

# Bat Monitoring at Minnehada Park 2023 Results Summary

## Bat Count Summary:

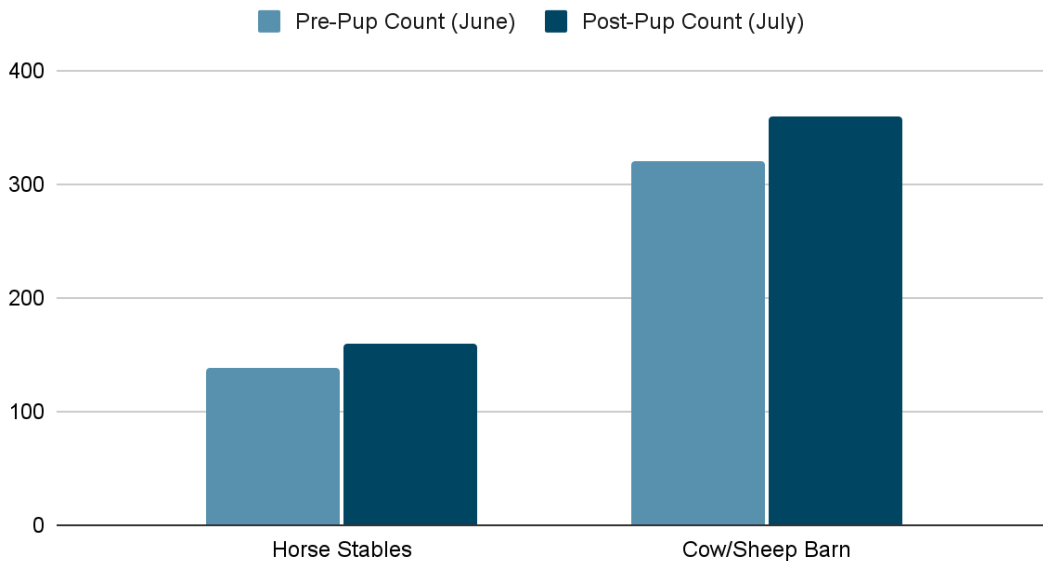
*Pre-Pup Counts:*

	<b>HORSE STABLES</b>	<b>COW/SHEEP BARN</b>	<b>VOLUNTEERS</b>
06 June 2023	N/A	490	4
08 June 2023	71	N/A	5
15 June 2023	208	N/A	4
17 June 2023	N/A	151	5
<b>Average</b>	<b>139</b>	<b>320</b>	<b>4.5</b>

*Post -Pup Counts:*

	<b>HORSE STABLES</b>	<b>COW/SHEEP BARN</b>	<b>VOLUNTEERS</b>
15 July 2023	114	N/A	4
19 July 2023	N/A	237	5
25 July 2023	206	N/A	4
26 July 2023	N/A	482	5
<b>Average</b>	<b>160</b>	<b>360</b>	<b>4.5</b>

## 2023 Bat Count Summary



## Foraging Survey Summary:

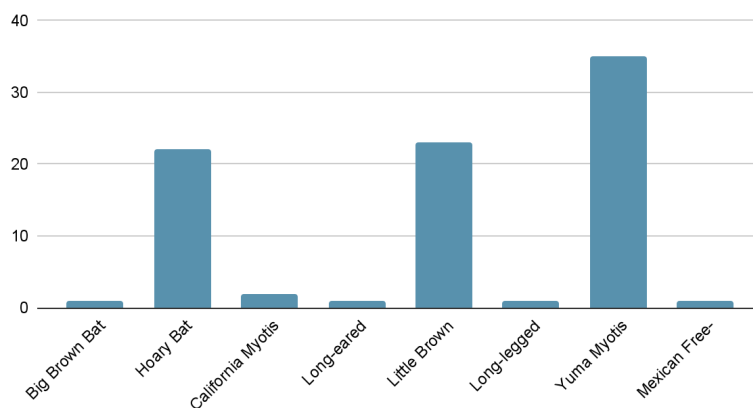
Summary of Bat Calls Detected July 8, 2023 at Minnekhada Marsh on Lodge Trail

Primary Bat Call ID*	Number of Calls**	Call %	Secondary Call ID
EPTFUS - Big Brown Bat	1	1%	LASCIN - Hoary Bat
LASCIN - Hoary Bat	22	26%	TADBRA - Mexican Free-tailed
MYOCAL - California Myotis	2	2%	MYOYUM - Yuma Myotis
MYOEVO - Long-eared Myotis	1	1%	MYOTHY - Fringed Myotis
MYOLUC - Little Brown Myotis	23	27%	MYOVOL - Long-legged Myotis
MYOVOL - Long-legged Myotis	1	1%	MYOLUC - Little Brown Myotis
MYOYUM - Yuma Myotis	35	41%	MYOCAL - California Myotis
TADBRA - Mexican Free-tailed	1	1%	LASCIN - Hoary Bat
<b>Total Bat Calls Detected</b>	86	100%	
<b>Number of Bat Species Detected</b>	8		
<b>Volunteers</b>	18		

\* 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.

Summary of Bat Calls Detected 08 July 2023



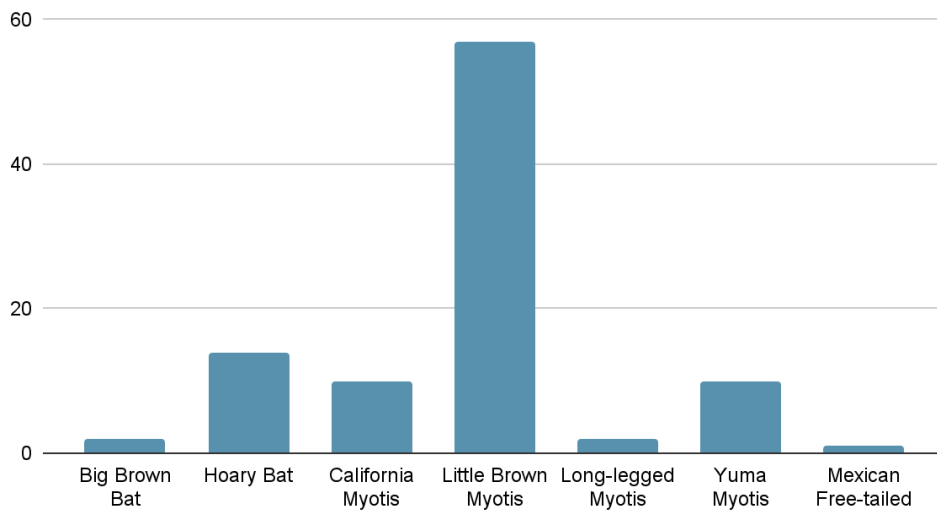
Summary of Bat Calls Detected July 22, 2023 at Minnehada Marsh on Mid Marsh Trail

Primary Bat Call ID*	Number of Calls**	Call %	Secondary Call ID
EPTFUS - Big Brown Bat	2	2%	LASCIN - Hoary Bat
LASCIN - Hoary Bat	14	15%	TADBRA - Mexican Free-tailed
MYOCAL - California Myotis	10	10%	MYOYUM - Yuma Myotis
MYOLUC - Little Brown Myotis	57	60%	MYOVOL - Long-legged Myotis
MYOVOL - Long-legged Myotis	2	2%	MYOLUC - Little Brown Myotis
MYOYUM - Yuma Myotis	10	10%	MYOCAL - California Myotis
TADBRA - Mexican Free-tailed	1	1%	LASCIN - Hoary Bat
<b>Total Bat Calls Detected</b>	96	100%	
<b>Number of Bat Species Detected</b>	7		

\* 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.

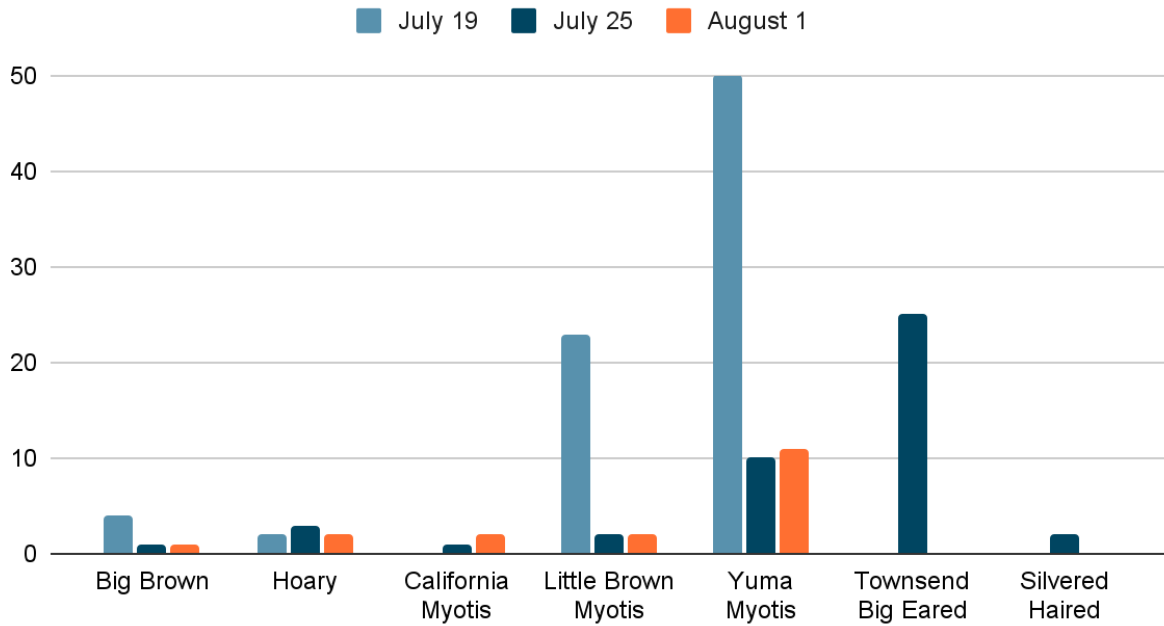
Summary of Bat Calls Detected 22 July 2023



### Acoustic Data Summary (non foraging nights):

	<b>Big Brown</b>	<b>Hoary</b>	<b>California Myotis</b>	<b>Little Brown Myotis</b>	<b>Yuma Myotis</b>	<b>Townsend Big Eared</b>	<b>Silvered Haired</b>
July 19th	4	2	0	23	50	0	0
July 25th	1	3	1	2	10	25	2
August 1st	1	2	2	2	11	0	0

### Calls Detected per Day



## Bat Condo Data Logger Data

### Temperature

	<b>Average (°C)</b>	<b>Max (°C)</b>	<b>Min (°C)</b>
<b>High Logger</b>	15.86	34.26	0.20
<b>Low Logger</b>	15.42	32.64	-0.22
<b>Ambient Logger</b>	14.82	35.35	-1.68

### Relative Humidity

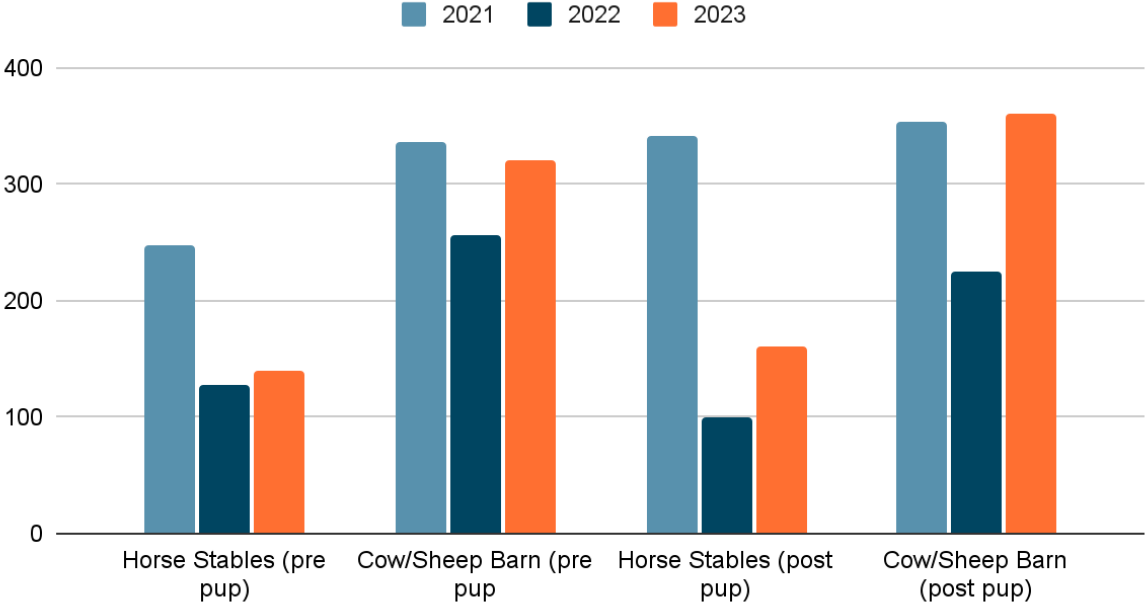
	<b>Average (%)</b>	<b>Max (%)</b>	<b>Min (%)</b>
<b>High Logger</b>	64.62	89.35	23.71
<b>Low Logger</b>	67.70	91.67	29.99
<b>Ambient Logger</b>			

### Dew Point

	<b>Average (°C)</b>	<b>Max (°C)</b>	<b>Min (°C)</b>
<b>High Logger</b>	8.90	21.38	-4.46
<b>Low Logger</b>	9.18	21.94	-3.63
<b>Ambient Logger</b>			

# Bat Count Comparison 2021-2023

## Bat Count Summary 2021-2023



**Incidental and Observations:**

<b>DATE</b>	<b>COMMENTS/OBSERVATIONS:</b>
<b>March 2023</b>	Data Loggers were added to the bat condo to monitor the inside temperature of the condo Guano was seen inside the bat condo showing signs of bats using the condo the previous season (2022)
<b>17 June 2023</b>	There was a bear in the area for the first 15 minutes of the bat count. Counters were distracted, so bat count may be low for this night.
<b>25 July 2023</b>	Bats at the stables seem to not venture very far for foraging. They seem to stay within hallways and stables and circle the stables. A lot of in and out seen on this night.
<b>26 July 2023</b>	Bat Condo was checked to see if there was any recent bat activity. No guano was seen in Condo guano trays, however, there was possible guano in the guano tray for the larger bat box on the condo. Data Loggers data was downloaded. Large number of bats are now coming out of the east side of the barn, more than previous years. Less bats coming out of the North side.
<b>30 August 2023</b>	Downloaded data from data logger. A lot of guano was observed in the guano tray of the bat house attached to the condo.

## Acknowledgements

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