

Bats of the Hassayampa River Preserve 2020

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Hassayampa bats

- No complete surveys in the past
- Unknown what species are present
- Not known when or how bats use the preserve



Research questions

- What species?
- How many or how active of each species?
- What is seasonal use of preserve?



Data collection

- Anabat express ultrasonic recorder
- 366 nights, sunset to sunrise recording
- Located in Cottonwood, Mesquite open woodland
- Echolocation calls identified to species with Kaleidoscope Pro software
- Each species call verified manually



Habitat

- Upper Sonoran Desert riparian habitat
- Perennial stream and pond
- Cottonwood, willow, mesquite woodland
- Surrounded by Sonoran Desert
- Relatively little development



Species identified

17 verified species

Most common species:

- Cave Myotis
- Mexican Free-Tailed
- Big Brown Bat
- Silver Haired Bat
- Western Small-Footed Myotis



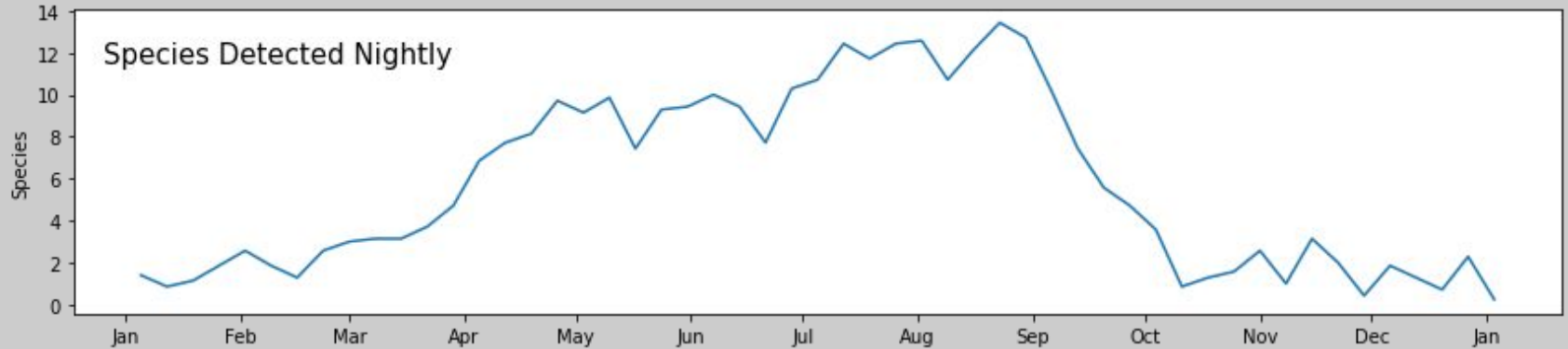
Species of interest

- Townsend's Big Eared Bat (vulnerable)
- Western Red Bat (sensitive)
- Western Yellow Bat (sensitive)

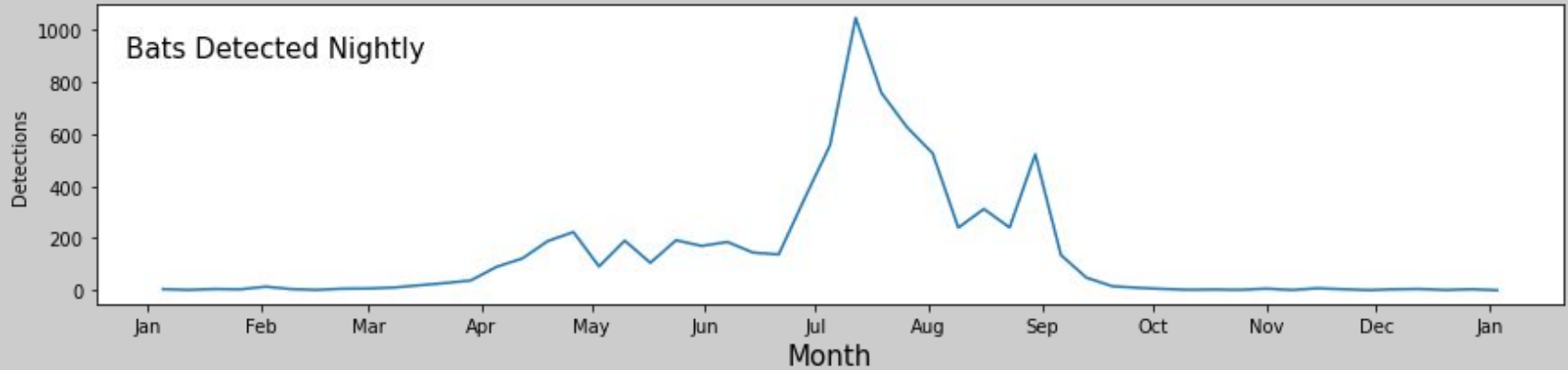


Seasonal species diversity

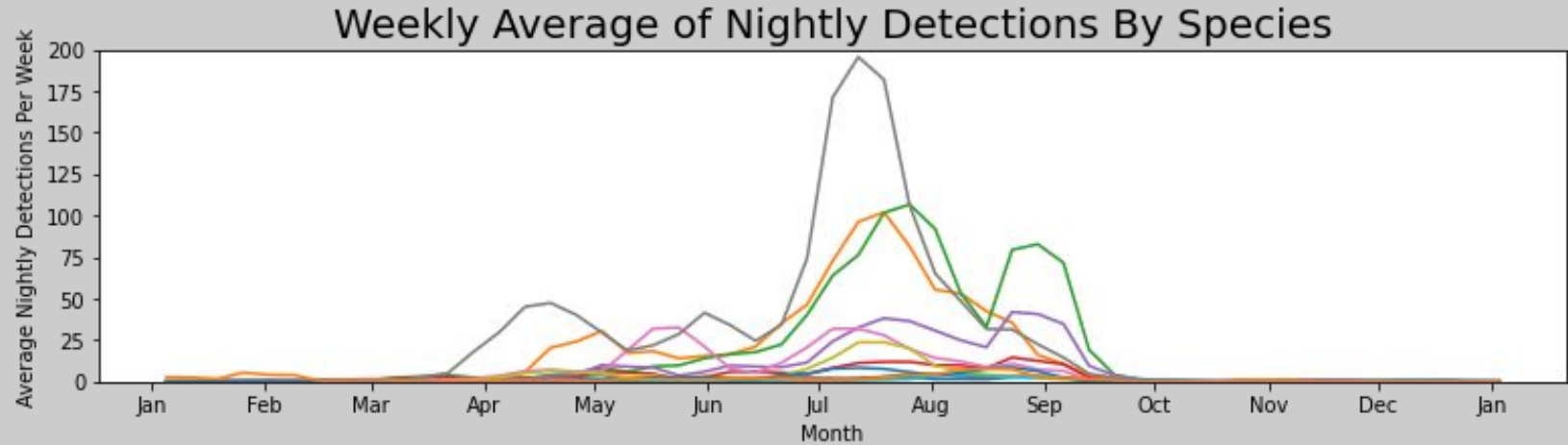
Weekly Averages of Bats



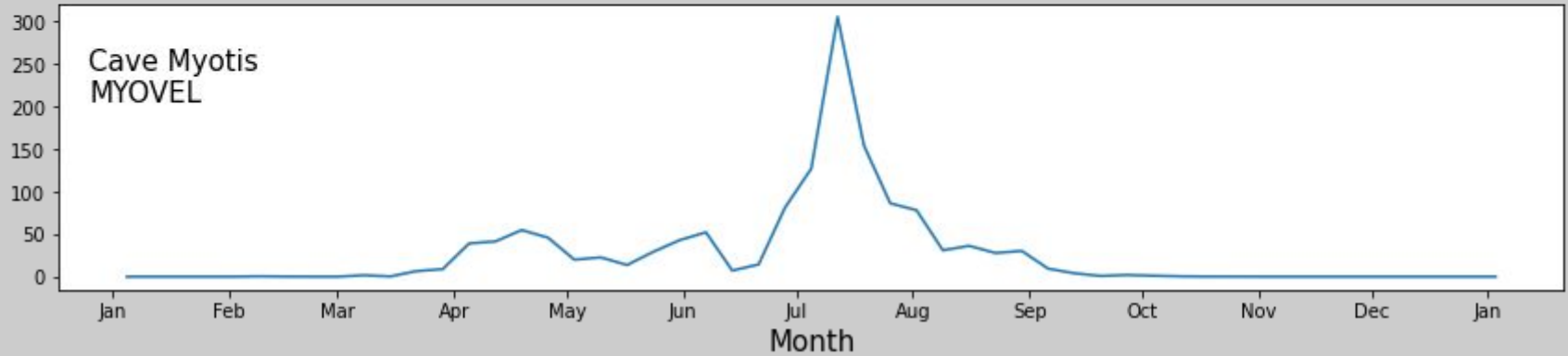
Seasonal bat activity



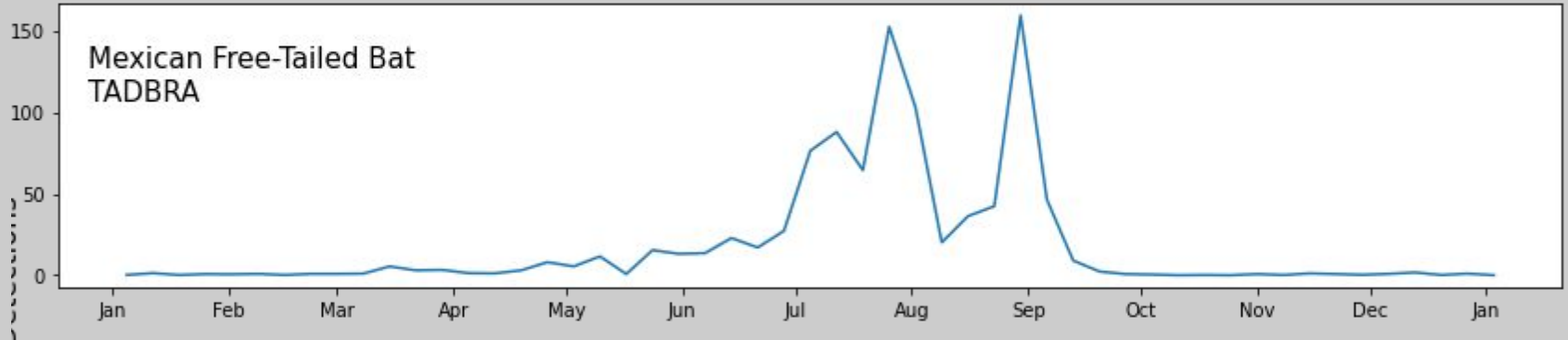
Seasonal bat activity



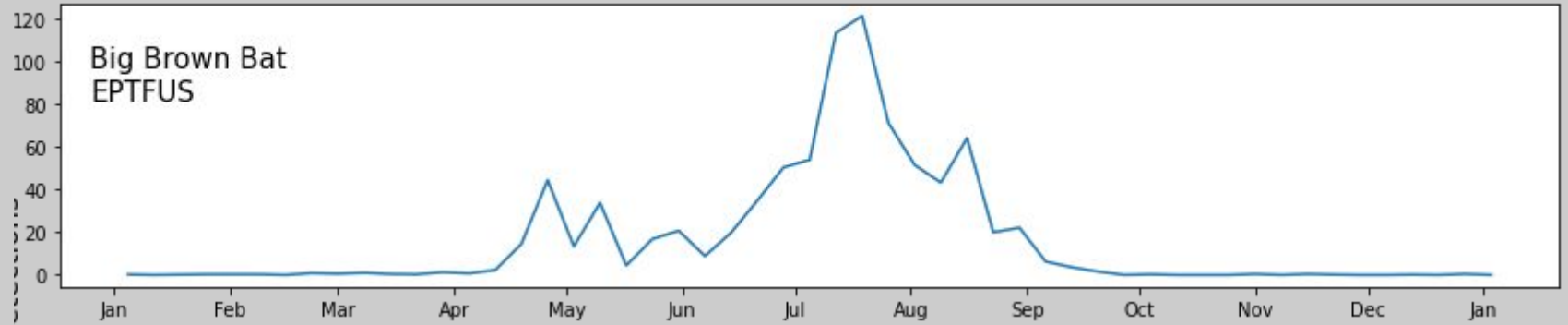
Cave Myotis



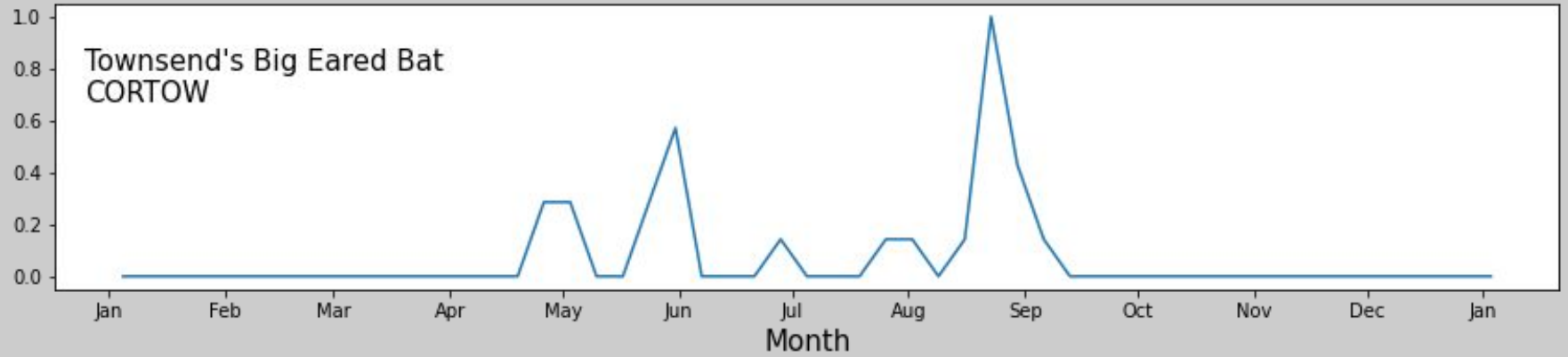
Mexican Free-Tailed Bat



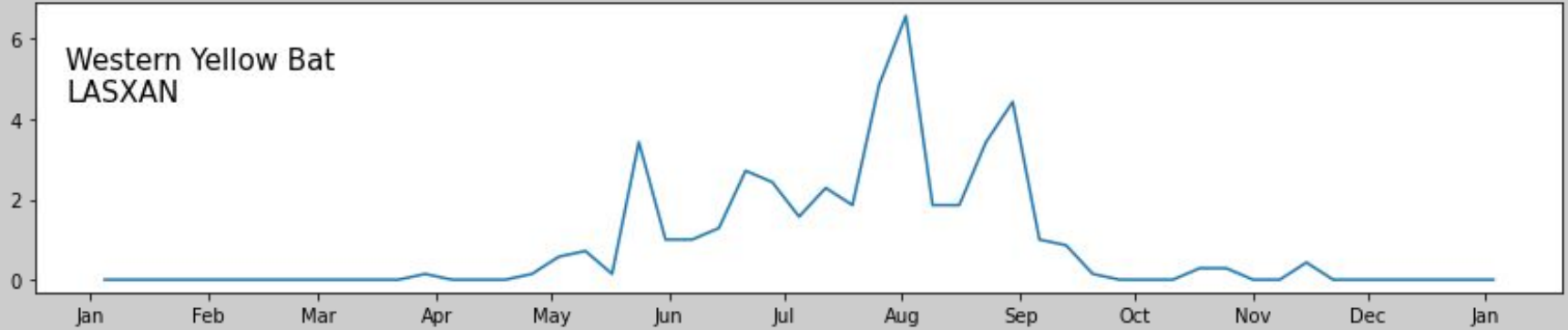
Big Brown Bat



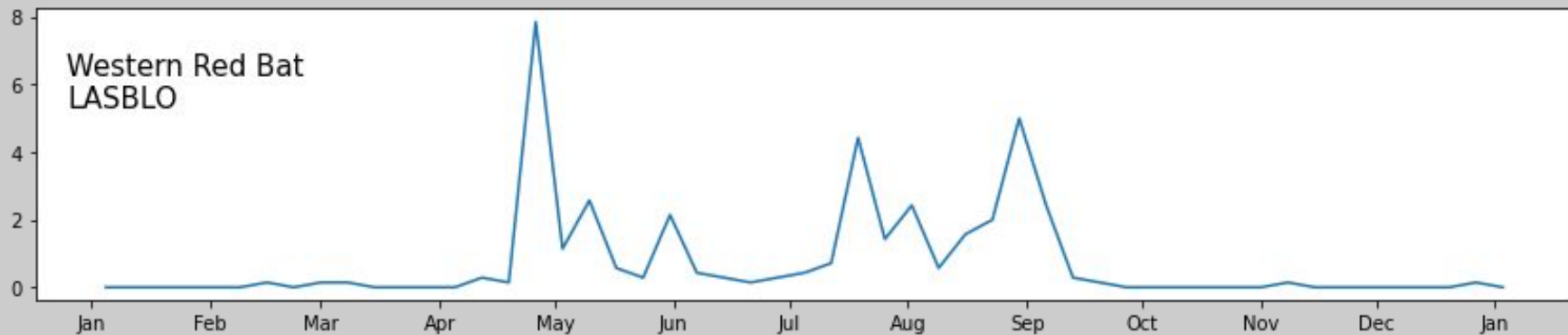
Townsend's Big Eared Bat



Western Yellow Bat



Western Red Bat



Hassayampa River Preserve Bats

- One of the most diverse in the United States
- Need continued monitoring
- Survey additional habitats
- Identify roosting locations for protection

