Bat Monitoring at Minnekhada Park 2025 Results Summary

Nov 12, 2025

Report by Erin Monastersky, MPA Volunteer Coordinator with additional comments by Steve Smith, MPA Board Sponsor.

Summary

2025 marked the fifth year of the Minnekhada Park Association managing the bat counts at Minnekhada Farm. There are two main count sites, the Dairy Barn (Cow/Sheep barn) and the Horse Stables. The Dairy Barn contains maternity colonies of two co-habitating species of bats, Yuma Myotis and Little Brown Myotis, while the horse stables contains a unique maternity colony of Townsend Big Eared Bats.

Overall, as you can see from the charts, the results of the counts show an improving trend for both colonies over the last three years, after a noticeable drop in 2022.

Methods

Bat Counts

A uniform counting technique was used for each individual site to ensure consistency. The number of volunteers varied from 7 to 10 participants each survey night. Four surveying nights were conducted in June (prior to pups emergence) and four counts were conducted in July (after pup emergence).

The surveys began around 15 minutes before sunset to align with the foraging time of the bats. Volunteers were paired up into teams of two and assigned to specific areas for the evening. Each volunteer was given a handheld counter to record the number of bats observed and instructed to note the time of the first and last bat sightings. Surveys concluded 10 minutes after the final bat observation.

At the horse stables, one volunteer in the pair counted the bats entering while the other counted the bats exiting. The difference between the two counts represented the total number of bats observed for that area. Counts from all stable areas were then summed to produce an overall count for the horse stables each night.

At the cow/ sheep barn, each volunteer took their own count of bats exiting the barn for their assigned area. The two counts within each pair were averaged to produce an overall number for that area. Finally, totals from all barn areas were combined to provide the nightly count for the barns.

Bat Call Data

Acoustic observations were collected using the Echo Meter Touch 2 Pro application on an iPad. The program was used during the bat counts to help in identifying bat species

during each survey. Additionally, a bat foraging survey was conducted at Minnekhada Marsh using the same device for an overview of bat foraging activity and behaviour in the area.

Incidental Observations

Earlier this year, we were informed by the BC Community Bat Network (BC Bats) that additional vigilance was recommended in order to reduce the potential spread of White Nose Syndrome (WNS). Although there were no confirmed mortalities in BC yet, the fungus causing WNS was identified in samples. As a result we started spraying volunteers' shoes with an alcohol based product. It is recommended that anyone entering areas frequented by bats do the same.

During a survey in June it was observed that a door leading to the roof of the stables, where the colony resides, was blown open. This raised concerns of possible temperature fluctuations that could affect the colony and the ability for predators to enter. As well, on June 9th a Barn Owl was observed entering one of the barns, suggesting the presence of predator pressure on the bat colony, although owls have been seen in past years.

Specifically on the Townsend Big Eared Bats, we are noticing an increasing pattern where many of the bats are not exiting the stables. It is quite possible that we are undercounting by some margin as we only count bats that exit. The only way to do a definitive count would be to carefully access the actual colony while they are inactive.

The Bat Condo that was built in 2020 is still not seeing much activity, however a smaller bat box which is attached to the outside is seeing activity with several bats spotted and some guano collected. A suggestion was made to take some of the fallen boards from the Dairy Barn and attach them to the condo, in order to create a familiar scent. This technique was used effectively at other locations.

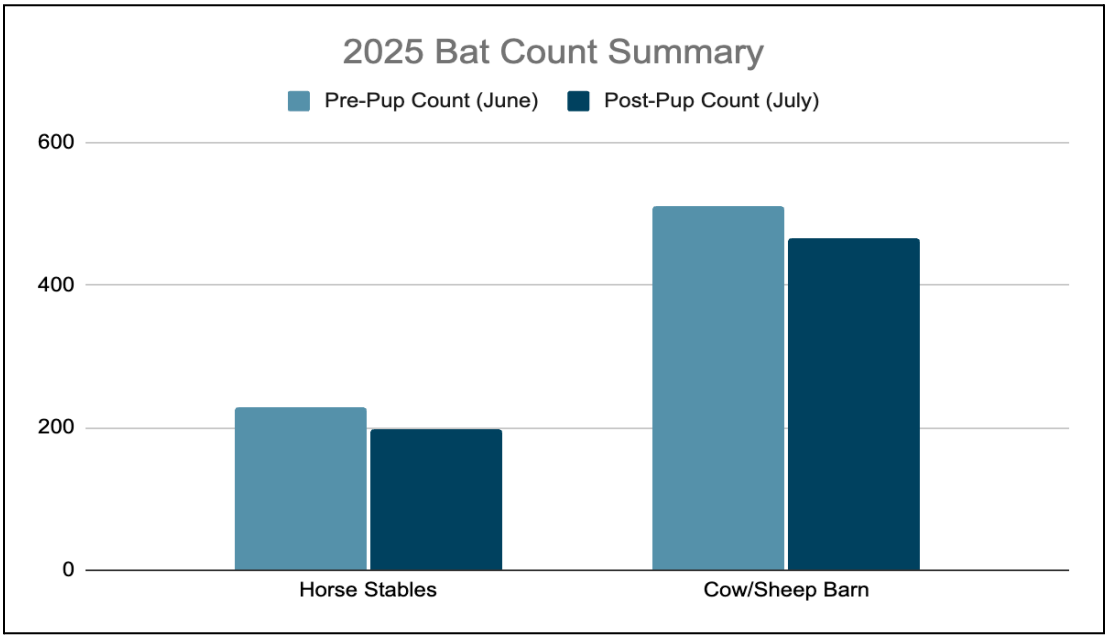
Bat Count Summary:

Table 1: Pre-Pup Counts (June)

	Horse Stables	Cow/Sheep Barn	Volunteers
09 June 2025	N/A	475	8
11 June 2025	228	N/A	8
16 June 2025	N/A	546	7
18 June 2025	231	N/A	7
Average	**229**	**510**	**7**

Table 2: Post -Pup Counts (July)

	Horse Stables	Cow/Sheep Barn	Volunteers
14 July 2025	N/A	358	8
16 July 2025	157	N/A	10
21 July 2025	N/A	573	7
23 July 2025	237	N/A	8
Average	**197**	**465**	**8**

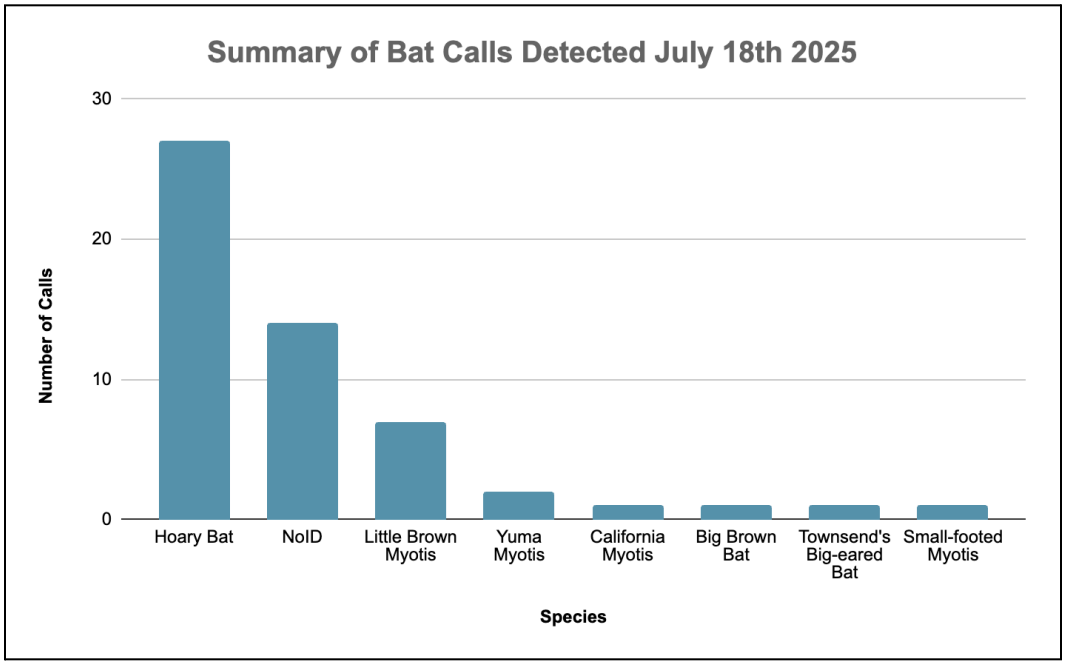


Foraging Survey Summary:

Table 3: Summary of Bat Calls Detected July 18, 2025 at Minnekhada Marsh on Lodge Trail

Primary Bat Call ID*	Number of Calls**	Call %	Secondary Call ID
LASCIN - Hoary Bat	27	49%	LASNOC - Silver-haired Bat
NoID	15	27%	N/A
MYOLUC - Little Brown Myotis	7	12%	MYOVOL - Long-legged Myotis
MYOYUM - Yuma Myotis	2	4%	MYOCAL - California Myotis
MYOCAL - California Myotis	1	2%	MYOLUC - Little Brown Myotis
EPTFUS - Big Brown Bat	1	2%	LASCIN - Hoary Bat
CORTOW- Townsend's Big-eared Bat	1	2%	MYOTHY - Fringed Myotis
MYOCIL - Small-footed Myotis	1	2%	MYOLUC - Little Brown Myotis
Total Bat Calls Detected	55	100%	
Number of Bat Species Detected	8		

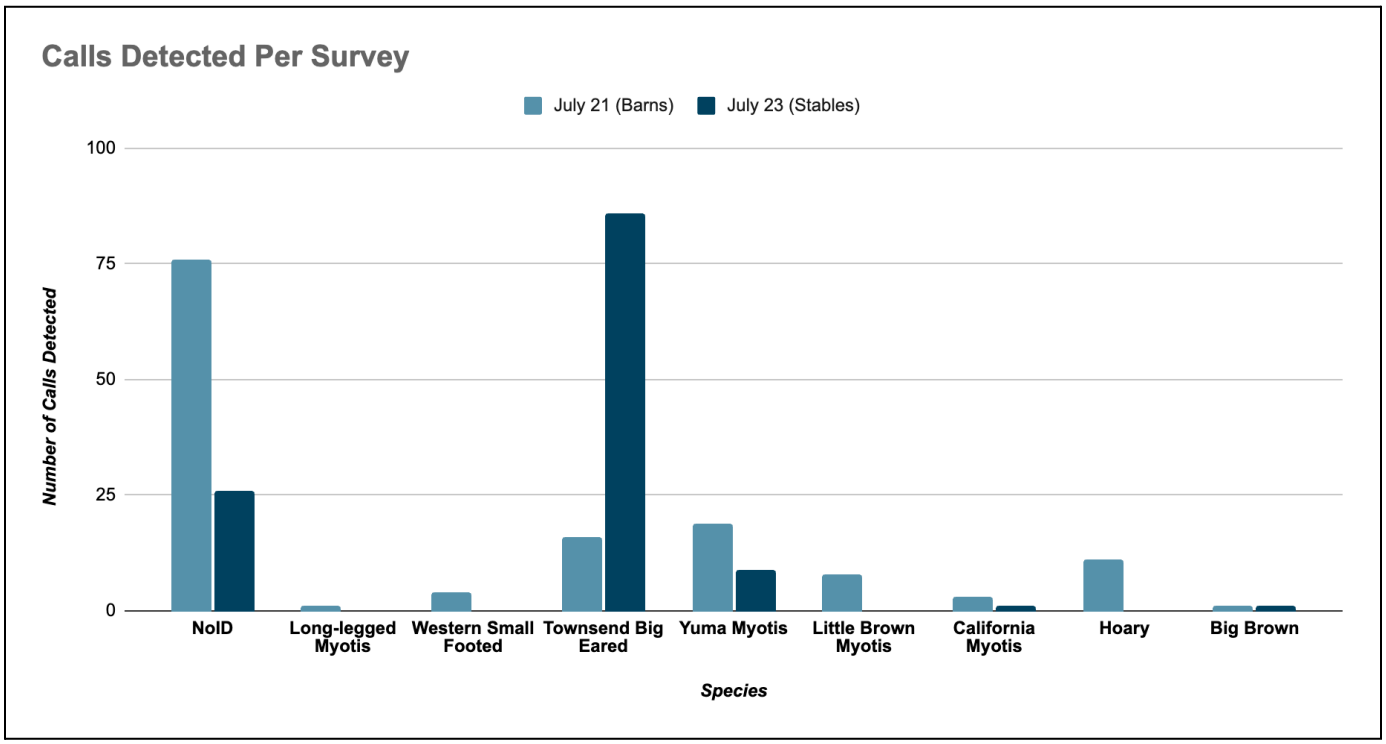
* Several results of the bat call auto-identifications for this session are uncertain and suspect.
** The number of bat detection calls does not reflect the number of different bats, as the same bat may make several calls within range of the bat detector, particularly if bats are foraging at a site.



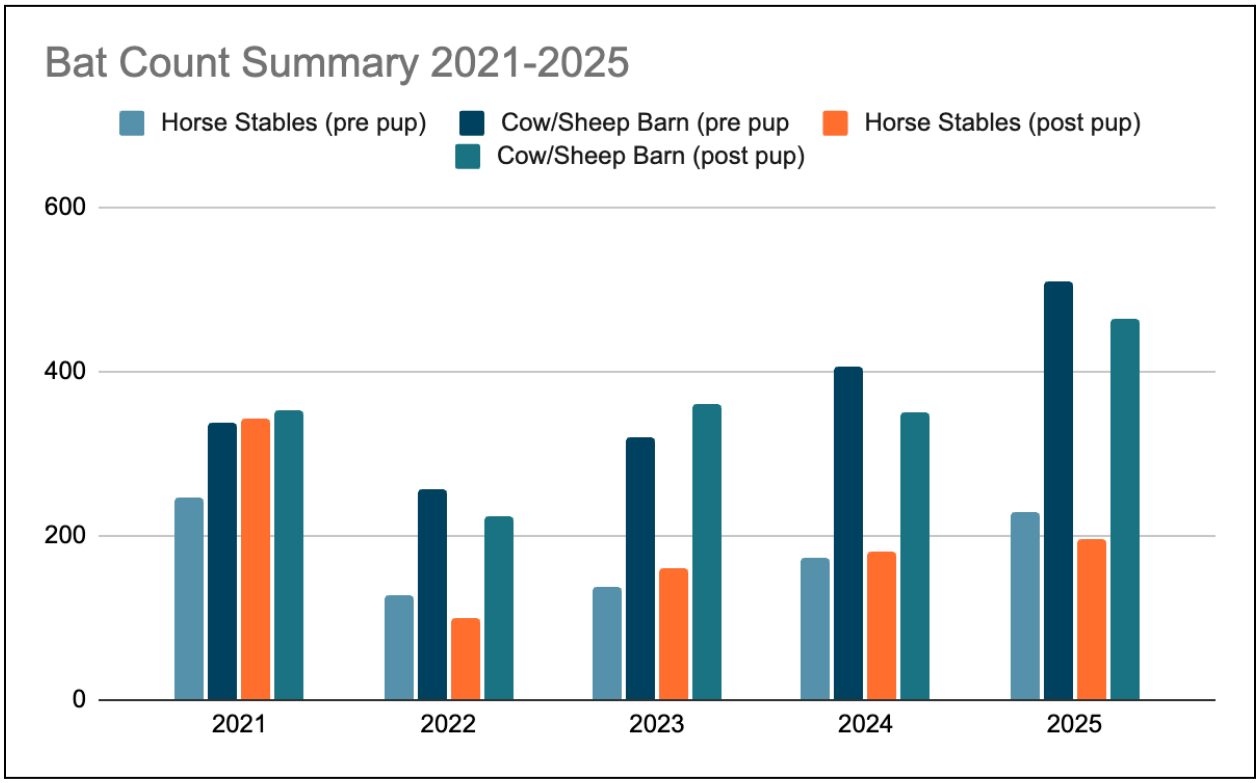
Acoustic Data Summary (non foraging nights):

Table 5: Summary of bat calls detected on bat count nights at Minnekhada Farm (July 21st at the barns, July 23rd at the stables)

	NoID	Long-legged Myotis	Western Small Footed	Townsend Big Eared	Yuma Myotis	Little Brown Myotis	California Myotis	Hoary	Big Brown
July 21st	76	1	0	86	19	8	3	11	1
July 23rd	26	0	4	16	9	0	1	0	1



Bat Count Comparison 2021-2025



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