

Humans & Bats

K - 2nd Grade

Lesson Plan by Jennifer Zapata

DURATION

Classroom: 1 hour Vist: 30 minutes

LOCATION

Classroom (with possible Museum connections in:

Age of Mammals

Nature Lab

North American Mammal Hall Nature Gardens)

SUPPLIES

- Pencil
- <u>Teacher Information Pages</u> & Worksheets (<u>English</u> / <u>Spanish</u>)
- Clipboard (while at Museum)

STANDARDS

- <u>Kinder</u>: NGSS: ESS3.A;
 ESS3.C; NGSS: ETS1.A; ETS1.B; LS1.C
- <u>1st grade</u>: NGSS: LS1.A-B; LS1.D; LS3.A; ET S1.A-C
- 2nd grade: NGSS: LS4.D; ETS1.B
- Writing Standards: W. 1.1; W. 1.1-1.1;
 2.2 (1st); W. 1.1-1.4 (2nd)
- Reading Standards: RC 2.3; 2.5 (K);
 RC 2.6; (1st); RC 2.5; 2.6 (2nd)

VOCABULARY

- Ecosystem
- Pollinator
- Mammal
- Pesticide

Overview

Bats play an important role in ecosystems all over the world, including in Los Angeles County. They are excellent pollinators and keep insect populations under control, save the agricultural industry billions of dollars annually, and are the only mammals that can fly! There are over 1,400 species of bats and they live on every continent except Antarctica.

Fears and misconceptions about bats have challenged their survival across the world. In this lesson we demystify these marvelous, yet often misunderstood, nocturnal creatures by exploring bat species native to Los Angeles County and how they have adapted to survive.

Concepts

- Bats play an important role in an ecosystem but are often misunderstood, and therefore threatened, by human activity.
- Bats are excellent pollinators and keep our insect populations under control.
- Bats are mammals and share some similarities with humans.

Objectives

- Students will compare and contrast bats and humans.
- Students will learn how human impact affects bat habitats and populations.

Outline

- Teacher Information Pages: These pages debunk bat myths that have affected bat reputations worldwide and throughout history. Links to K-2 friendly educational videos about bats can be used as a supplemental resource.
- 2. <u>Bat Dangers and Solutions</u>: These graphic organizers will be used to discuss the ways that bats are being negatively affected by human activity, and will follow up with ways where humans can begin making better changes.
- 3. <u>Bats Can, Have, and Are Graphic Organizer</u>: This can be completed as a whole group discussion or done independently by students. There are two versions with writing and drawing prompts. A teacher sheet has been provided with suggested answers. Option to do this as a primer before a field trip.
- 4. <u>Mammal to Mammal Humans and Bats</u>: This graphic organizer provides six boxes for students to write or draw traits that bats and humans have. A teacher sheet has been provided with suggested answers.
- 5. <u>Persuasive Essay</u>: This extension activity can be used as part of a mini-research project for students to explore how bats are being threatened by human impact on the environment and their habitats.