

# SUMMER BAT MONITORING



DUBUQUE  
**COUNTY**  
CONSERVATION

# INTERESTED IN SUMMER BAT COUNTS?

## WHY ARE WE COUNTING BATS?

Our native bat species are declining at an alarming rate, and more research is needed! We want to know how our bats in Dubuque County are doing- and bat counts are a great way to monitor them!

## WHAT IS A BAT COUNT?

A **Bat Count** is simply a count of all the bats leaving an active roost for evening hunting. We get comfortable at the roost 30 min before sunset, and count until 60 min after sunset (this ends up being a 1.5 hr survey). We take note of some weather information too.

## WHEN CAN I SURVEY?

All surveys must be conducted within either the Pre-Volant or the Post-Volant window. These time frames will provide data on the adult population that survived the winter, and the total population after this years pups are born. This will allow us to more accurately follow trends in the population.

## WHO CAN PARTICIPATE?

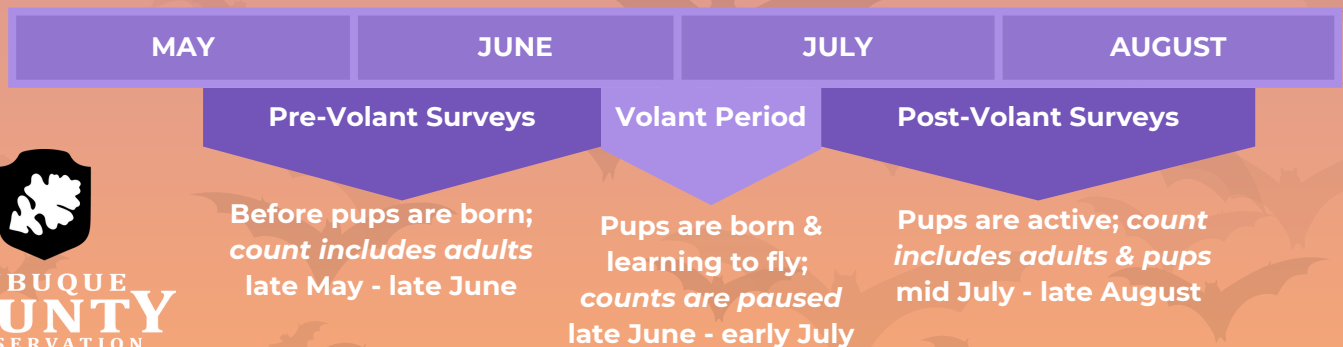
Anyone can participate! When deciding if you would like to conduct a count, consider that it will entail 1.5 hrs of active attention, and a mellow audience. You are welcome to bring a camp chair or picnic blanket (and a picnic of course!) to make the experience more comfortable. A smartphone is highly recommended for submitting bat count and weather data.

## HOW DO WE SUBMIT DATA?

We have a web survey available to submit your data directly from your phone- either through your browser or through the Survey123 App.



Paper copies of the survey will be available to print or pick up at Swiss Valley Nature Center.



# SUMMER BAT COUNT PROTOCOL

## CONDUCTING YOUR BAT COUNT

- Plan to survey the roost 30 min before sunset - 60 min after sunset, get comfortable! It can be helpful to position yourself so the bats are silhouetted against the sky
- Open up the bat count survey (browser or app)
- Observe and enter weather conditions
- Enter location
- Begin counting bats as they exit the roost- mark tallies on scratch paper, notes on your phone, or use a counter if you have one. Each observer should count for the entire time, and submit their own total
- Submit the survey

### DO NOT

- Shine lights into the roost
- Make loud noises or disturbances (quiet conversation is fine)

Submit your data directly from your phone through your browser or the Survey123 App.

Paper copies of the survey will be available to print or pick up at Swiss Valley Nature Center.



## WHAT TO BRING

### Required

- Water bottle
- Smartphone or paper survey
- Counter or paper & pencil

### Recommended

- Binoculars
- Camp chair or picnic blanket
- Red light headlamp

## WEATHER DATA

Take note of sky & wind condition, as well as temperature.

If you have trouble accessing the internet at the roost site, take notes on paper and submit the survey later.

WIND CONDITION	1	calm, no wind	0mph
	2	light breeze	1-7mph
	3	gentle breeze	8-12mph

SKY CONDITION	1	clear skies
	2	partly cloudy
	3	overcast

MAY

JUNE

JULY

AUGUST

Pre-Volant Surveys

Volant Period

Post-Volant Surveys



DUBUQUE  
COUNTY  
CONSERVATION

Before pups are born;  
*count includes adults*  
late May - late June

Pups are born &  
learning to fly;  
*counts are paused*  
late June - early July

Pups are active; *count*  
*includes adults & pups*  
mid July - late August

# BAT MONITORING

## Help us monitor our native Bats!

Native bats are rapidly declining, and more research is needed. We want to understand how our bat communities are doing, so we are looking to our citizen scientists for help in achieving this. This data will allow us to follow trends in bat populations over time, and monitor which species are present in our county parks.

## Solo Opportunities in Bat Monitoring

### ***BAT ROOST OBSERVATIONS*** April - September

The goal of the **Bat Roost Observation Survey** is to locate active bat roosts within Dubuque County Conservation parks to prepare for summer roost monitoring, guano surveys, and acoustic recording. We are looking for active roosting sites (currently occupied by bats); this could be in the form of a bat house, tree, cave, culvert, bridge, wood pile, or other structure. If you find an active bat roost while you are out hiking please let us know!

To report a bat roost fill out our mobile survey through your browser or the Survey123 App.



### ***SUNSET BAT COUNTS*** May - August

A **Bat Count** is simply a count of all the bats leaving an active roost for evening hunting. We get comfortable at the roost 30 min before sunset, and count each exiting bat until all have left, usually around 60 min after sunset (this ends up being a 1.5 hr survey). Weather information such as temperature, sky cover, and wind speed are recorded. We request that roost counts be done at least once during both the Pre-volant and Post-volant survey windows, though weekly bat counts are ideal.

Paper surveys  
are available at  
Swiss Valley  
Nature Center

OR

Use the mobile survey  
through your browser  
or the Survey123 App.





# BAT MONITORING



## Guided Opportunities in Bat Monitoring

### *SUNSET BAT COUNT + GUANO SURVEY* May - August

A **Bat Count** is simply a count of all the bats leaving an active roost for evening hunting. We get comfortable at the roost 30 min before sunset, and count each exiting bat until all have left, usually around 60 min after sunset (this ends up being a 1.5 hr survey). Weather information such as temperature, sky cover, and wind speed are recorded.

**Guano Surveys** are conducted by staff throughout May, and demonstrated at the beginning of guided Sunset Bat Count events. The guano samples are then sent to the IA DNR to be tested for the presence of White Nose Syndrome (WNS). This project may be available for independent Citizen Scientists based on commitment and training- contact us if interested.

### *BAT ACOUSTIC HIKE* June - August

A **Bat Acoustic Hike** is an evening group hike led by staff, utilizing a Wildlife Acoustics mobile recorder to pick up bat calls and identify the species in real time. This is a great opportunity to monitor species present in our parks that may not be observed in typical roosts- such as solitary roosting species. During the hike, staff will discuss our native bats, conservation concerns, and ongoing research.

### *BAT MIST NETTING* July

This special **Mist Netting** event is a unique opportunity to get close to our native bat species and learn from an expert on Iowa's Bats! Researchers will set up a large mist net to catch bats as they are hunting after dark. Bats will be examined, physical information recorded, and then released.

# ***BAT MONITORING***

## **Bat Monitoring Events - 2025**

### ***SUNSET BAT COUNT***

**May 16 | Swiss Valley Nature Center | 7:30pm**

**May 30 | Swiss Valley Nature Center | 7:30pm**

**June 13 | Swiss Valley Nature Center | 7:30pm**

**August 8 | Swiss Valley Nature Center | 7:30pm**

### ***GUANO SURVEY DEMO***

**May 16 | Swiss Valley Nature Center | 7:30pm**

**May 30 | Swiss Valley Nature Center | 7:30pm**



### ***GUIDED ACOUSTIC HIKE***

**June 13 | Swiss Valley Nature Center | 7:30pm**

**July 18 | Whitewater Canyon WA | 7:30pm**

**August 22 | Whitewater Canyon WA | 7:30pm**



# BAT MONITORING

## Survey Protocols

### SUNSET BAT COUNT PROTOCOL

#### CONDUCTING YOUR BAT COUNT

- Plan to survey the roost 30 min before sunset - 60 min after sunset, get comfortable! It can be helpful to position yourself so the bats are silhouetted against the sky
- Open up the bat count survey (browser or app)
- Observe and enter weather conditions
- Enter location
- Begin counting bats as they exit the roost- mark tallies on scratch paper, notes on your phone, or use a counter if you have one. Each observer should count for the entire time, and submit their own total
- Submit the survey

#### DO NOT

- Shine lights into the roost
- Make loud noises or disturbances

#### WEATHER DATA

Take note of sky & wind condition, as well as temperature.

If you have trouble accessing the internet at the roost site, take notes on paper and submit the survey later.

WIND CONDITION			SKY CONDITION
1	calm, no wind	0mph	clear skies
2	light breeze	1-7mph	partly cloudy
3	gentle breeze	8-12mph	overcast

#### WHEN CAN I SURVEY?

All surveys must be conducted within either the Pre-Volant or the Post-Volant window. These time frames will provide data on the adult population that survived the winter, and the total population after this years pups are born. This will allow us to more accurately follow trends in the population.

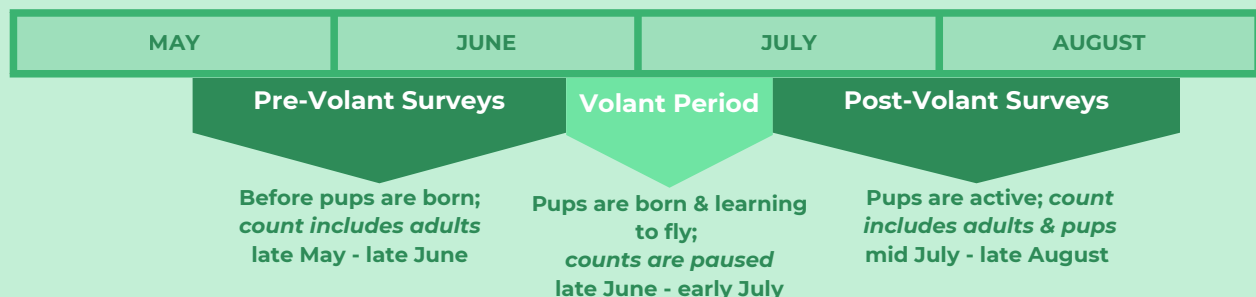
#### WHAT TO BRING

##### Required

- Water bottle
- Smartphone or paper survey
- Counter or paper & pencil

##### Recommended

- Binoculars
- Camp chair or picnic blanket
- Red light headlamp



# BAT MONITORING

## Survey Data

### BAT ROOST OBSERVATION - MOBILE



<https://arcg.is/0WmD990>



**Bat Roost Observations**

The goal of this Bat Roost Observation survey is to locate active bat roosts within Dubuque County Conservation parks to prepare for summer roost monitoring, guano surveys, and acoustic recording. By participating in this County Conservation-Citizen Science Initiative, you are providing valuable information for conservation staff in our efforts to monitor and protect our beloved native bats. Thank you for your contribution to bat conservation!

**Contact**

**Observer Name\***

**Date and Time of Observation\***  
If you are submitting this report after the fact, set the date and time to reflect the actual observation

MM/DD/YYYY

hh:mm

**Phone Number**

**Observer Email\***

**Roost Site**

**Bat Roost Location\***  
Indicate the closest approximate point

Tip: This question will try to use your location. Press to continue.

No geometry captured yet.

**Roost Type\***  
Select the most accurate roost type

Building

Cave

Culvert

Tree

Bridge

Bat House

**Describe the Roost**  
Include any details that would be helpful in locating the roost

**Method of ID\***  
Select all that apply

☐ Bats visible in roost

☐ Bats audible in roost

☐ Guano present

☐ Bats visible entering/exiting specific area

☐ Dead bats near roost

**Bat monitoring interest\***  
Indicate your level of interest in being contacted about future citizen science opportunities

☐ I am interested in monitoring this roost

☐ I am interested in future bat monitoring opportunities

☐ I am interested in all citizen science opportunities

☐ I might be interested... tell me more

☐ I am not interested

**What is your favorite Iowa bat species?**

-Please select-

Submit

# BAT MONITORING

## Survey Data

### SUNSET BAT COUNT

DATE	START TIME	END TIME
<input type="text"/>	<input type="text"/>	<input type="text"/>

PARK	ROOST #
<input type="text"/>	<input type="text"/>

WIND #	SKY #	TEMP.
<input type="text"/>	<input type="text"/>	<input type="text"/>

WIND  
CONDITION

1	calm, no wind	0mph
2	light breeze	1-7mph
3	gentle breeze	8-12mph

SKY  
CONDITION

1	clear skies
2	partly cloudy
3	overcast

COUNT/OBSERVER NOTES

<input type="text"/>	<input type="text"/>
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TOTAL BATS

OBSERVER NAME

PHONE/EMAIL

## SUNSET BAT COUNT - MOBILE



<https://arcg.is/1Xa5jq0>



**Sunset Bat Count**

The goal of this Sunset Bat Count survey is to monitor our bat populations within Dubuque County Conservation parks. By conducting roost counts throughout the summer, we can determine where bats are preferring to establish maternity colonies, and any trends in population growth or decline. This survey is one component of our larger Citizen Science Initiative which also includes guano surveys and acoustic recording.

By participating in this County Conservation-Citizen Science Initiative, you are providing valuable information for conservation staff in our efforts to monitor and protect our beloved native bats. Thank you for your contribution to bat conservation!

**Contact**

**Observer Name \***

**Date & Time of Observation \***

If you are submitting this report after the fact, set the date and time to reflect the actual observation

4/3/2025

01:24 PM

**Observer Phone Number**

**Observer Email \***

**Roost Site**

**Bat Roost Location \***

Indicate the closest approximate point

**Roost Type \***

Select the most accurate roost type

Building

Cave

Culvert

Tree

Bridge

Bat House

**Describe the Roost**

Include any details that would be helpful in locating the roost

**Bat Count Data**

**Sky Condition \***

-Please select-

**Wind Condition \***

-Please select-

**Temperature (degrees Fahrenheit) \***

**Bats Counted \***

Enter the total number bats counted exiting the roost

**Bat monitoring interest \***

Indicate your level of interest in being contacted about future citizen science opportunities

☐ I am interested in monitoring this roost

☐ I am interested in future bat monitoring opportunities

☐ I am interested in all citizen science opportunities

☐ I might be interested... tell me more

☐ I am not interested

**What is your favorite Iowa bat species?**

-Please select-



# SUMMER BAT COUNT

DATE START TIME END TIME

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PARK ROOST # WIND SKY TEMP.

		#	#	
--	--	---	---	--

COUNT/OBSERVER NOTES

	TOTAL BATS

WIND  
CONDITION

1	calm, no wind	0mph
2	light breeze	1-7mph
3	gentle breeze	8-12mph

SKY  
CONDITION

1	clear skies
2	partly cloudy
3	overcast

OBSERVER NAME

--

PHONE/EMAIL

--

# SUMMER BAT COUNT

DATE START TIME END TIME

--	--	--

PARK ROOST # WIND SKY TEMP.

		#	#	
--	--	---	---	--

COUNT/OBSERVER NOTES

	TOTAL BATS

WIND  
CONDITION

1	calm, no wind	0mph
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OBSERVER NAME

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PHONE/EMAIL

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