

# WINTER IS COMING

## Wildlife Hazard Management Committee Meeting

November 19<sup>th</sup>, 2025

Steven Gurney, MSc, AWB®  
Wildlife Biologist, WCAA



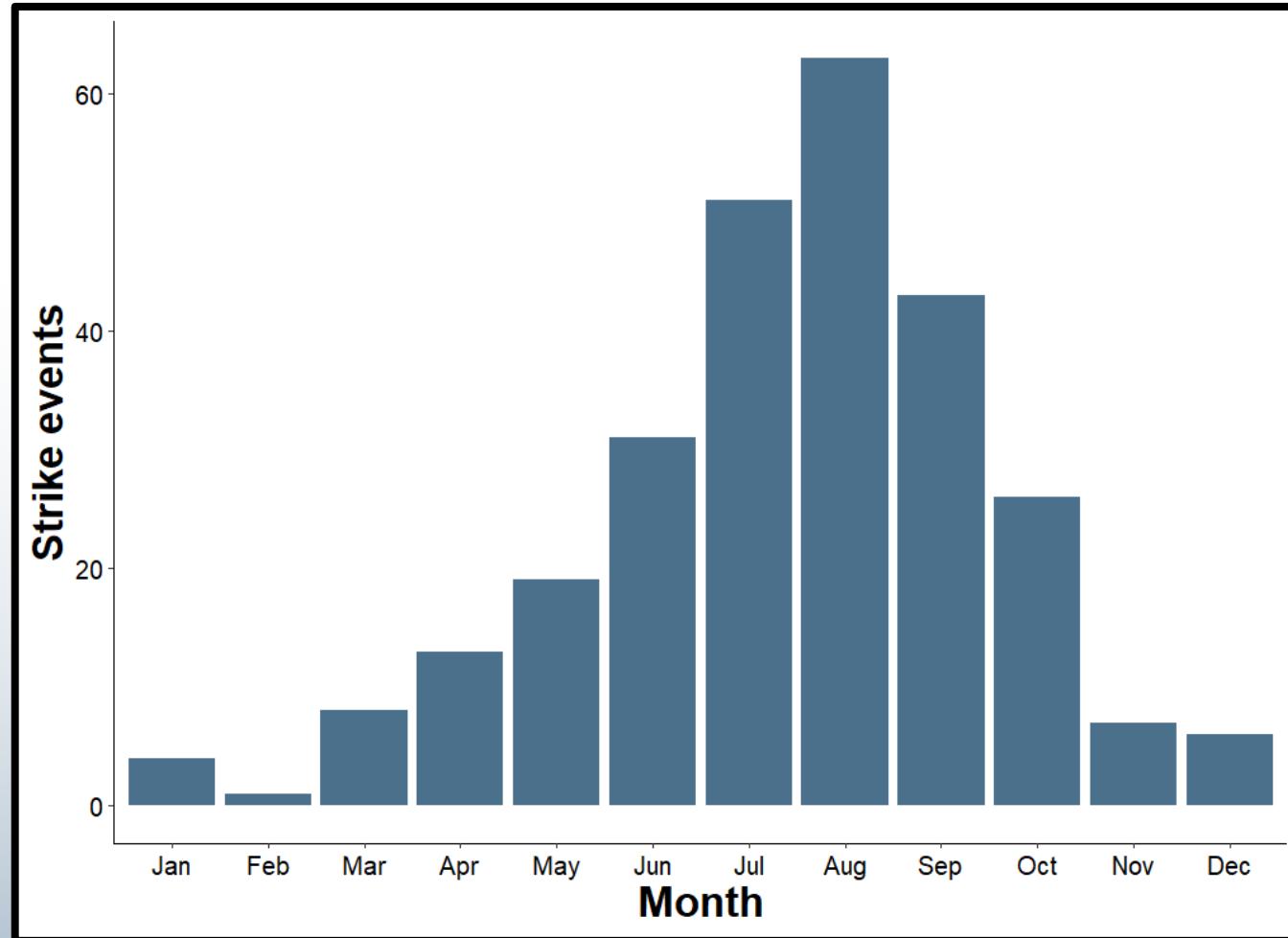
United States  
Department of  
Agriculture

# WINTER IS COMING

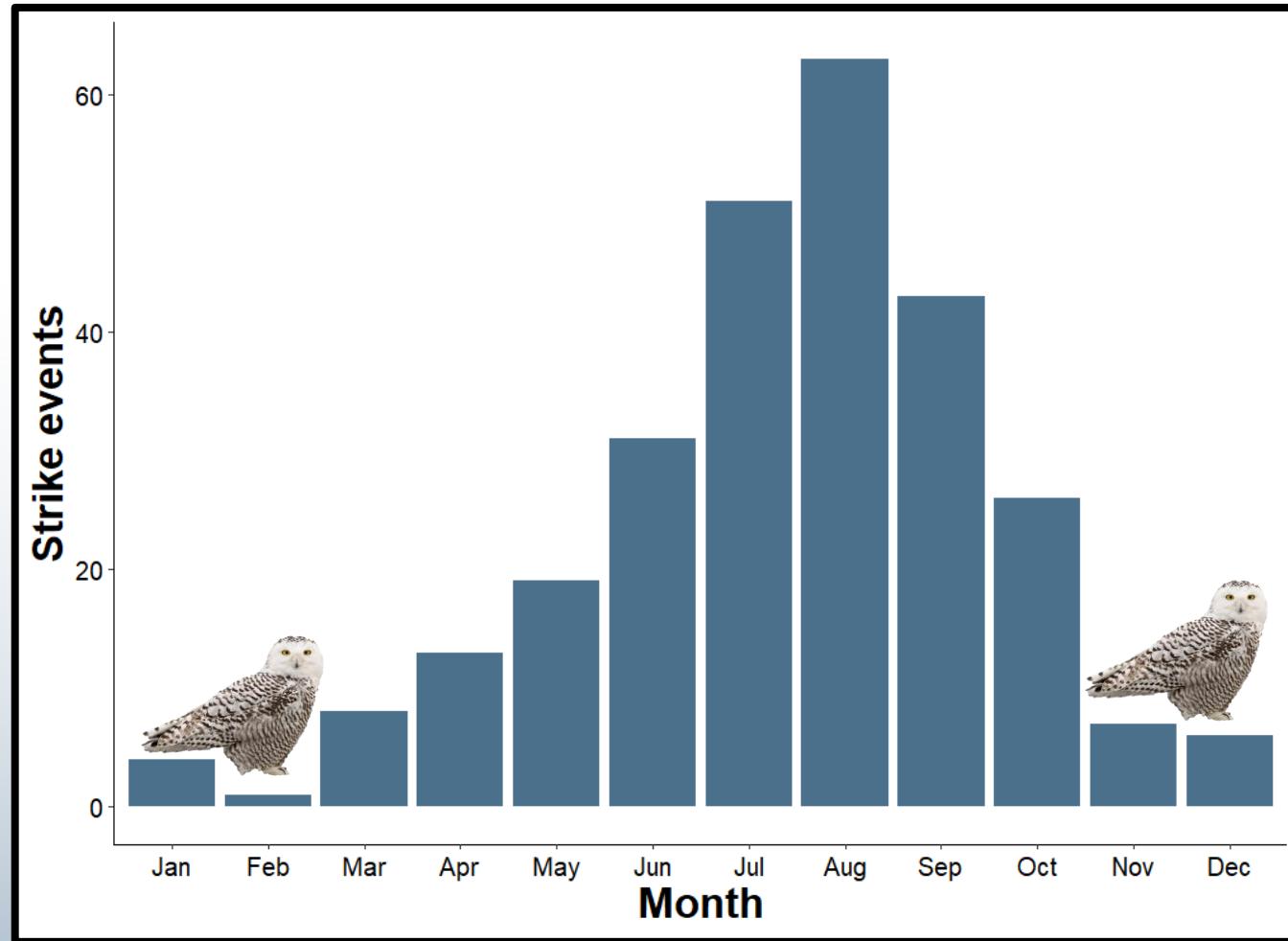


And so are snowy owls!

# We are coming out of our high-strike season...



# We are coming out of our high-strike season... But strikes can be more severe in winter



# Snowy owls are a big bird!



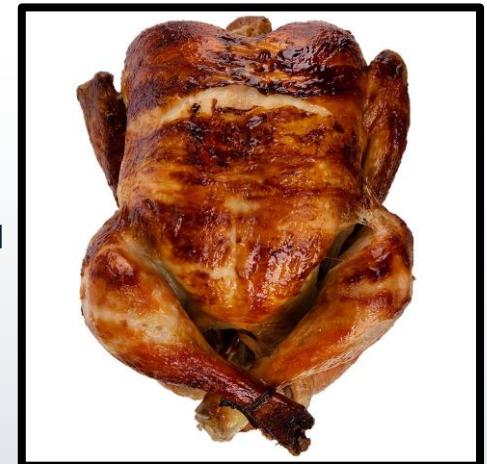
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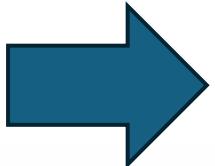


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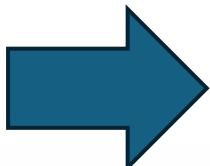
# Snowy owls stay low to the ground

Perching,  
cover

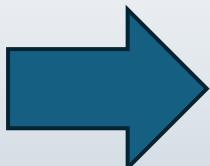


# Snowy owls stay low to the ground

Perching,  
cover



Hunting



# Snowy owls are attracted to airports

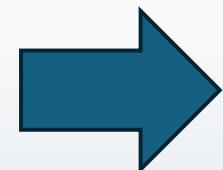
- Breed in Arctic
- Winter south  
(including MI)
- Favor open landscapes

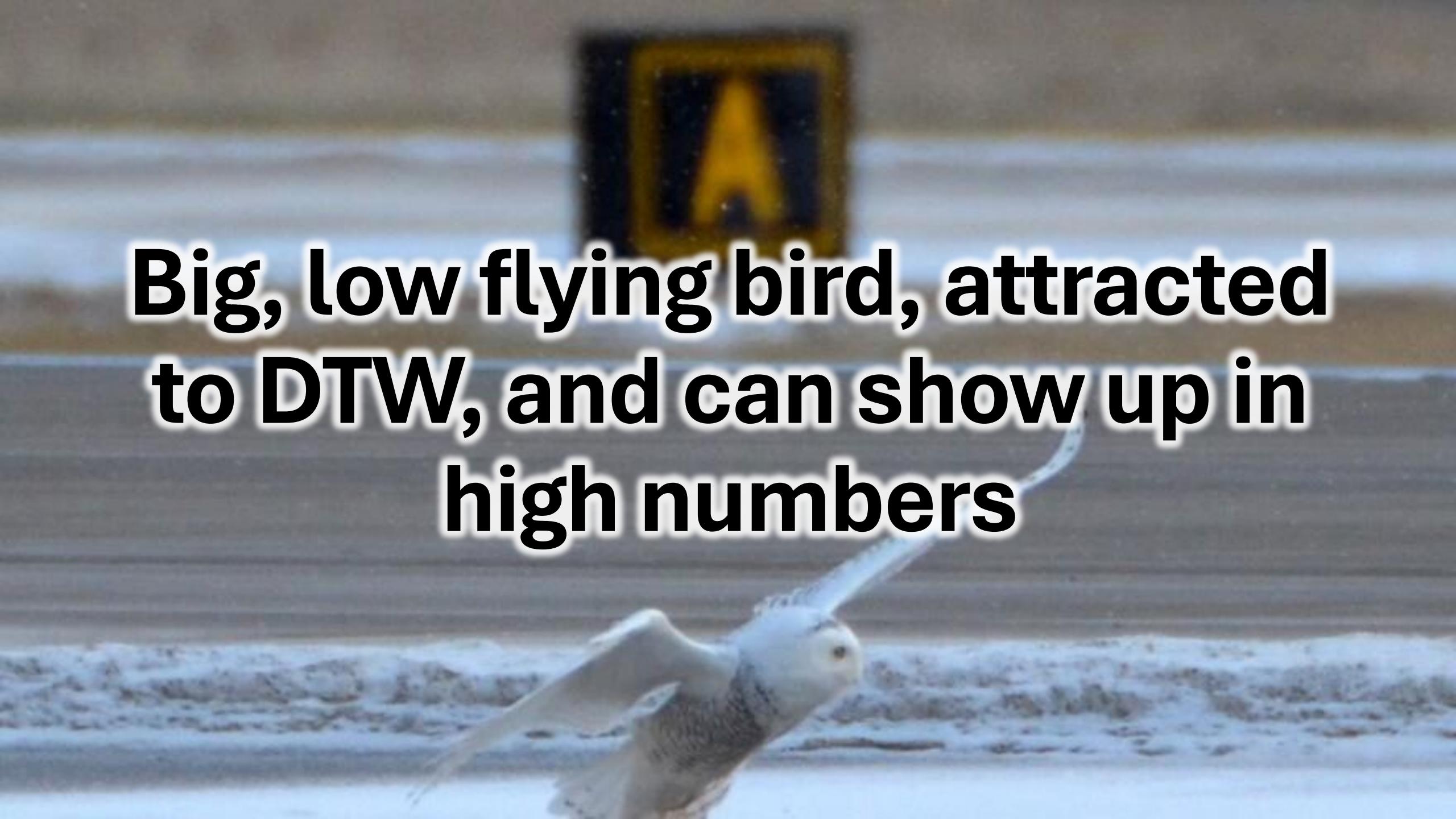


*(Picture credit: A. Messing)*

# Snowy owls can migrate in high numbers

- Eruptive years
- Irregular mass movement of individuals across large distances
- Linked to high reproductive success



A large bird, possibly a gull or tern, is captured in flight, flying low over a body of water. Its dark wings and light body are clearly visible against the bright sky. The bird's reflection is clearly visible on the slightly rippled water surface below.

**Big, low flying bird, attracted  
to DTW, and can show up in  
high numbers**



**Big, low flying bird, attracted  
to DTW, and can stand up in  
high tides**

**BIG  
PROBLEM**

# We ranked how hazardous species are at DTW using an established methodology used by the FAA, USDA, and USGS.

(Dolbeer et al. 2000; Zakrejsek and Bissonette 2006; Dolbeer and Wright 2009; DeVault et al. 2011, 2018; Schwarz et al. 2014; Altringer et al. 2024)



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# Snowy owls are the most hazardous species at DTW

Species	% of strikes with damage	% of strikes with substantial damage	% of strikes with effect on flight	Composite rank
Snowy owl	18	9	14	1
Turkey vulture	50	50	0	2
Double-crested cormorant	50	0	0	3
Gulls	7	2	8	4
Canada goose	17	0	0	5
Red-tailed hawk	7	0	4	6
Rough-legged hawk	12	0	0	6
Coyote	0	0	33	6
Mallard	10	0	0	9
European starling	3	0	3	10

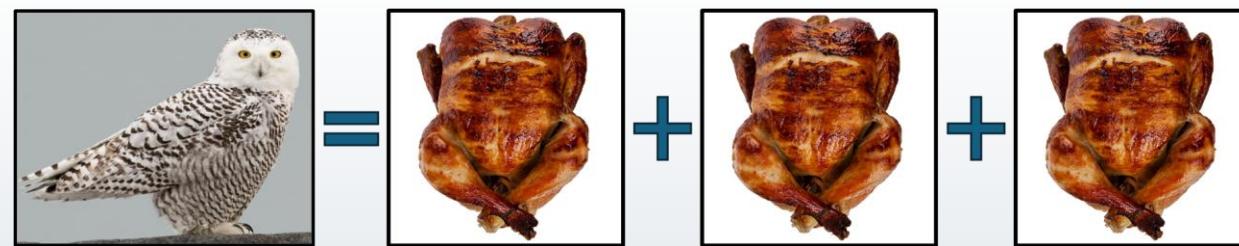
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Double-crested cormorant	50	0	0	3
Gulls	70	0	8	4
Canada goose	10	0	0	5
Red-tailed hawk	70	0	4	6
Rough-legged hawk	12	0	0	6
Coyote	0	0	33	6
Mallard	10	0	0	9
European starling	3	0	3	10

Compared to 17<sup>th</sup>  
most hazardous  
species nationwide

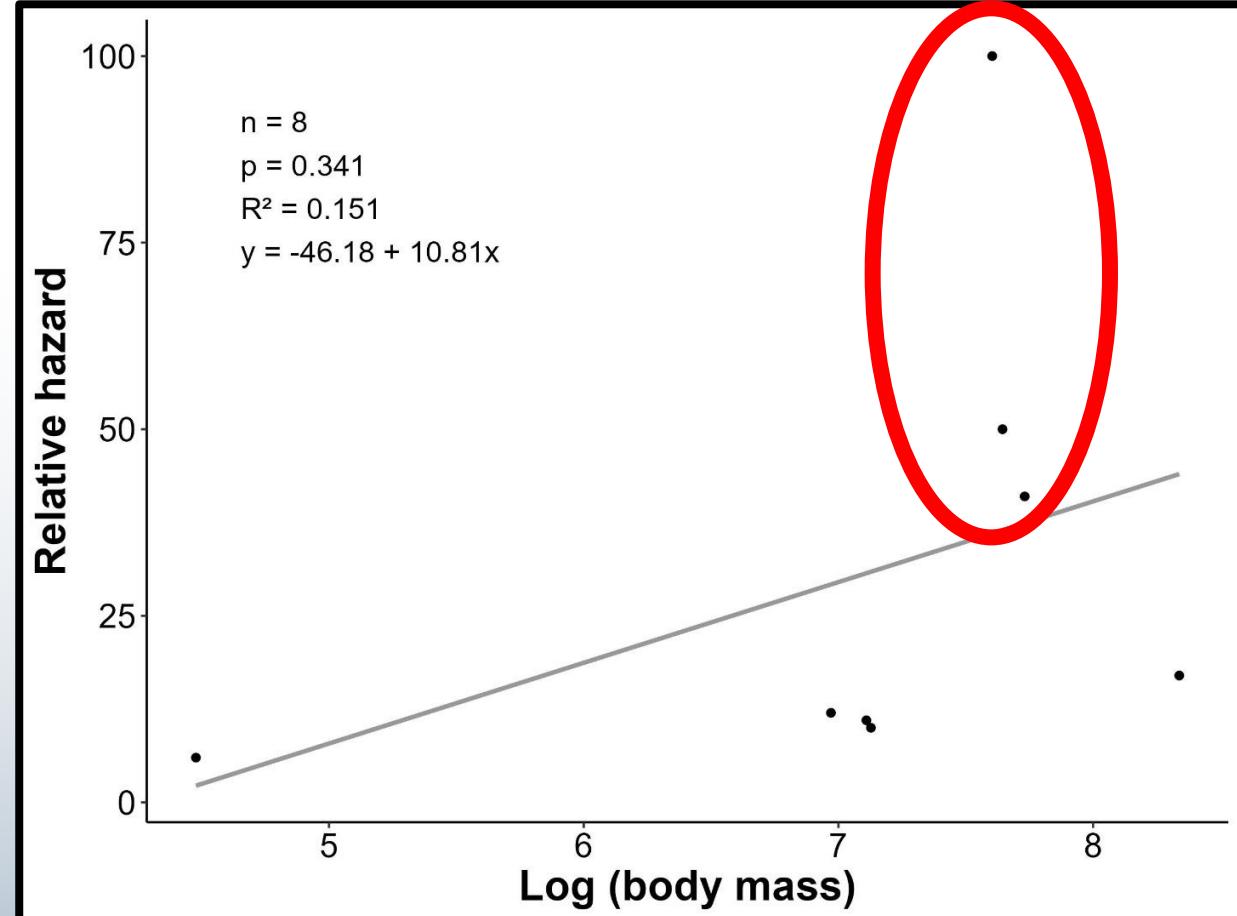
# The bigger the bird, the bigger the hazard

Species	Body mass (g)
Snowy owl	2,279
Turkey vulture	2,006
Double-crested cormorant	2,089
Herring gull	1,147
Ring-billed gull	566
Gulls	857
Canada goose	4,181
Red-tailed hawk	1,224
Rough-legged hawk	1,065
Coyote	15,876
Mallard	1,246
European starling	88



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# Snowy owls are a unique problem to DTW

Airport	Strikes	Damaging strikes

# Snowy owls are a unique problem to DTW

- 2nd highest # of strikes
- Most damaging strikes

Airport	Strikes	Damaging strikes
General Edward Lawrence Logan	39	3
Detroit Metro Wayne County	22	4
Chicago O'hare	19	0
John F Kennedy	14	1
Chicago Midway	8	0
Cleveland-Hopkins	8	0
Minneapolis-St Paul/Wold-Chamberlain	7	1
Willow Run	5	0

# Snowy owls are a unique problem to DTW

- 2nd highest # of strikes
- Most damaging strikes
- Willow Run ranked 8<sup>th</sup>
- Greater-DTW area = national hotspot

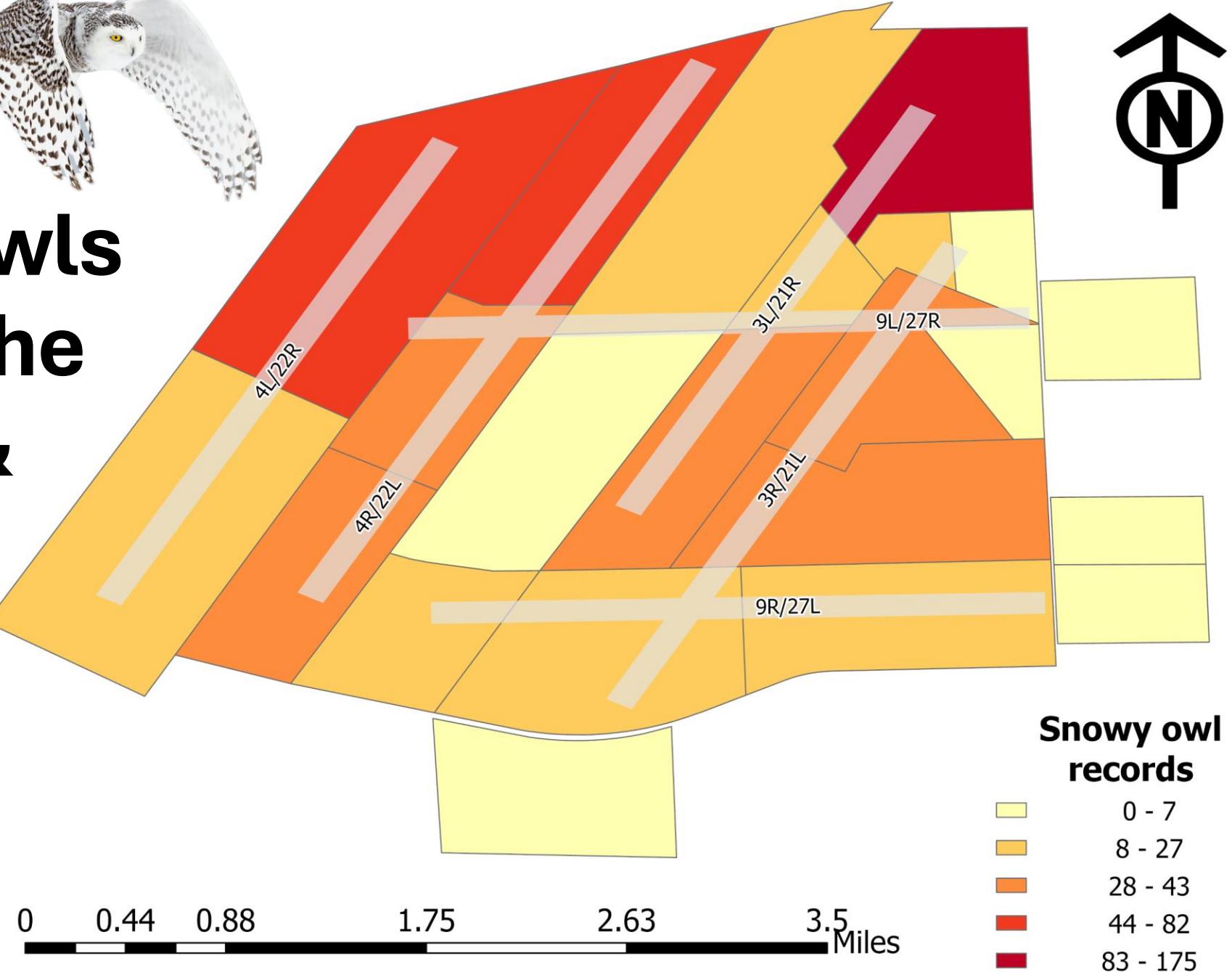
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**Look twice → Snowy owl or grocery bag?**



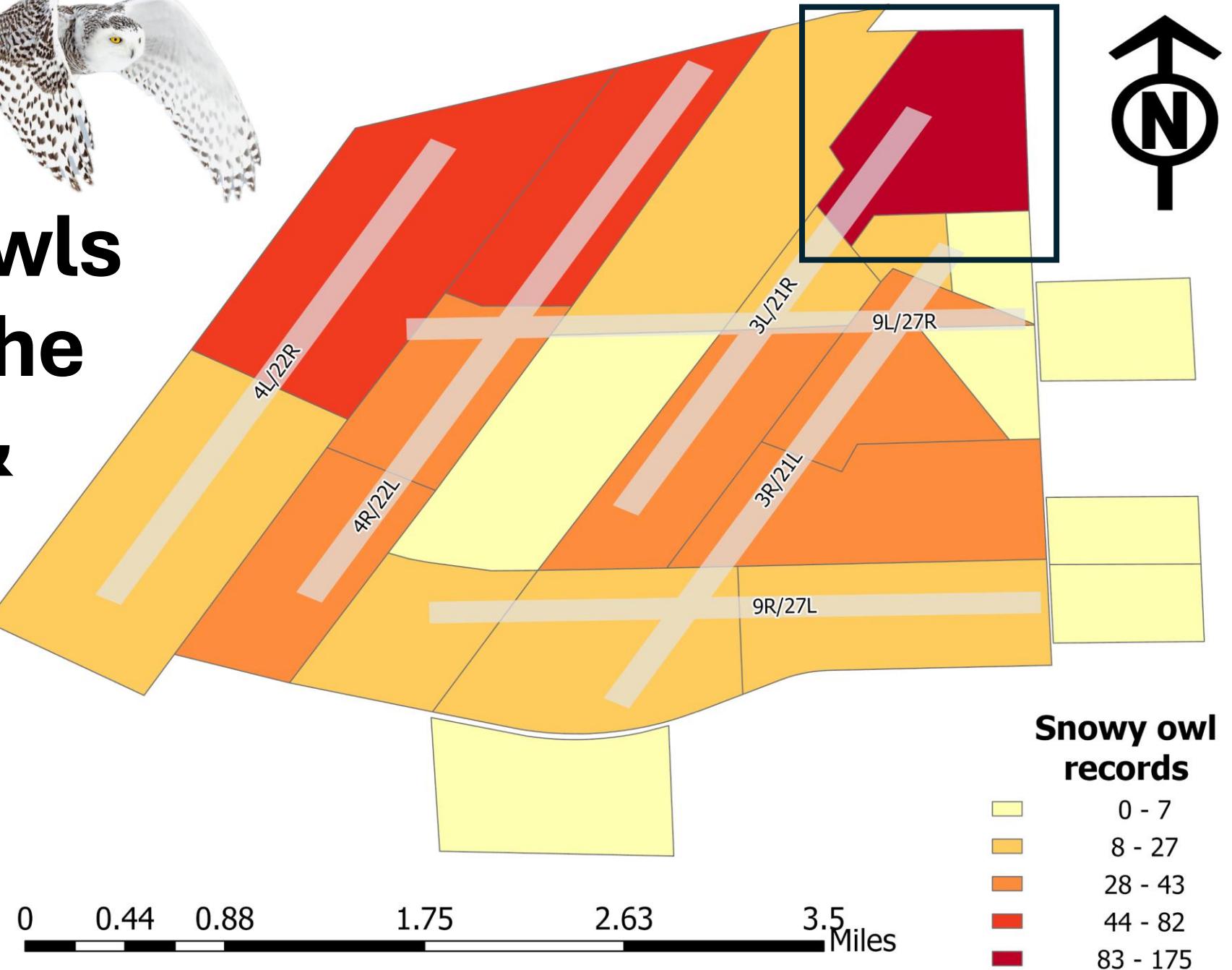


# Most snowy owls observed in the northeast & northwest





**Most snowy owls  
observed in the  
northeast &  
northwest**



# Snowy owls in the northeast

- Open landscape
- Cover objects
- Structures
- Light poles



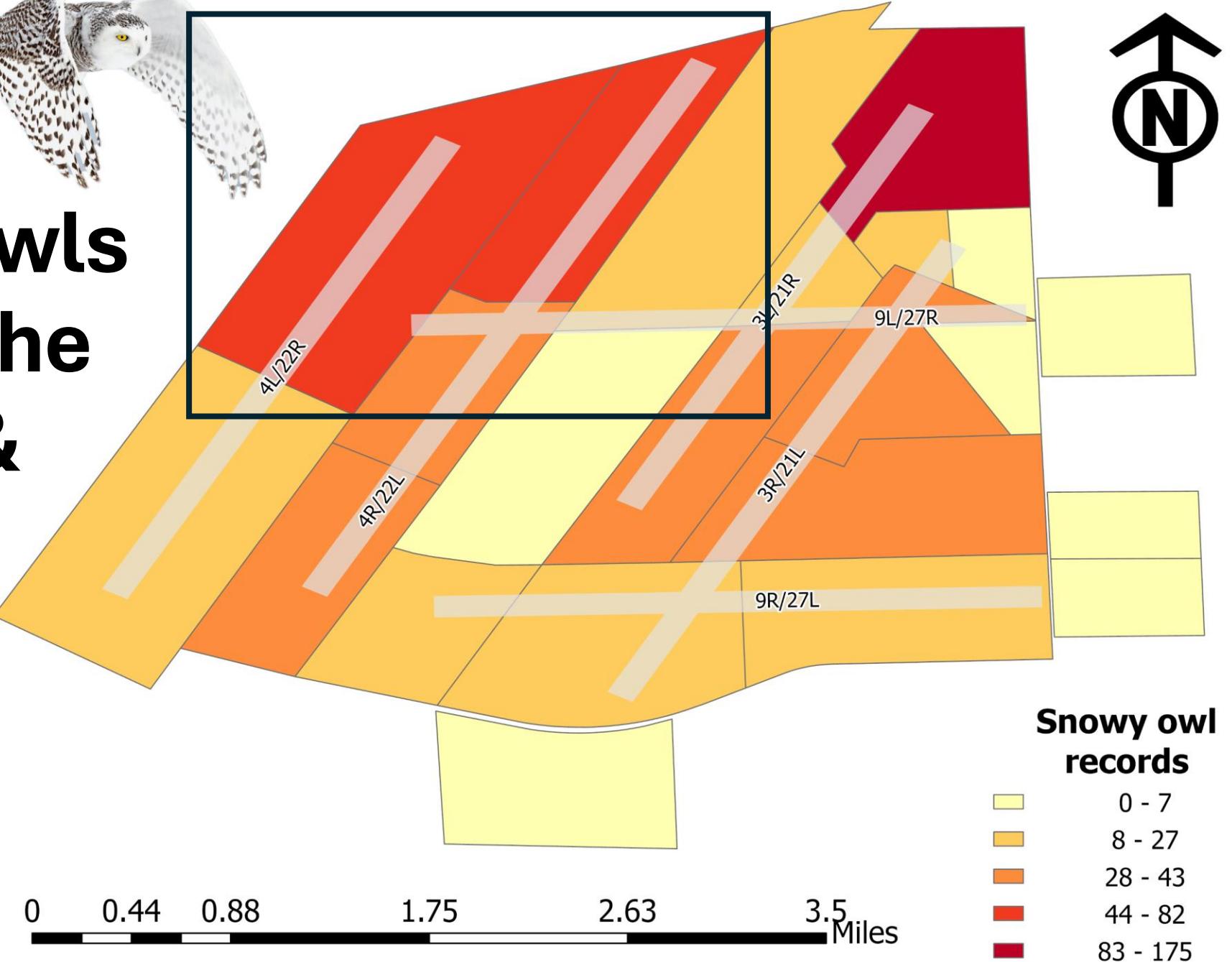
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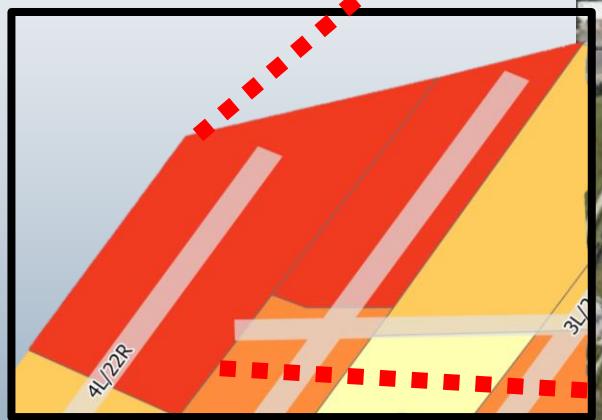


# Most snowy owls observed in the northeast & northwest



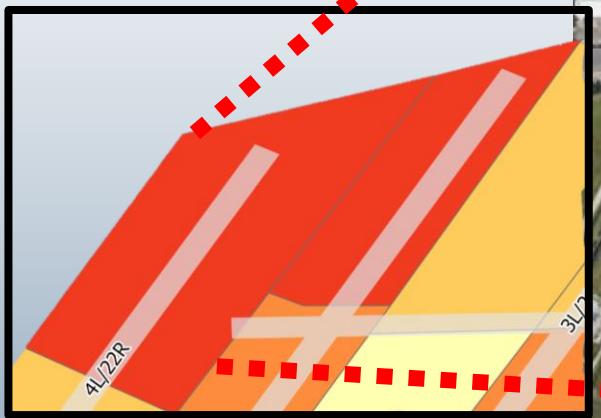
# Snowy owls in the northwest

- Open landscape
- Cover objects
- Structures
- Light poles

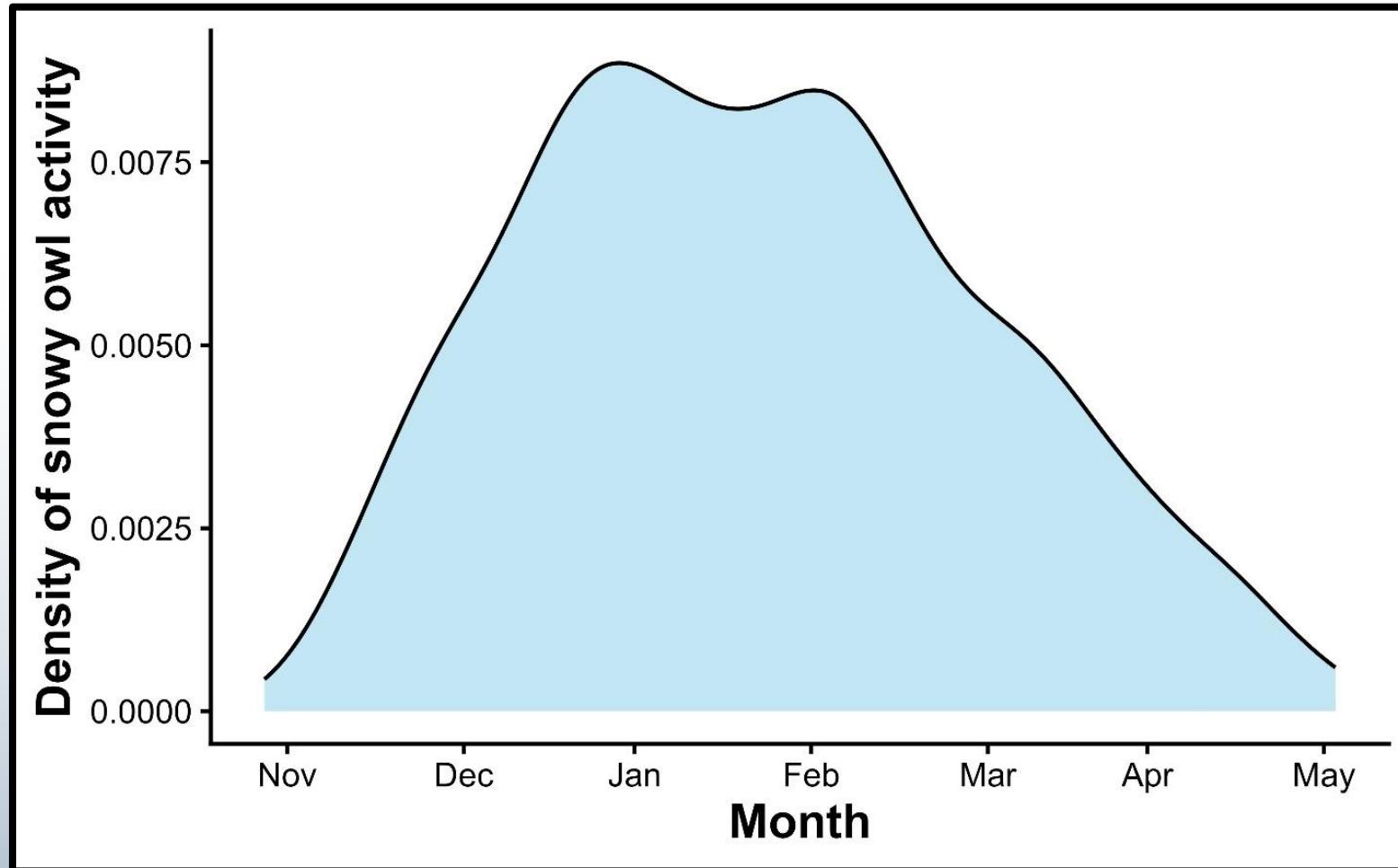


# Snowy owls in the northwest

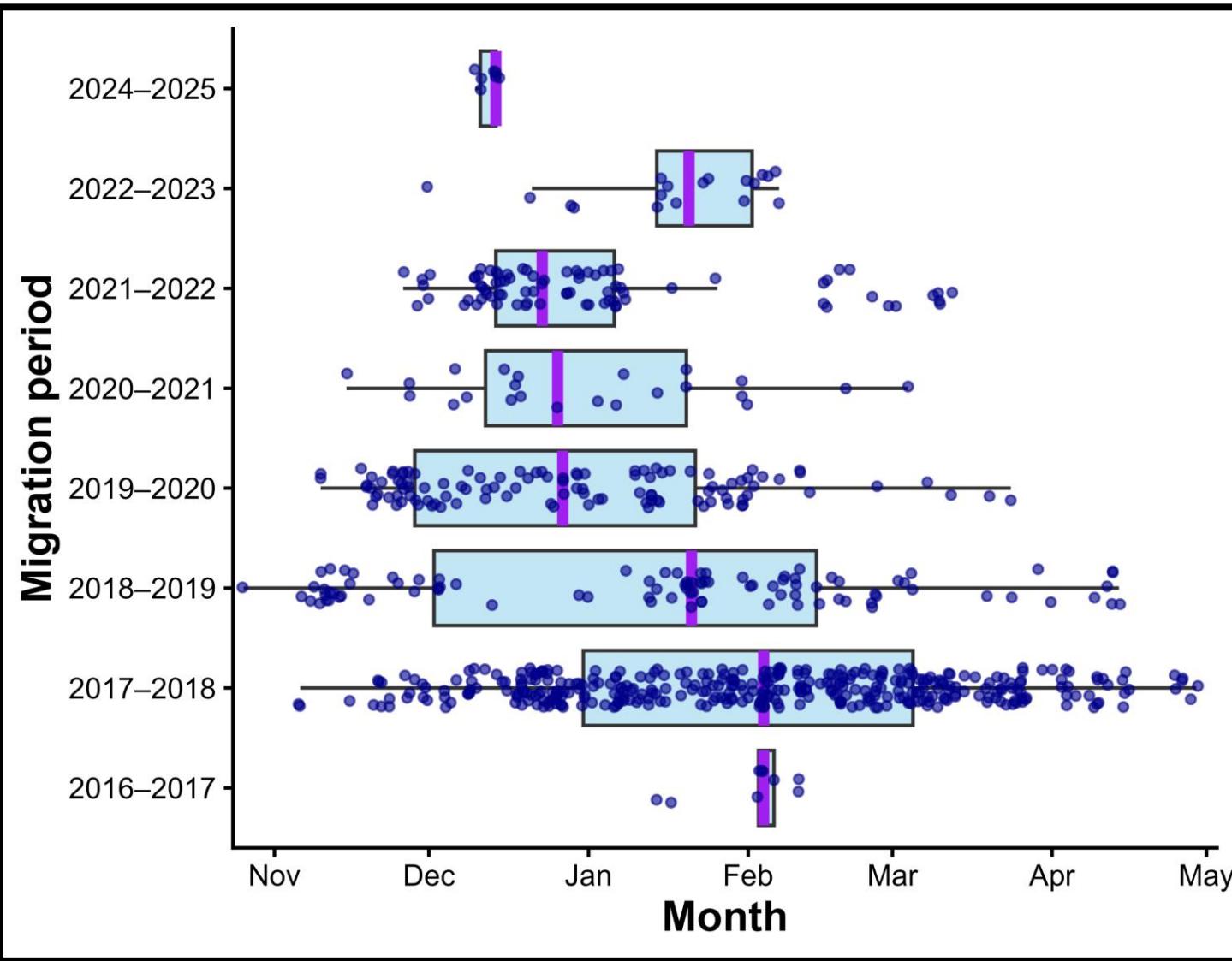
- Open landscape
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# Snowy owl activity peaks in late December & early February

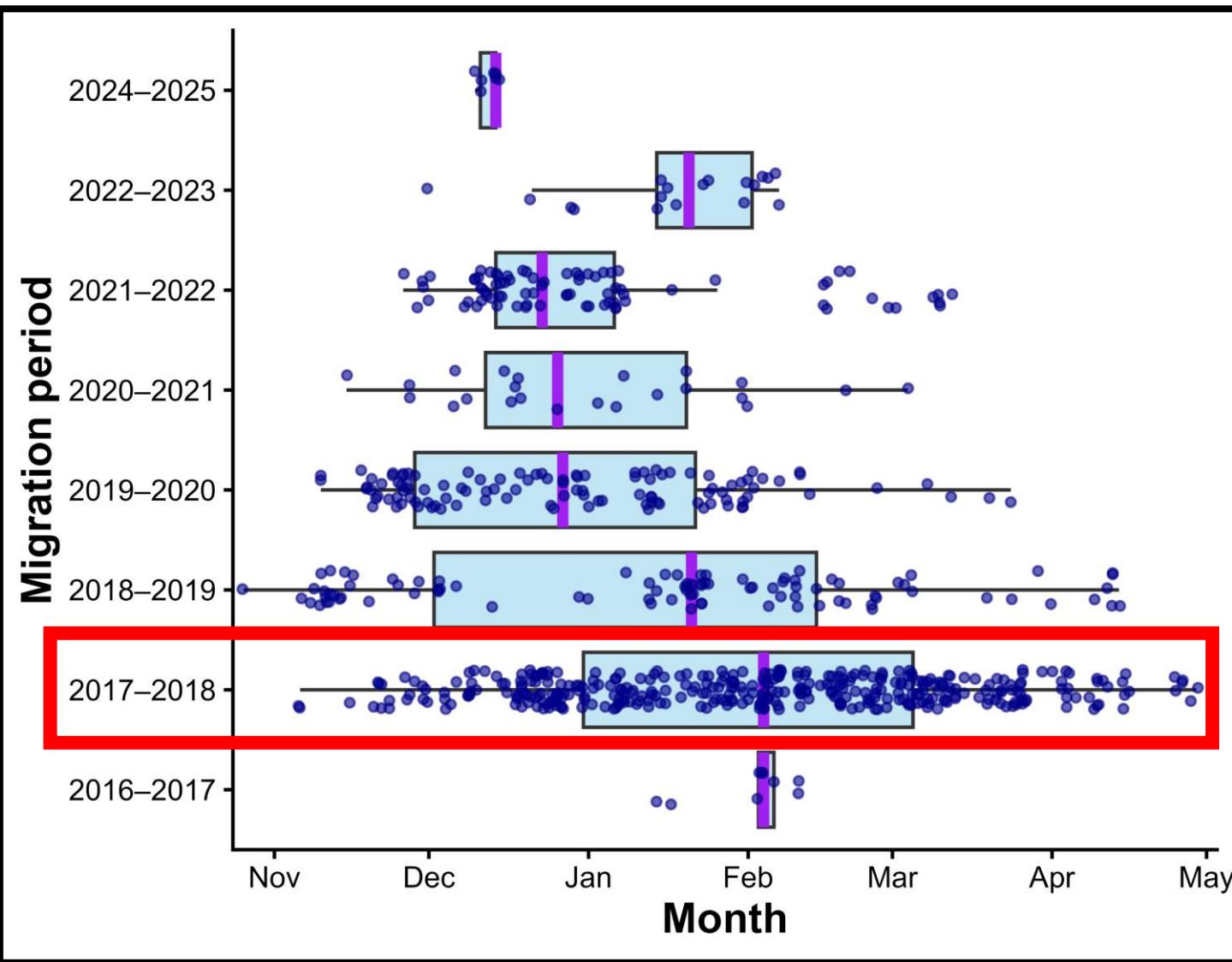


# More snowy owl activity when populations irrupt



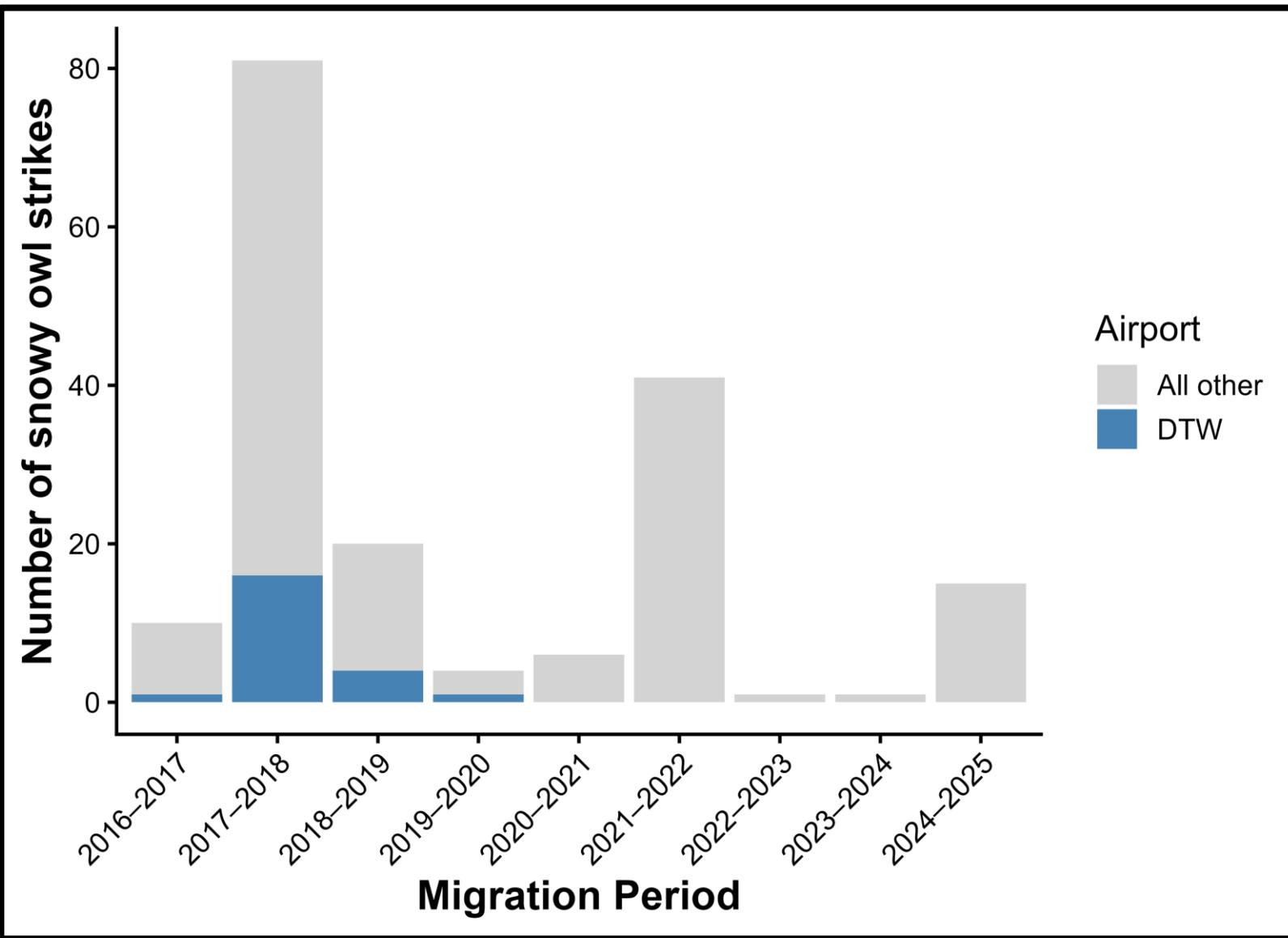
- Activity varies by winter
- Irruptive winter 2017–2018
- Very high activity

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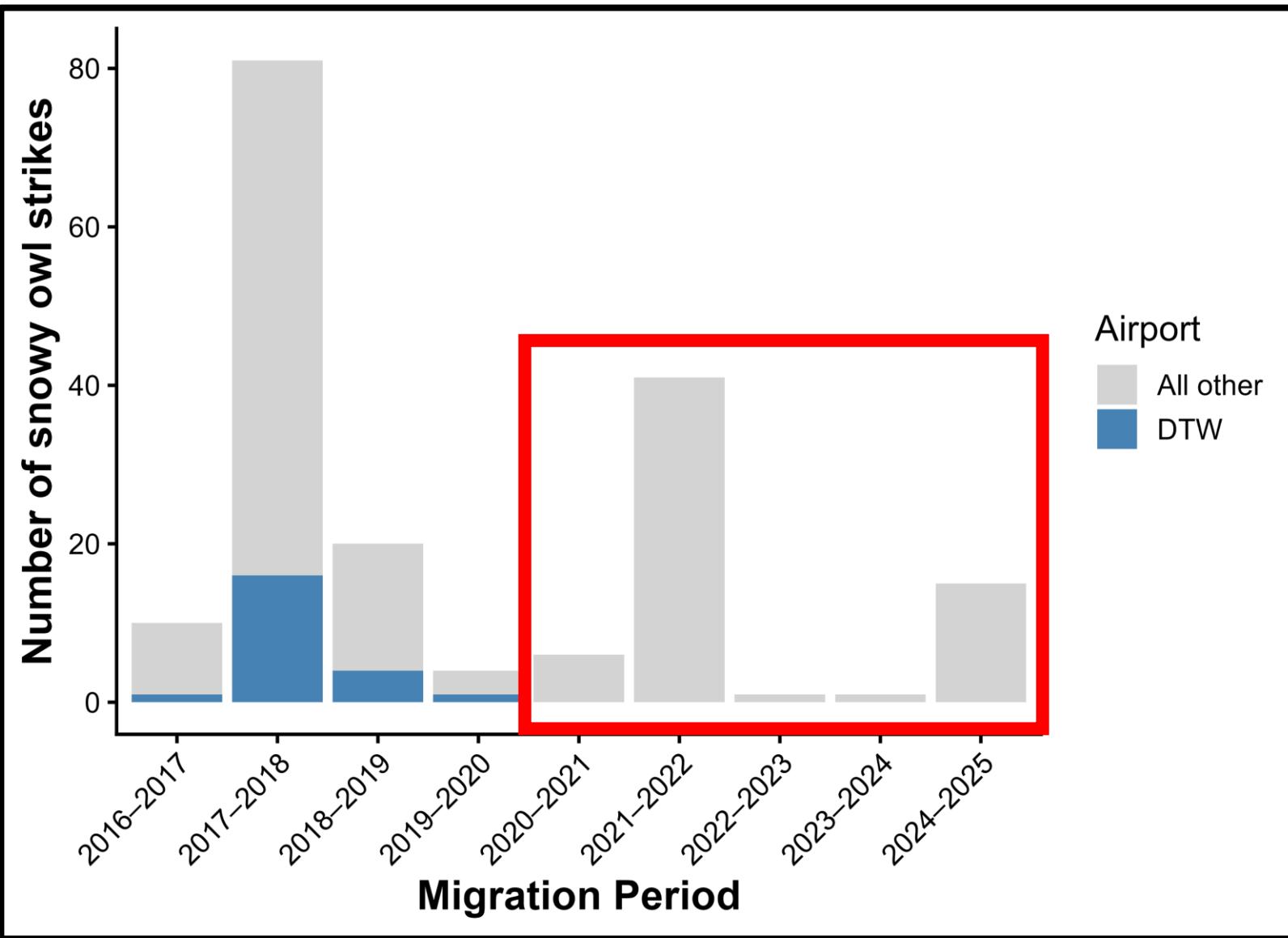
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# Irruptive winters = Higher strike rates



- Reflected in national records
- Irruptive winters driver of high snowy owl strike rate
- Very successful management in recent years

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# Best management practice → Trap and relocate

- Active & passive trapping
- 98 trap and relocation events since 2016
- ~11 trap and relocation events per year

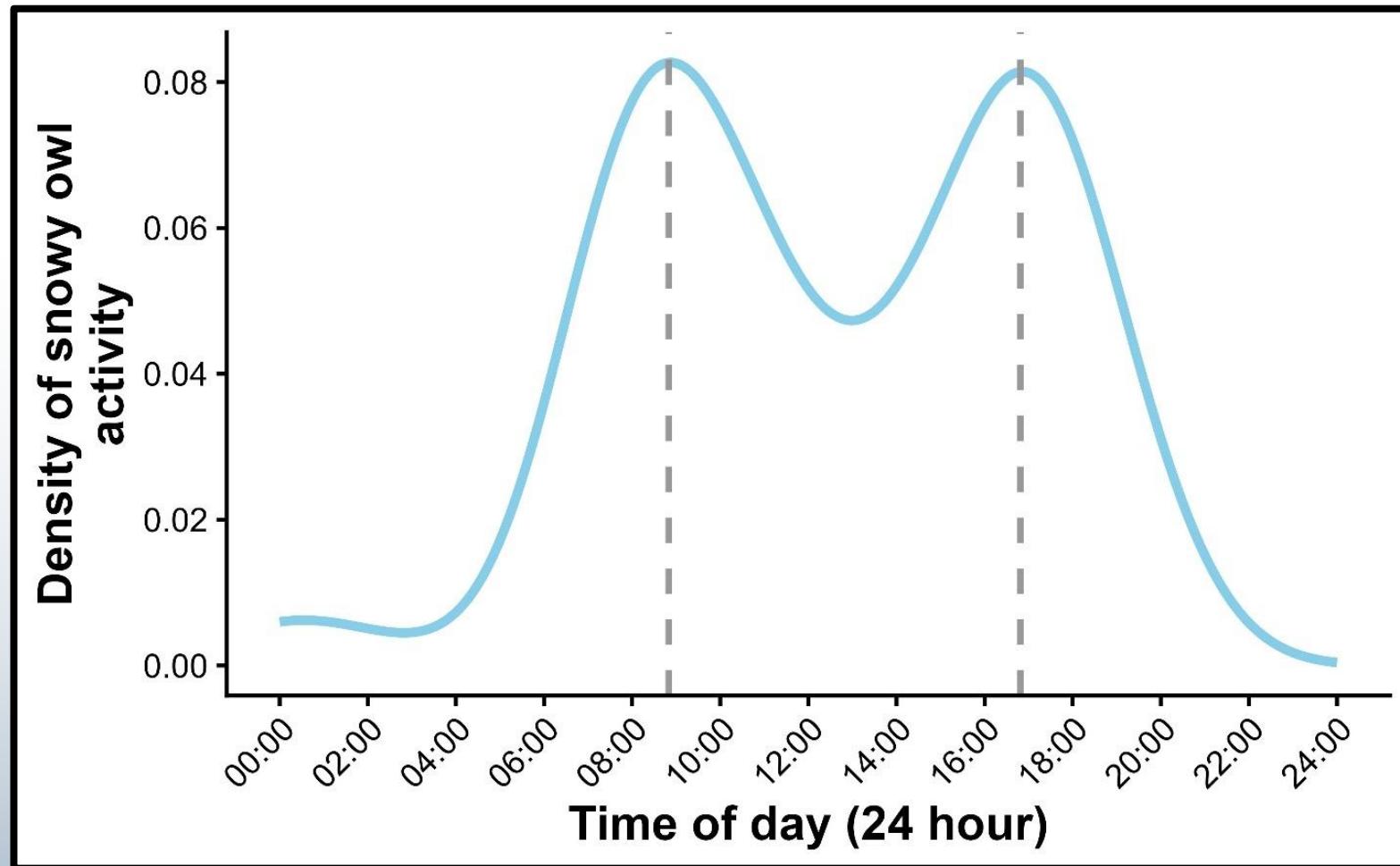


(Picture credit: A. Messing)



- Bird in **Runway Safety Area** → Harass from area immediately & notify Wildlife personnel
- Bird in the movement area → Watch & notify Wildlife personnel
- Other personnel → Notify Dispatch immediately
- Airfield Operations → Submit record (Survey123)

# You're most likely to see a snowy owl around sunrise & sunset

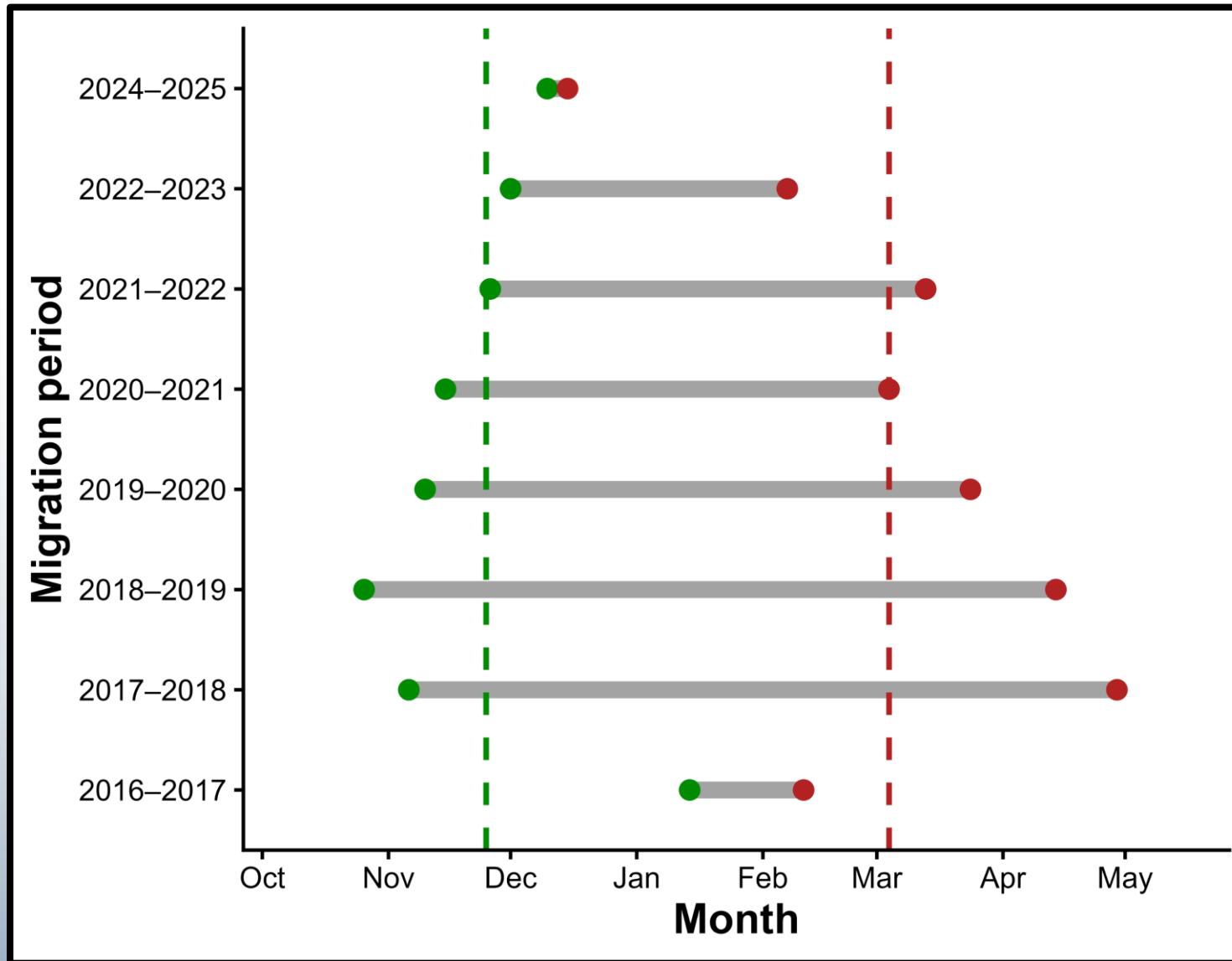


# Early bird: Nov 12<sup>th</sup>, 2025



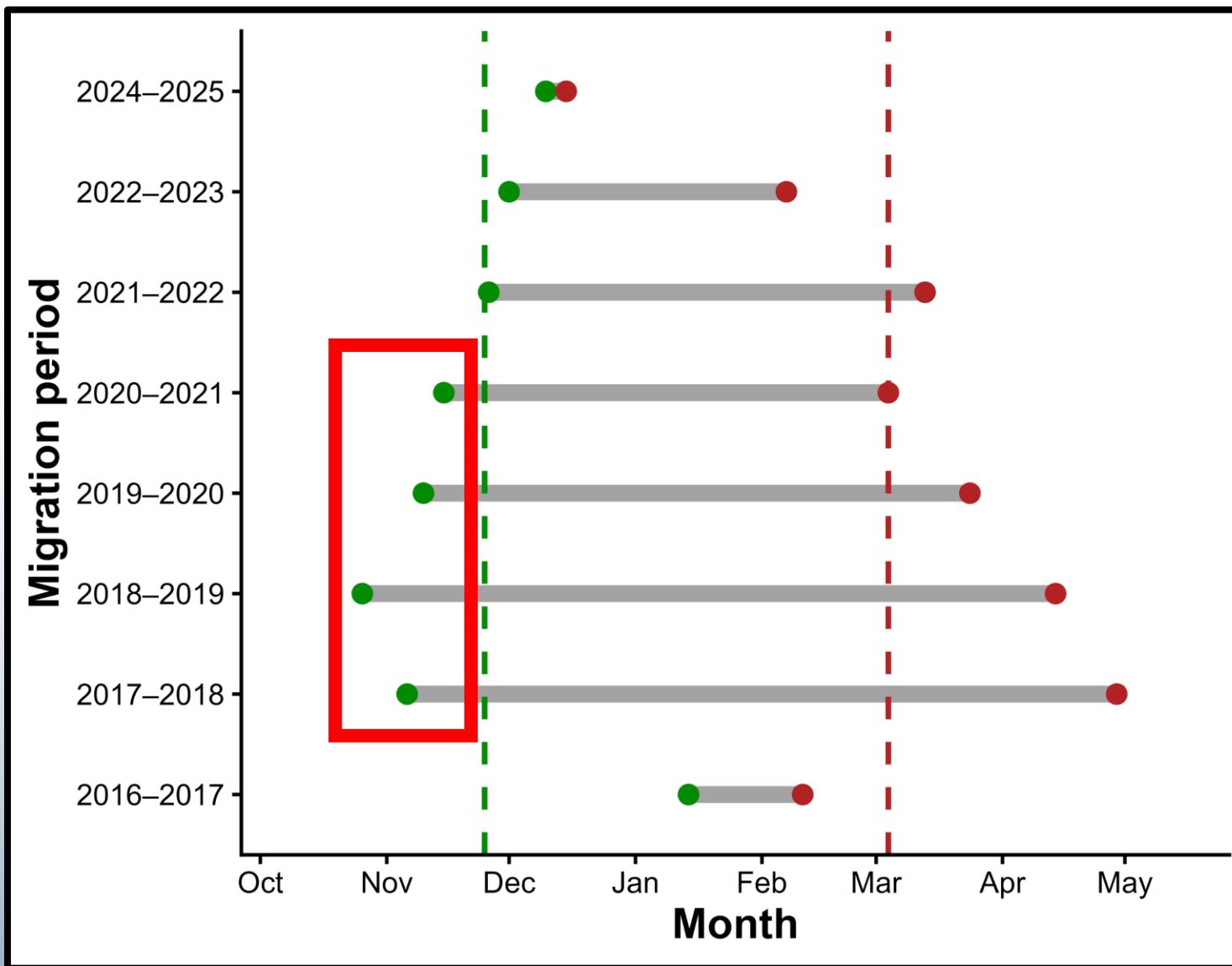
- Ops observed bird twice, active around sunrise
- Ops reported observations to Wildlife staff
- Ops submitted data
- Bird went inactive midday
- Wildlife team communicated capture plan with Ops
- Successful capture around sunset
- Great teamwork and communication

# Snowy owls are generally at DTW from December to March



- Arrival as early as October 26<sup>th</sup>
- Final departure as late as April 29<sup>th</sup>

# Potential for high level of snowy owl activity this winter



- Arrive before Nov 25<sup>th</sup> = potential for high activity overall
- Nov 12<sup>th</sup> arrival this year