

# Bat Monitoring



The Wisconsin Bat Program was created by the Wisconsin Department of Natural Resources in 2007 for monitoring and inventorying bat populations in the state. This was the same year that the white nose syndrome (WNS) was discovered in

New York. WNS is a fungal disease, so named because of the white fungal growth on the muzzle of the bat. The WDNR knew of the high mortality rates of this disease, up to 95%, and wanted to establish baseline data before the disease reached Wisconsin and hopefully find some possible causes and/or cures. The disease quickly moved west, killing millions of bats in its path. The cause of mortality is still unknown, but it is known that the disease will cause the bats to wake early out of their torpor and burn up crucial fat reserves. Bats only have one baby (pup) a year, so even if they become immune to this disease, it will take many years to recover. In 2014, the presence of WNS was found in the southwest part of Wisconsin. Our blog entitled "[Bats in Wisconsin](#)" provides additional information on this topic.

Bats are vital to our ecosystem. They act as natural pest controllers by eating mosquitoes, as well as forestry and agricultural pests. They also play an important role in dispensing seeds and pollinating plants.

Our four bat houses are located in our 5-Acre Prairie and houses little brown bats. As you can see from the picture above, they are mounted on 4" x 4" treated posts about 13 feet in the air, two facing south and two facing north. We plan to add more houses in the future, based on demand. Bats leave their houses shortly after sunset, so one should be in place and ready to count about 20 minutes prior to sunset. We use

hand clickers for counting. It is quite fun to see them leave.

Click [Wisconsin Bat Program](#) for a full full description of the program.

The table below shows the results from our data collection. The effects of WNS hit us in 2017 with a 72% morality rate.

| <b>2013 – 2 Bat Houses</b> |             |                |             |                   |                 |                   |
|----------------------------|-------------|----------------|-------------|-------------------|-----------------|-------------------|
| <b>Date</b>                | <b>Temp</b> | <b>Weather</b> | <b>Wind</b> | <b>Start Time</b> | <b>End Time</b> | <b>Total Bats</b> |
| 4/30                       | 75          | Clear          | Calm        | 8:20              | 8:40            | 56                |
| 7/23                       | 62          | Clear          | Calm        | 8:40              | 8:55            | 28                |
| 8/13                       | 62          | Clear          | Calm        | 8:15              | 8:35            | 40                |
|                            |             |                |             |                   |                 |                   |
| <b>2014 – 2 Bat Houses</b> |             |                |             |                   |                 |                   |
| <b>Date</b>                | <b>Temp</b> | <b>Weather</b> | <b>Wind</b> | <b>Start Time</b> | <b>End Time</b> | <b>Total Bats</b> |
| 5/22                       | 65          | Clear          | Calm        | 8:40              | 9:00            | 57                |
| 5/23                       | 66          | Clear          | Calm        | 8:38              | 8:55            | 58                |
| 5/25                       | 77          | Heavy Clds     | Calm        | 8:32              | 8:50            | 73                |
| 7/4                        | 68          | Clear          | Calm        | 8:48              | 9:06            | 39                |
| 7/15                       | 66          | Clear          | Calm        | 8:38              | 8:59            | 69                |
| 7/16                       | 65          | Clear          | Calm        | 8:38              | 8:58            | 80                |
| 7/17                       | 66          | Clear          | Still       | 8:35              | 8:57            | 81                |
| 8/22                       | 65          | Clear          | Still       | 8:17              | 8:27            | 16                |
| <b>2015 – 4 Bat Houses</b> |             |                |             |                   |                 |                   |
| <b>Date</b>                | <b>Temp</b> | <b>Weather</b> | <b>Wind</b> | <b>Start Time</b> | <b>End Time</b> | <b>Total Bats</b> |
| 5/1                        | 61          | Cloudy         | Calm        | 8:11              | 8:24            | 88                |

| 5/13                       | 57          | Partly Cldy    | Calm        | 8:25              | 8:40            | 112               |
|----------------------------|-------------|----------------|-------------|-------------------|-----------------|-------------------|
| 6/17                       | 78          | Partly Cldy    | Calm        | 8:52              | 9:09            | 61                |
| 7/22                       | 79          | Clear          | Calm        | 8:43              | 8:57            | 131               |
| <b>2016 – 4 Bat Houses</b> |             |                |             |                   |                 |                   |
| <b>Date</b>                | <b>Temp</b> | <b>Weather</b> | <b>Wind</b> | <b>Start Time</b> | <b>End Time</b> | <b>Total Bats</b> |
| 5/8                        | 62          | Clear          | Calm        | 8:23              | 8:40            | 87                |
| 6/18                       | 77          | Clear          | Calm        | 8:56              | 9:16            | 91                |
| 6/26                       | 78          | Clear          | Calm        | 9:02              | 9:20            | 26                |
| 6/27                       | 73          | Partly Cld     | Calm        | 8:57              | 9:15            | 26                |
| 7/13                       | 72          | Clear          | Calm        | 8:55              | 9:13            | 41                |
| 7/27                       | 79          | Partly Cld     | Calm        | 8:35              | 8:55            | 141               |
| <b>2017 – 4 Bat Houses</b> |             |                |             |                   |                 |                   |
| <b>Date</b>                | <b>Temp</b> | <b>Weather</b> | <b>Wind</b> | <b>Start Time</b> | <b>End Time</b> | <b>Total Bats</b> |
| 5/11                       | 63          | Clear          | Calm        | 8:28              | 8:40            | 26                |
| 7/01                       | 77          | Partly Cld     | Calm        | 9:02              | 9:17            | 14                |
| 7/25                       | 72          | Partly Cld     | Calm        | 8:40              | 8:55            | 39                |
| <b>2018 – 4 Bat Houses</b> |             |                |             |                   |                 |                   |
| 5/07                       | 75          | Partly Cld     | Calm        | 8:25              | 8:39            | 7                 |
| 5/25                       | 79          | Cloudy         | Calm        | 8:47              | 9:00            | 14                |
| 7/02                       | 80          | Clear          | Calm        | 9:00              | 9:20            | 0                 |
| 7/15                       | 82          | Clear          | Calm        | 9:00              | 9:20            | 7                 |
| 7/25                       | 70          | Clear          | Calm        | 8:40              | 9:00            | 17                |

**2019 – 4 Bat Houses**

|      |    |                            |      |      |      |    |
|------|----|----------------------------|------|------|------|----|
| 5/16 | 72 | Cldy,<br>some<br>sprinkles | Calm | 8:35 | 8:50 | 10 |
| 6/01 | 69 | Cloudy                     | Calm | 8:46 | 9:05 | 7  |
| 6/02 | 65 | Overcast                   | Calm | 8:55 | 9:10 | 8  |
| 7/21 | 72 | Clear                      | Calm | 8:45 | 9:00 | 1  |
| 7/22 | 65 | Partly<br>Cldy             | Calm | 8:45 | 9:00 | 1  |