

- Direct Contact
 - Holes
 - Compromised exclusions
 - Foundation breaches
- Indirect Contact (attractants)
 - Standing water
 - Spilled grain
 - Clutter



Wildlife Biosecurity Assessments

- Standardized methods
- Document wildlife activity and habitats used
- Show trends over time



Species	Hazard Tier	July	August	TOTAL
House Sparrow	1	117	65	182
Barn Swallow	2	12	32	44
European Starling	2	2	17	19
Common Grackle	2	1	11	12
Killdeer	1	2	1	3
American Robin	2	0	1	1
TOTAL		134	127	261



Wildlife Biosecurity Assessments

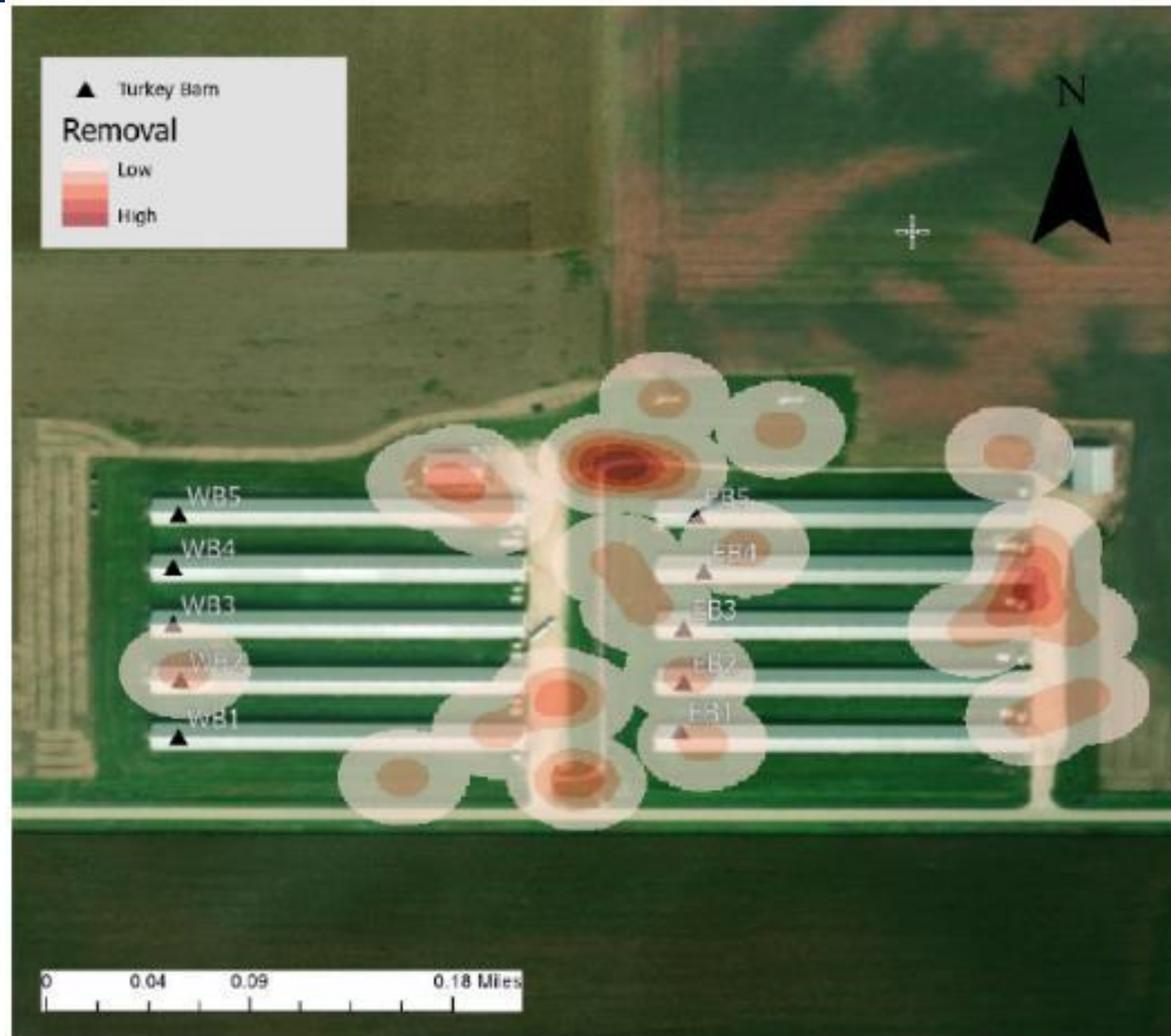
- List of all hazards
 - Locations on map
 - Pictures of each hazard
 - Building repairs, mechanical exclusion, etc. are responsibility of the producer

- Conducted over time to show progress



Wildlife Biosecurity Assessments

- WS will conduct wildlife management if needed/agreed upon
- Record results of all wildlife removals and dispersals
- Show trends over time



Wildlife Biosecurity Assessments

- Assessments done on 169 farms
 - More than 86,000 animals dispersed
 - 18,500 removed
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Thank you





United States Department of Agriculture