

Mexican Free-tailed Bat
(*Tadarida brasiliensis*)



Bats on VSFB



Pallid Bat (*Antrozous pallidus*)

Bats 101

- 1,100 species worldwide constitute one fifth of all mammal species (think fur!)
- More than 50% of American bat species are in severe **decline or endangered**.
- Most American bats eat insects like beetles, flies, moths, and **mosquitoes**.
- Bats can carry rabies and should **never be handled**.

Echolocation

- Bats form sound-pictures in the brain from returning echoes, much like human brains use light to make images of our surroundings.
- When sound hits an object, it bounces off and returns to the bat at the **same speed** but **lower intensity**.
- Bats listen to these quiet echoes to calculate differences in **distance** to an object while flying in fractions of a second.

Why Care About Bats?

- One small bat can **eat up to 1,000 small insects in 1 hour!**
- Bats save the U.S. agricultural industry **at least \$3 billion dollars per year** through pollination and eating pesky insects.
- White-Nose Syndrome, a fungal disease, has killed millions of bats since 2006 causing several species to be at risk of becoming endangered.

The loss of one million bats in the NE U.S. alone has resulted in **more than 660 metric tons of insects no longer being eaten!**

Bats on VSFB

- **12-14** species on base, including 4 state sensitive species such as the pallid bat.
- Found roosting in many **abandoned buildings** on base and within the cantonment area.

What Can You Do?

- Look, but **DON'T touch!**
- Build a bat house out of plywood, install in sunny locations, at least 15ft off the ground.
- Support humane bat exclusion from buildings.
- Consider bats when fumigating and tenting buildings.

Need More Info?

- Check out the Fact Fliers at Bat Conservation Internationals website (www.batcon.org).
- Natural Resources Managers with 30 CES/CEI are available to advise VSFB residents about bats, bat exclusion, and conflict concerns. **Call (805) 605-8399 or (805) 606-4198.**



1 kHz = 1,000 Hz of sound waves or cycles per second!

Think about fluorescent lights – they flicker at 120 flashes/second (which humans CAN'T see)!

Humans can only see light flicker up to 50 flashes/sec or 50 Hz.

Bats “see” more than 200 times this (10,000-90,000 Hz)!