

PacWest Bat Hub Summer Solstice Survey Results

Report produced on October 14, 2024


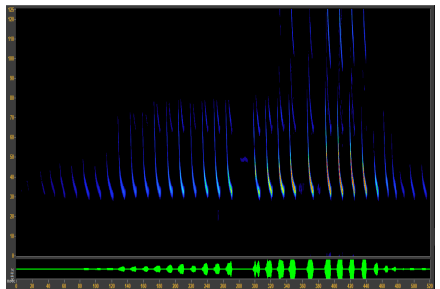
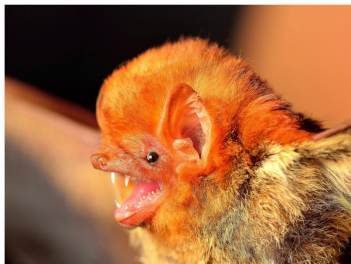
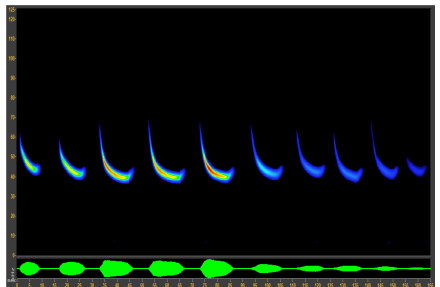



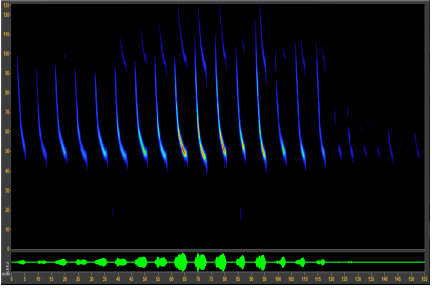

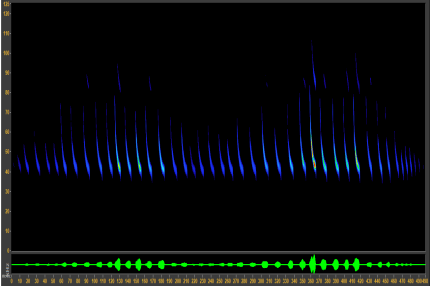

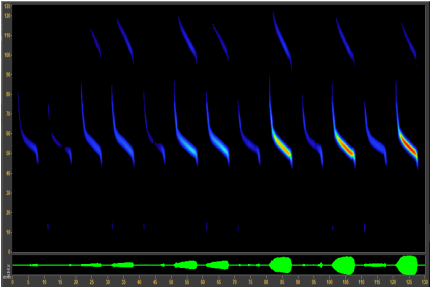

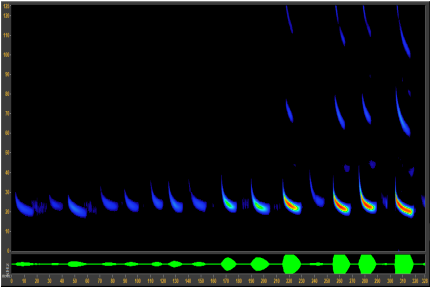

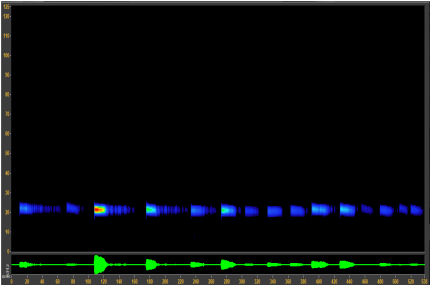
Hello Margaret,

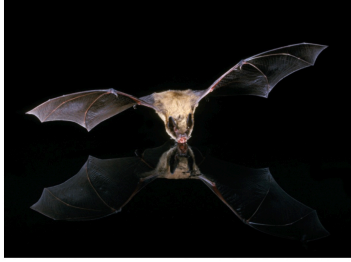
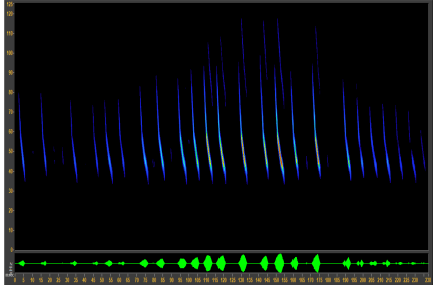
Thank you for participating in Bat Conservation International’s pilot of a new community-based bat monitoring program! Your survey from 6/18/2024 to 6/25/2024 at Oxbow Nature Study Area detected 4395 bat calls.

What species did you detect?

Congratulations! You recorded these bat species:

Common Name	Scientific Name	Photo	Learn More	Range Map	Echolocation Spectrogram
Big Brown Bat	<i>Eptesicus fuscus</i>	 <small>MICHAEL DURHAM/MINDEN PICTURES</small>	Species Info	Species Map	
Western Red Bat	<i>Lasiurus frantzii</i>	 <small>JOSE GABRIEL MARTINEZ FONSECA</small>	Species Info	Species Map	

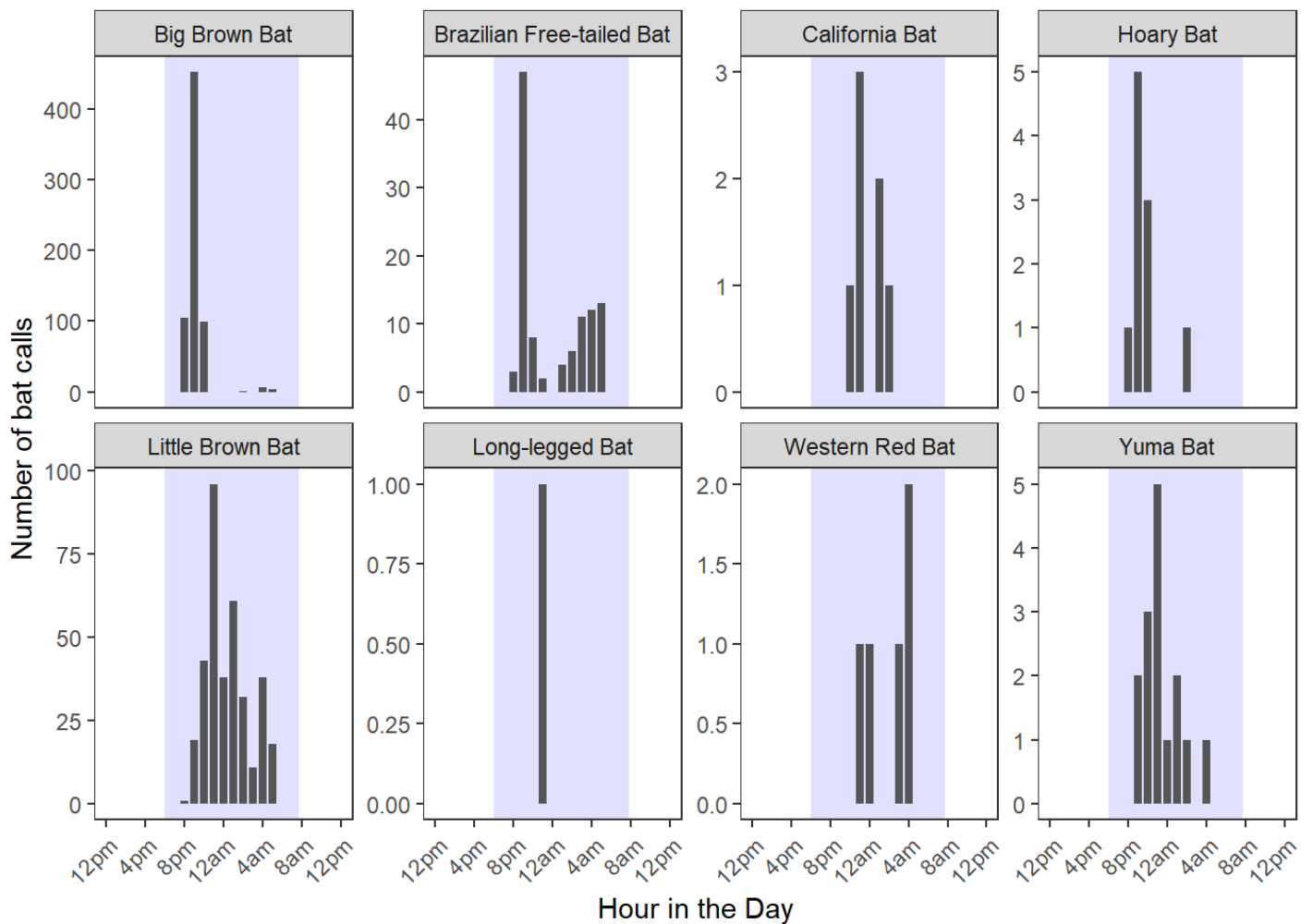
Common Name	Scientific Name	Photo	Learn More	Range Map	Echolocation Spectrogram
California Bat	<i>Myotis californicus</i>	 <p>MICHAEL DURHAM/MINDEN PICTURES, BAT CONSERVATION INTERNATIONAL</p>	Species Info	Species Map	
Little Brown Bat	<i>Myotis lucifugus</i>	 <p>JASON CORBETT</p>	Species Info	Species Map	
Yuma Bat	<i>Myotis yumanensis</i>	 <p>MICHAEL DURHAM/MINDEN PICTURES, BAT CONSERVATION INTERNATIONAL</p>	Species Info	Species Map	
Hoary Bat	<i>Lasiurus cinereus</i>	 <p>MICHAEL DURHAM/MINDEN PICTURES, BAT CONSERVATION INTERNATIONAL</p>	Species Info	Species Map	
Brazilian Free-tailed Bat	<i>Tadarida brasiliensis</i>	 <p>MICHAEL DURHAM/MINDEN PICTURES, BAT CONSERVATION INTERNATIONAL</p>	Species Info	Species Map	

Common Name	Scientific Name	Photo	Learn More	Range Map	Echolocation Spectrogram
Long-legged Bat	<i>Myotis volans</i>		Species Info	Species Map	

When are bats active in your community?

This graph shows the times of night when different bat species were active at your survey location. The time is shown at the bottom of the graph(s) and the bars indicate the number of calls recorded for that species during each hour of the night.

*Note that the bars are a summation of all calls recorded during your survey.



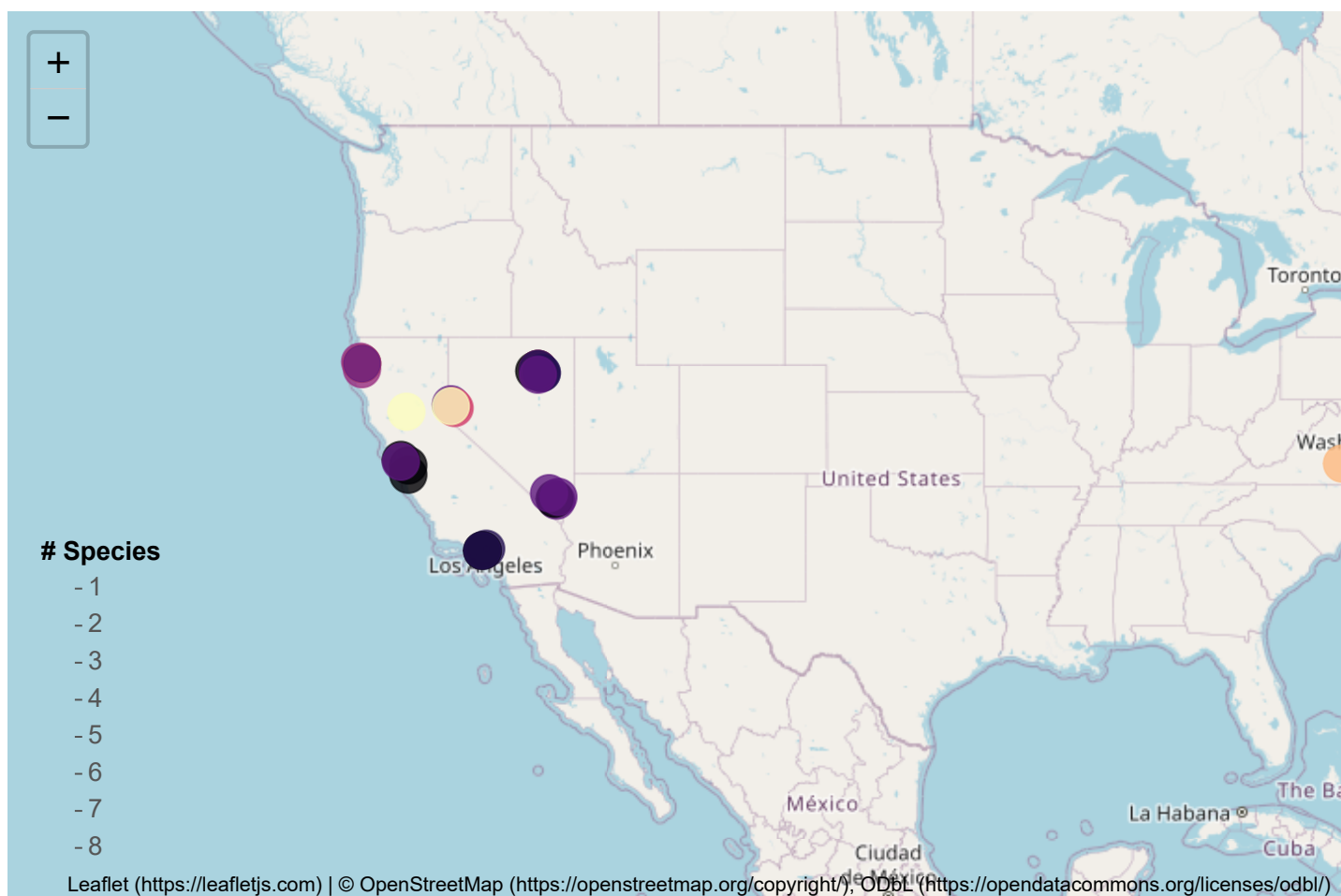
How do your results compare?

Thirty-nine participants in the PacWest pilot program recorded a total of 44,735 bat calls from 22 different species. The most commonly recorded species were the Brazilian Free-tailed Bat, California Bat, and Big Brown Bat.

This interactive map shows the number of bat species recorded at every survey location in the PacWest pilot. Zoom in and out and pan to check out the different survey sites. You can also view the data in the BatAMP portal:

<https://batamp.databasin.org/maps/new/#datasets=bce60b94183c4081906f1f6c4b902758>

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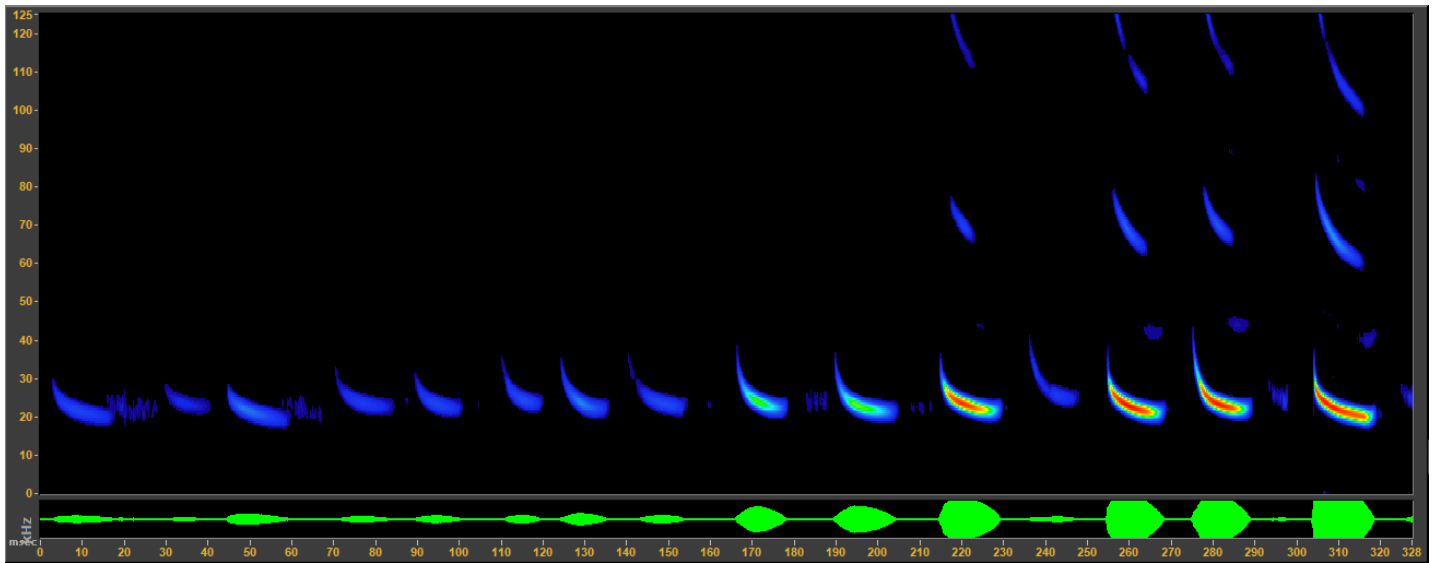


How did we analyze the recordings you made?

Your bat detector recorded 4395 bat calls. These recordings were run through autoclassification software that examines numerous parameters of the call and assigns a species classification. A subset of the auto-classified calls was inspected by an expert acoustician to verify the species identification and confirm that a species was truly detected.


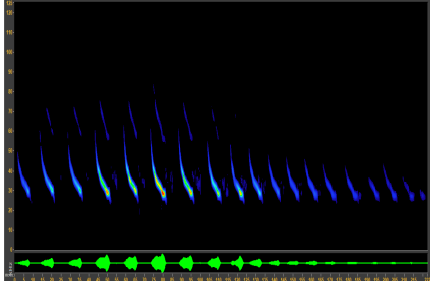
See it for yourself!


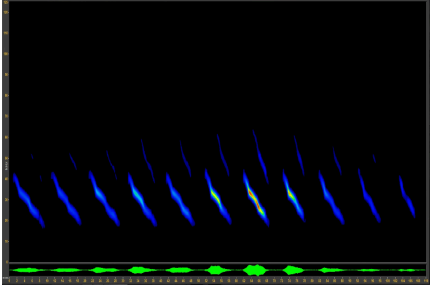

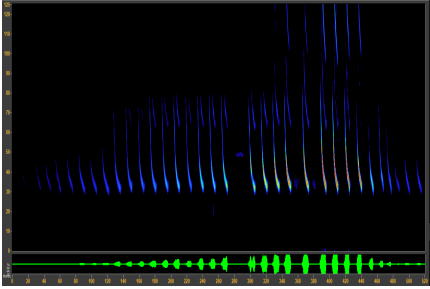

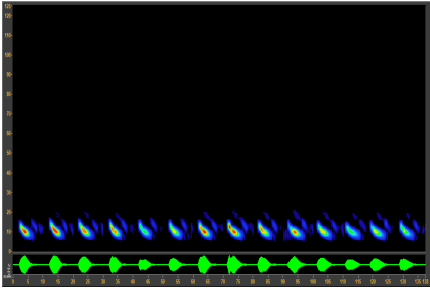

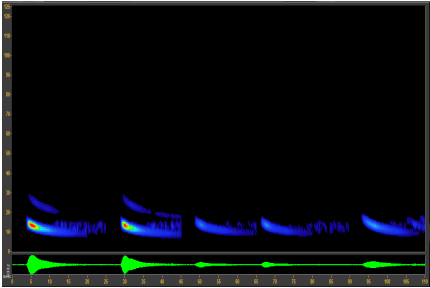

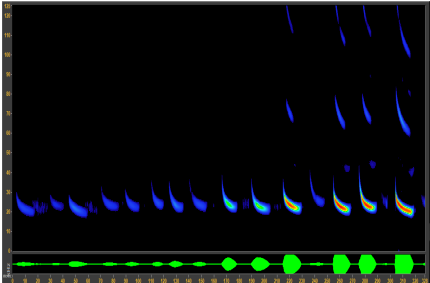
Below is an example spectrogram of the call of a Hoary Bat (*Lasiurus cinereus*). A spectrogram is a visual representation of a sound. Time is shown in milliseconds and runs from left to right, and the pitch or frequency of the sound is measured in kilohertz and is shown from top to bottom. For reference, humans can typically hear between 2 and 20 kilohertz (kHz), so everything above 20 kHz is considered ultrasonic, or above human hearing. The loudness or intensity of the call is indicated by the color scale, with hotter colors being louder and cooler colors being quieter. Check out the echolocation spectrograms in your species list to see how calls differ by species.


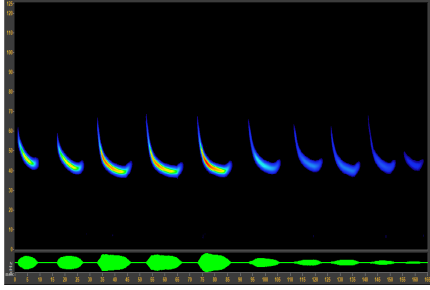

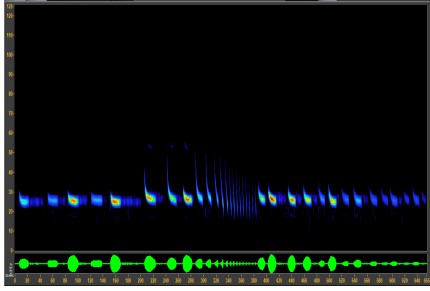

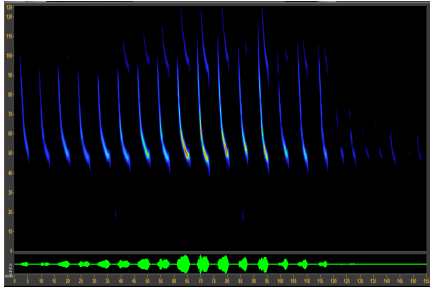

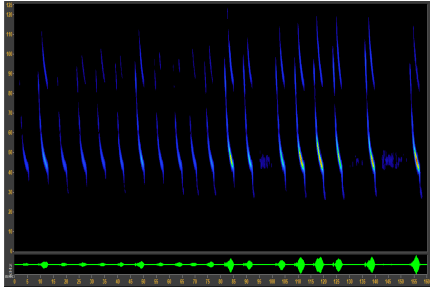

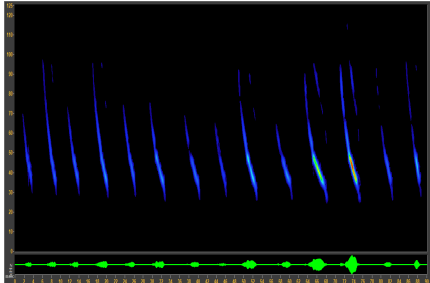



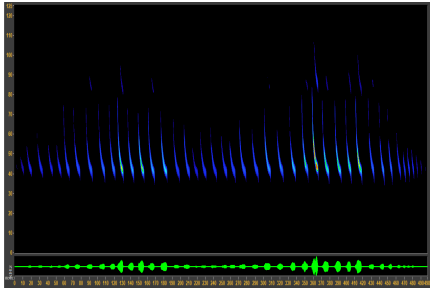

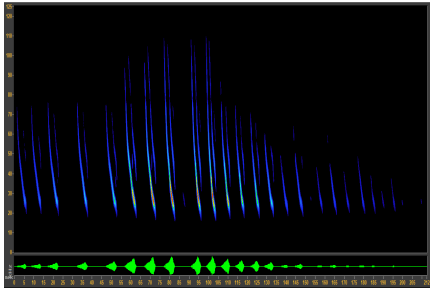

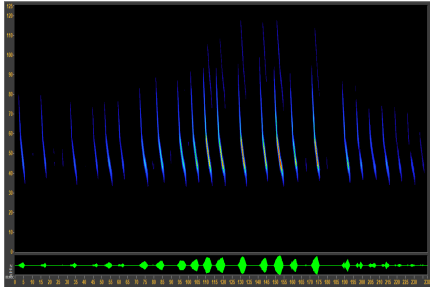

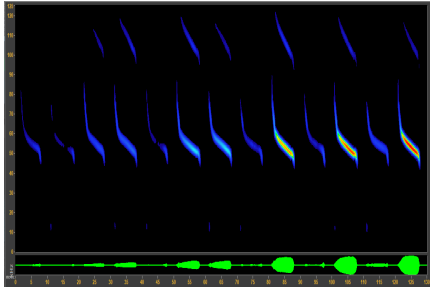

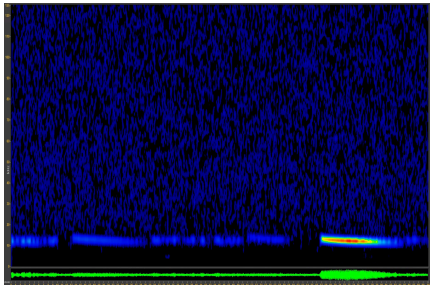
Learn More


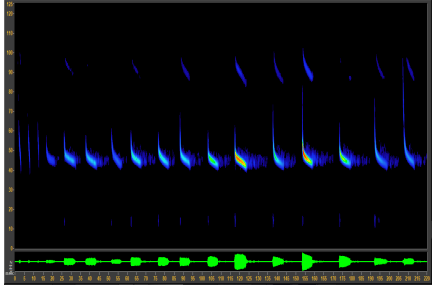

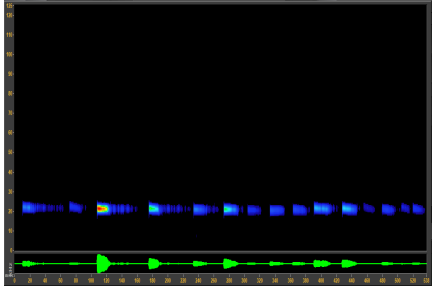
Below is a list of bat species that could potentially occur in your region. There are numerous factors that influence if a species is found in a particular area, including access to roosting habitat, water, and food.

Common Name	Scientific Name	Photo	Learn More	Range Map	Echolocation Spectrogram
Pallid Bat	<i>Antrozous pallidus</i>	 <p><small>© Richard Jackson A PALLID BAT (ANTROZOUS PALLIDUS) MUNCHES ON A SCORPION COURTESY OF RICHARD JACKSON</small></p>	Species Info	Species Map	

Common Name	Scientific Name	Photo	Learn More	Range Map	Echolocation Spectrogram
Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	 <p><small>MICHAEL DURHAM/MINDEN PICTURES</small></p>	Species Info	Species Map	
Big Brown Bat	<i>Eptesicus fuscus</i>	 <p><small>MICHAEL DURHAM/MINDEN PICTURES</small></p>	Species Info	Species Map	
Spotted Bat	<i>Euderma maculatum</i>	 <p><small>MICHAEL DURHAM/MINDEN PICTURES</small></p>	Species Info	Species Map	
Western Mastiff Bat	<i>Eumops perotis</i>	 <p><small>MICHAEL DURHAM/MINDEN PICTURES</small></p>	Species Info	Species Map	
Hoary Bat	<i>Lasiurus cinereus</i>	 <p><small>MICHAEL DURHAM/MINDEN PICTURES, BAT CONSERVATION INTERNATIONAL</small></p>	Species Info	Species Map	

Common Name	Scientific Name	Photo	Learn More	Range Map	Echolocation Spectrogram
Western Red Bat	<i>Lasiurus frantzii</i>	 <small>JOSE GABRIEL MARTINEZ FONSECA</small>	Species Info	Species Map	
Silver-haired Bat	<i>Lasionycteris noctivagans</i>	 <small>MICHAEL DURHAM/MINDEN PICTURES, BAT CONSERVATION INTERNATIONAL</small>	Species Info	Species Map	
California Bat	<i>Myotis californicus</i>	 <small>MICHAEL DURHAM/MINDEN PICTURES, BAT CONSERVATION INTERNATIONAL</small>	Species Info	Species Map	
Western Small-footed Bat	<i>Myotis ciliolabrum</i>	 <small>MICHAEL DURHAM/MINDEN PICTURES, BAT CONSERVATION INTERNATIONAL</small>	Species Info	Species Map	
Long-eared Bat	<i>Myotis evotis</i>	 <small>MICHAEL DURHAM/MINDEN PICTURES, BAT CONSERVATION INTERNATIONAL</small>	Species Info	Species Map	

Common Name	Scientific Name	Photo	Learn More	Range Map	Echolocation Spectrogram
Little Brown Bat	<i>Myotis lucifugus</i>	 <p><small>JASON CORBETT</small></p>	Species Info	Species Map	
Fringed Bat	<i>Myotis thysanodes</i>	 <p><small>J. SCOTT ALTENBACH</small></p>	Species Info	Species Map	
Long-legged Bat	<i>Myotis volans</i>	 <p><small>J. SCOTT ALTENBACH</small></p>	Species Info	Species Map	
Yuma Bat	<i>Myotis yumanensis</i>	 <p><small>MICHAEL DURHAM/MINDEN PICTURES, BAT CONSERVATION INTERNATIONAL</small></p>	Species Info	Species Map	
Big Free-tailed Bat	<i>Nyctinomops macrotis</i>	 <p><small>BRUCE D. TAUBERT / BAT CONSERVATION INTERNATIONAL</small></p>	Species Info	Species Map	

Common Name	Scientific Name	Photo	Learn More	Range Map	Echolocation Spectrogram
Canyon Bat	<i>Parastrellus hesperus</i>	 <small>J. SCOTT ALTENBACH</small>	Species Info	Species Map	
Brazilian Free-tailed Bat	<i>Tadarida brasiliensis</i>	 <small>MICHAEL DURHAM/MINDEN PICTURES, BAT CONSERVATION INTERNATIONAL</small>	Species Info	Species Map	

Thank You!

Thank you for participating in this pilot program!

The data you collected has been submitted to the North American Bat Monitoring Program (NABat) Database (<https://www.nabatmonitoring.org/> (<https://www.nabatmonitoring.org/>)) and will be incorporated into the species conservation status and population trend analyses conducted by NABat (<https://sciencebase.usgs.gov/nabat/#/explore> (<https://sciencebase.usgs.gov/nabat/#/explore>)). Your data fills important gaps in our monitoring of bats in North America, particularly in more urban areas, and will help us answer critical questions about their natural history.

Keep up with the PacWest Community Science Program on our website:

<https://www.pacwestbats.org/about-3> (<https://www.pacwestbats.org/about-3>).