



# Community for Emerging and Zoonotic Diseases

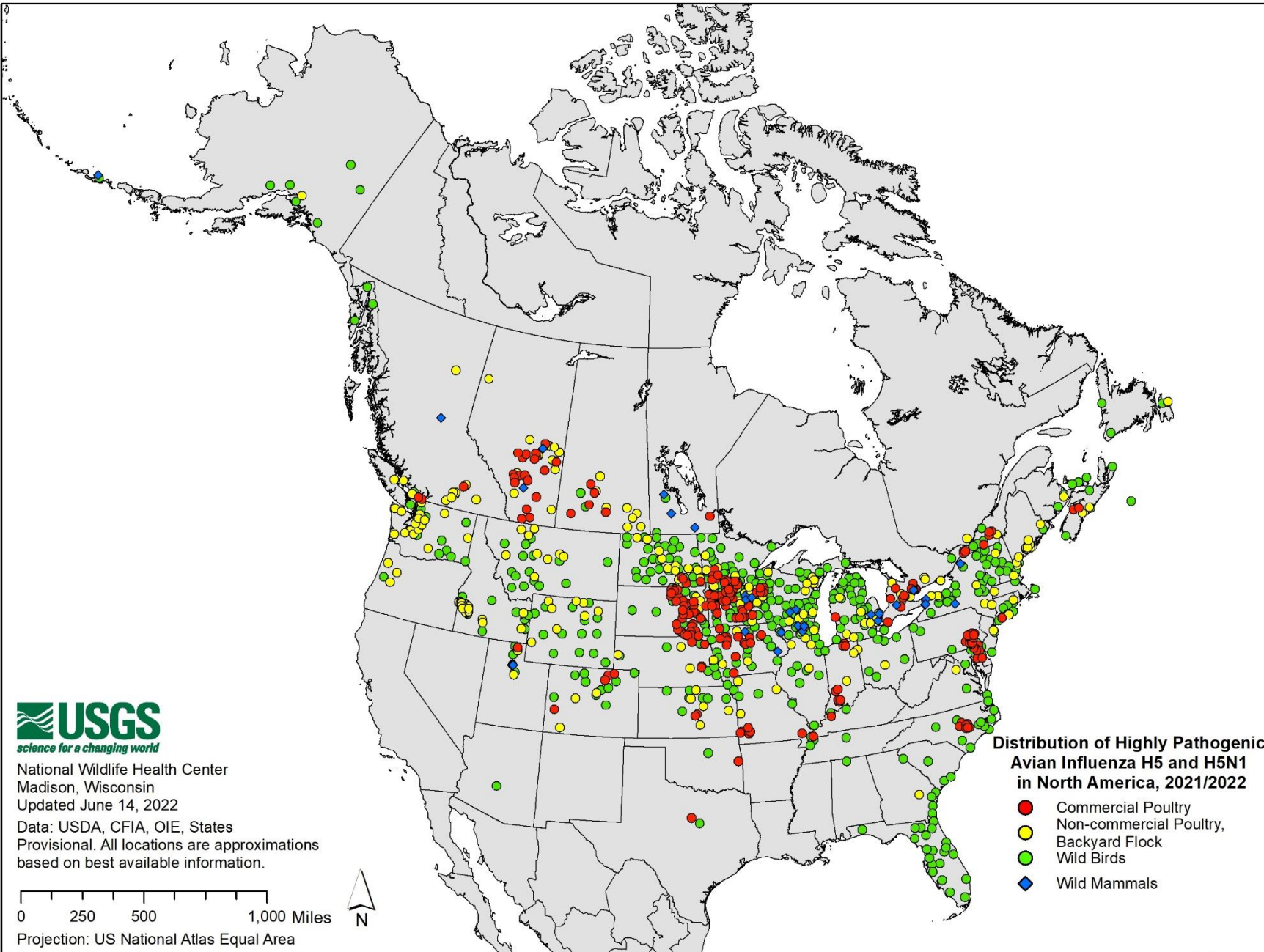
*Identifying emerging risks through collective intelligence*

CFIA One Health HPAI Meeting

23 June 2022

[www.cezd.ca](http://www.cezd.ca)

# USGS Map





# HPAI 2022 Confirmed Detections

as of June 23, 2022

Last reported detection Wednesday, June 22, 2022

Data updated weekdays by 12pm Eastern

[Download Data](#)

## 376 Confirmed Flocks

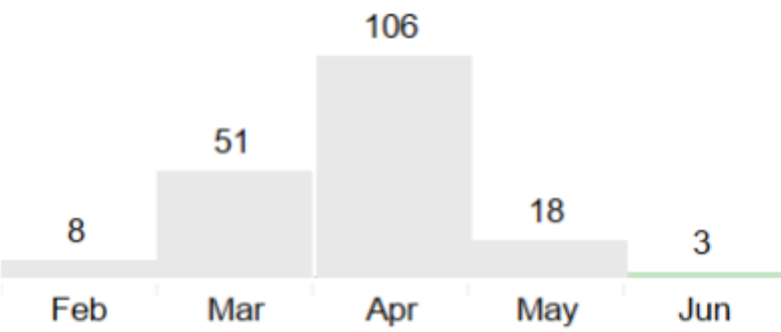
Birds tested and confirmed having HPAI

## 36 Affected States

States with at least one confirmed infected flock

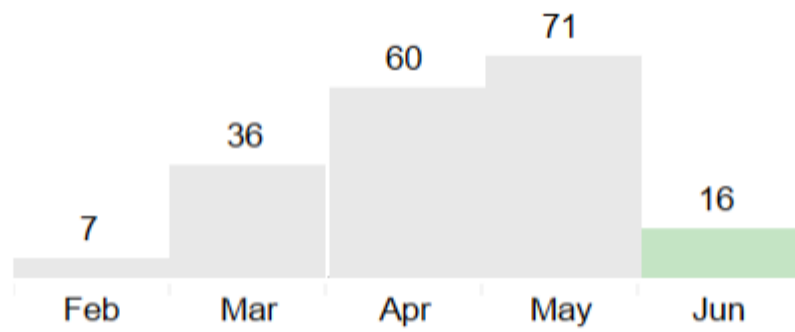
### Commercial Flocks

# 186



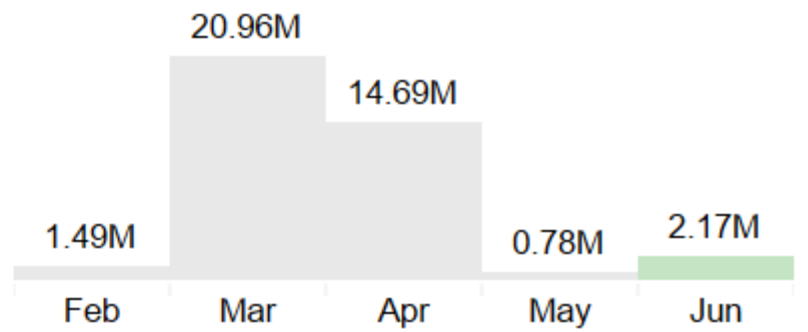
### Backyard Flocks

# 190



### Birds Affected\*

# 40.09M



\*Number of birds on confirmed infected premises.

Bars reflect most recent 4 months (numbers may not add up to total).

# USDA list outbreaks reported in

## domestic birds

Colorado	No new cases	6 affected flocks 4 Commercial, 3 Backyard > 3.5 million birds
Utah	No new cases	4 total flocks 1 commercial, 3 backyard >1.5 million birds
Indiana	No new cases	13 total flocks 9 commercial, 4 backyard >189,000
<b>Washington</b>	<b>4 new cases</b> <b>4 backyard</b>	23 total flock 23 backyard flocks 1,458 birds
Minnesota	No new cases	80 total flocks 59 commercial, 21 backyard >2.9 million birds
Pennsylvania	No new cases	17 total flock 17 commercial flock >4.0 million birds



Border State

North Dakota	No new cases	16 total flocks 4 Commercial 12 Backyard >167,000 birds
Alaska	No new cases	1 total flock 1 backyard flock 30 birds
Montana	No new cases	9 total flocks All backyard >78,000 birds
Michigan	No new cases	13 total flocks 1 commercial, 12 backyard > 35,000 birds
Wisconsin	No new cases	22 total flocks 8 commercial, 14 backyard > 3.0 million birds
Idaho	No new cases	25 total flocks All backyard 988 birds

# US Domestic Detections

## [USDA list](#) of Affected Commercial and Backyard Flocks – states with no new detections

Vermont	No new cases	1 total flocks 1 backyard 30 birds
Maine	No new cases	12 flocks total 12 backyard 893 birds
New Hampshire	No new cases	1 total flock 1 backyard 150 birds
New York	No new cases	8 total flocks 1 commercial 7 backyard 7028 birds affected
Ohio	No new cases	1 total flock 1 backyard flock 20 birds

Oklahoma	No new cases	1 total flock 1 commercial flock 13,800 birds
Nebraska	No new cases	8 total flocks 4 commercial, 4 backyard >4.8 million birds
Missouri	No new cases	9 total flocks 6 commercial, 3 backyard >430,000 birds
Wyoming	3 new cases 3 backyard	8 total flocks All backyard birds 350 birds
South Dakota	1 new case 1 backyard	40 total flocks 36 commercial, 4 backyard >1.6 million birds
Oregon	1 new case	2 total flock 2 backyard flock 540 birds
Illinois	1 new case 1 backyard	4 total flocks 4 backyard flocks 150 birds

 Border State

# US Domestic Detections

## [USDA list](#) of Affected Commercial and Backyard Flocks new states with no new outbreaks reported

Delaware	No new cases	3 total flocks 3 commercial >1.4 million birds
Massachusetts	No new cases	1 total flock 1 backyard flock 240 birds
Connecticut	No new cases	1 total flock 1 backyard 160 birds
Kentucky	No new cases	2 total flocks 2 commercial >284,000 birds
Kansas	No new cases	6 total flocks 1 commercial, 5 backyard 7,546 birds
New Jersey	No new cases	1 total flock 1 backyard flock 60 birds

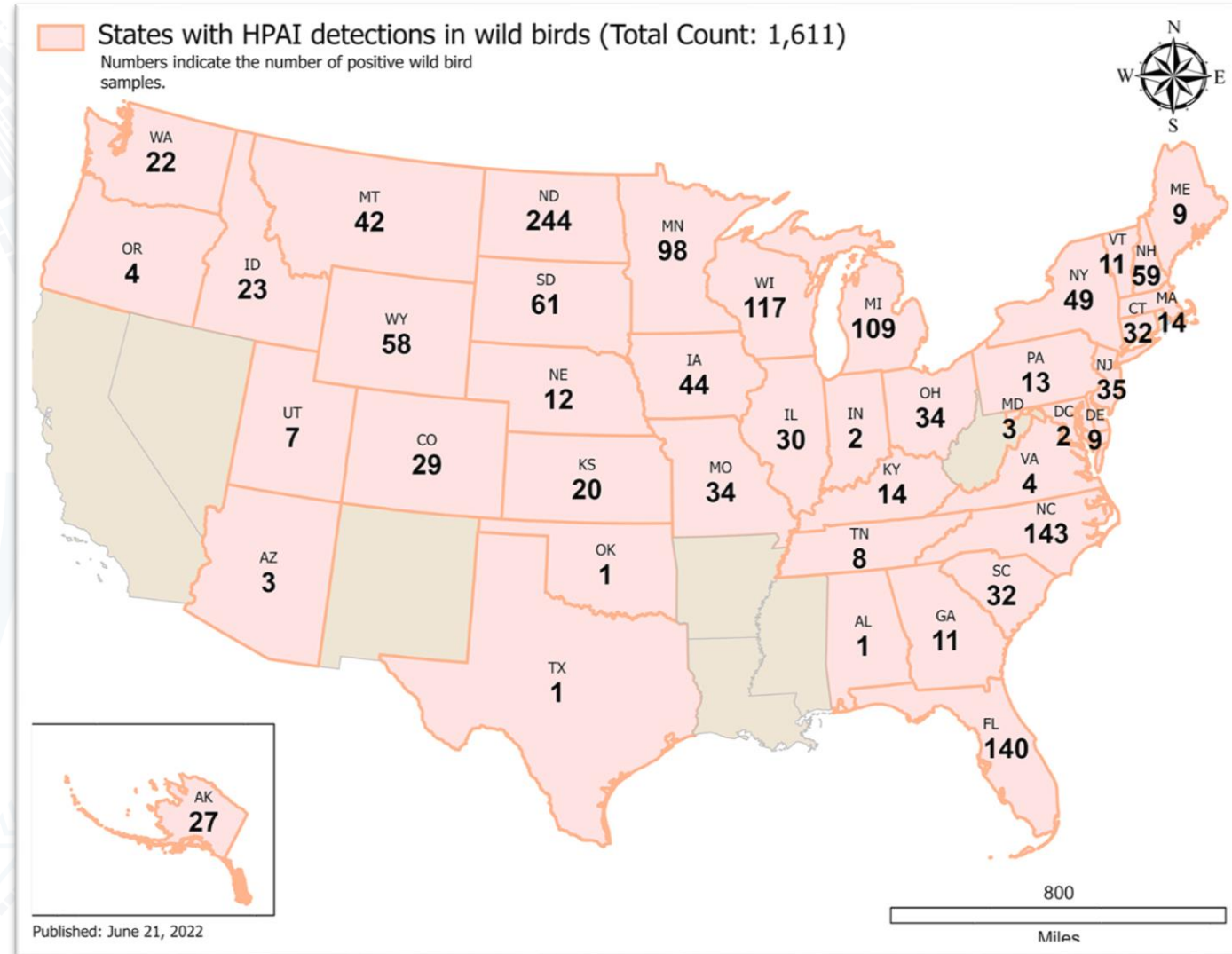
North Carolina	No new cases	9 total flocks All commercial >480,000 birds
Virginia	No new cases	1 total flock 1 backyard flock 90 birds
Maryland	No new cases	4 total flocks 4 commercial >1.7 million birds
Texas	No new cases	1 total flock 1 commercial flock 1,700 birds
Iowa	No new cases	19 total flocks 15 commercial 4 backyard >13.3 million birds
Georgia	1 new case 1 backyard	1 total flock 1 backyard 490 birds

# US Wild Bird H5N1 Avian Influenza

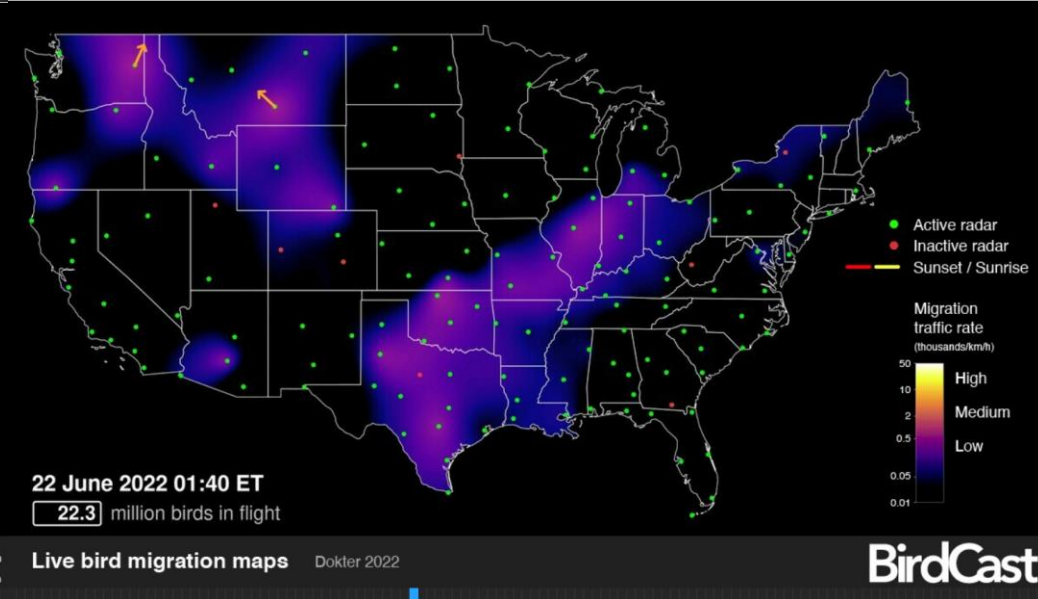
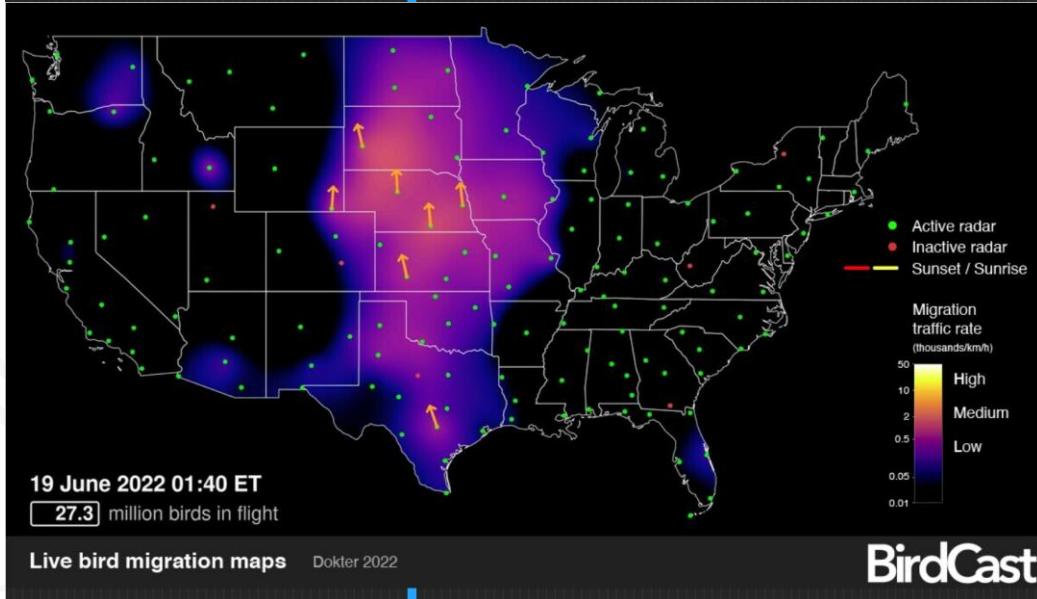
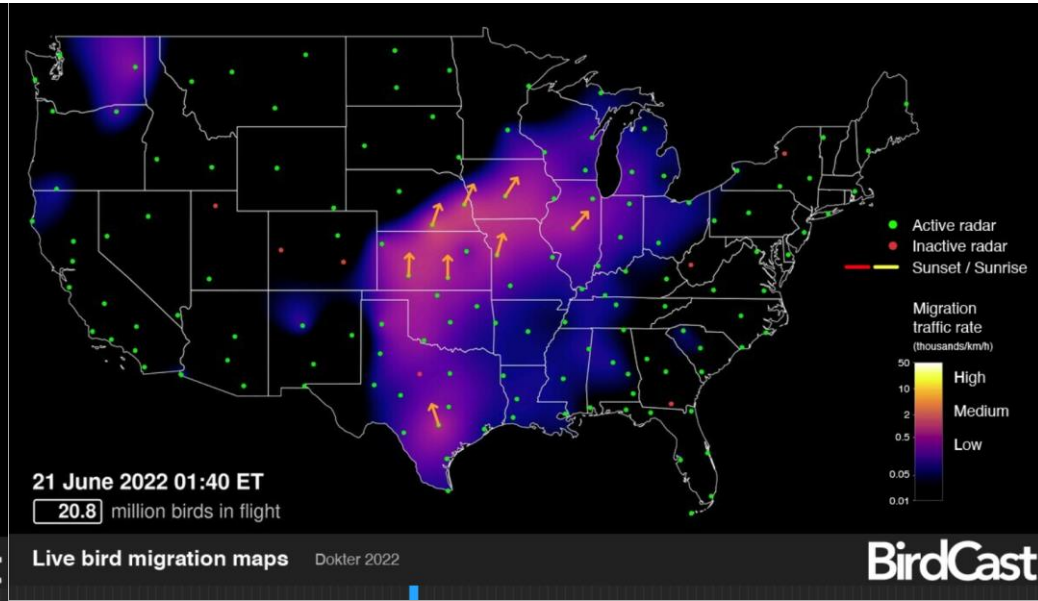
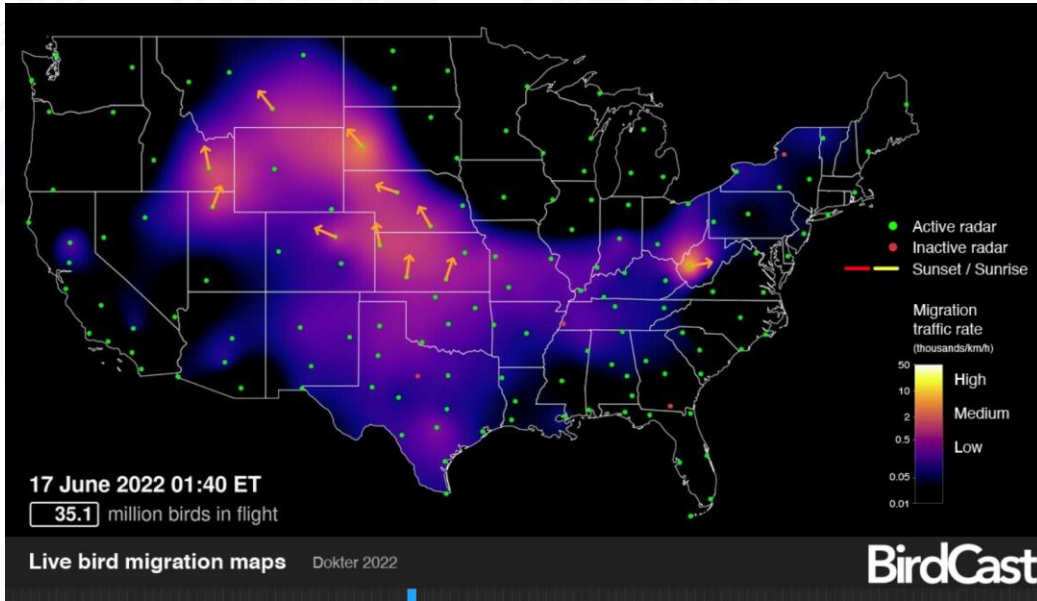
- [US Wild Bird Information](#)
- No new states reporting detections
- Small number of new reports across the US.
- MI has greatest number at 28, 8 other states report single digit increases

[Live bird migration map](#)

Declining numbers June 16-22, 2022  
<35 million birds each night



# Wild Bird Migration



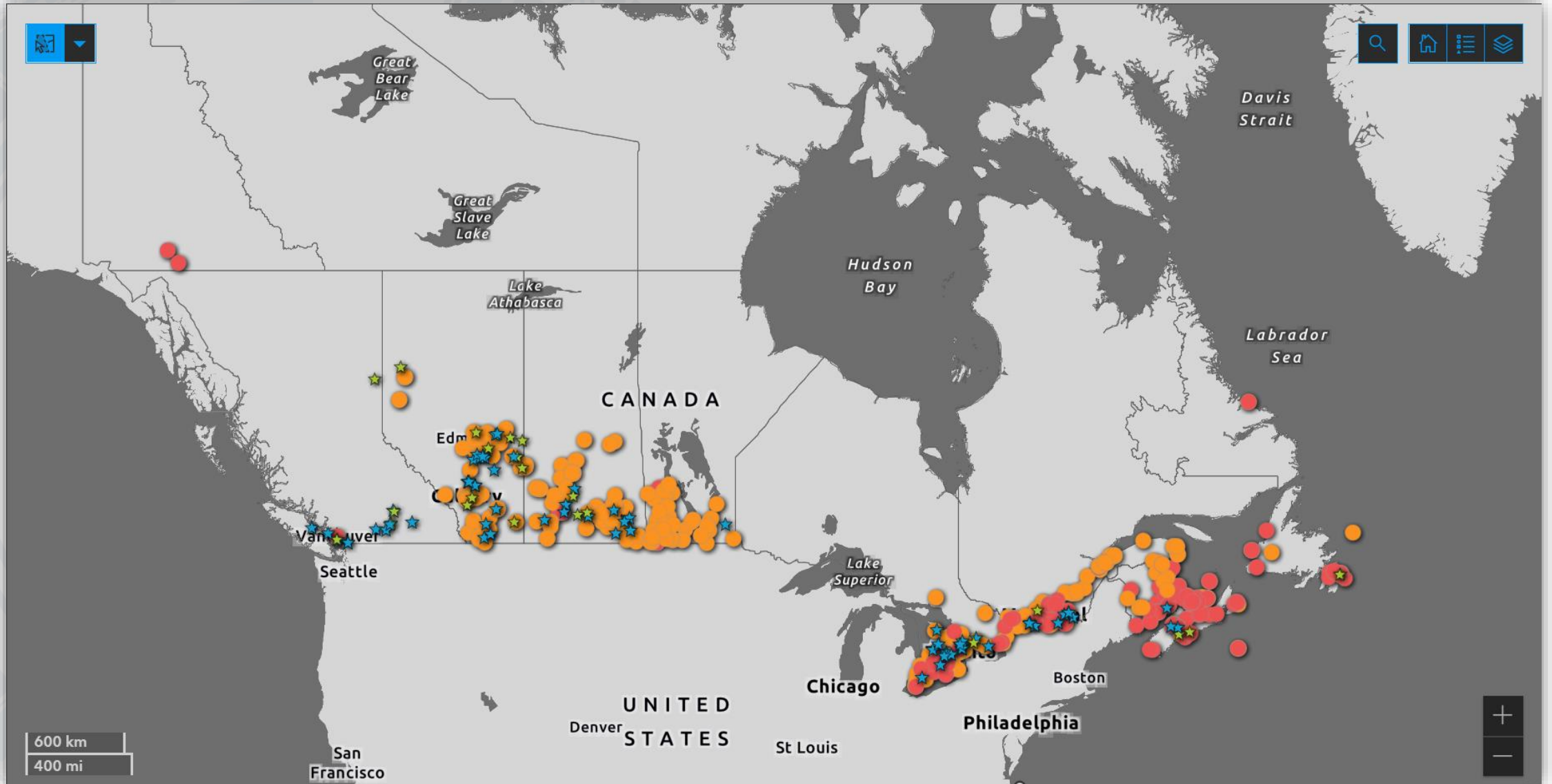


# Canadian Domestic Detections

Canadian Detections in Domestic Birds [CFIA Website](#) as of June 22, 2022

Province	New Cases Since June 9 <sup>nd</sup> , 2022	All Cases
British Columbia	1 new case 1 small flock poultry	1 Captive wild non poultry 4 Commercial Poultry 9 Small Flock Poultry 4 Small Flock non-poultry
Alberta	No new cases	19 Commercial Poultry 2 Small Flock Poultry 10 Small Flock Non-poultry
Saskatchewan	No new cases	5 Commercial Poultry 5 Small Flock Poultry 3 Small Flock Non-Poultry
Manitoba	1 new case 1 small flock non poultry	1 Commercial Poultry 2 Small Flock Non-Poultry
Ontario	No new cases	20 Commercial Poultry 5 Small Flock Poultry 1 Small Flock non-poultry
Quebec	No new cases	4 Commercial Poultry 2 Small Flock Poultry 1 Small Flock non-poultry
New Brunswick	No new cases	1 Small Flock Poultry
Nova Scotia	No new cases	2 Commercial Poultry 2 Small Flock Non-poultry
Newfoundland and Labrador	No new cases	2 Small Flock non-poultry

# Wild Bird H5N1 Avian Influenza



## Resurgence of H5N6 avian influenza virus in 2021 poses new threat to public health - The Lancet Microbe

- Increased occurrence of H5N6 in China in last couple of years
- Of particular concern is that the genomes of H5N6 viruses were continuously reassorted with those of 2.3.4.4b H5N8 viruses of wild bird-origin
- 2/5 of the genotypes isolated had 100% mortality in mouse models
- The circulating 2.3.4.4b H5N6 viruses are antigenically distinct from the strains in the commercial vaccine (poultry) in China