HISTORICAL INQUIRY QUESTION

What impact has urban development had on biodiversity in the Los Angeles area?

LOST LA EPISODE

Wild L.A.
What impact has urban development had on biodiversity in the Los Angeles area?

Author of Lesson
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Content Standards
3.3: Students draw from historical and community resources to organize the sequence of local historical events and describe how each period of settlement left its mark on the land.

CCSS Standards
CCSS.ELA-LITERACY-RL.3.1: Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

CCSS.ELA-LITERACY.RI.3.2: Determine the main idea of a text; recount the key details and explain how they support the main idea.

CCSS.ELA-LITERACY.RI.3.3: Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

CCSS.ELA-LITERACY.RI.3.7: Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur.)

CCSS.ELA-LITERACY.W.3.1.B: Provide reasons that support the opinion.

CCSS.ELA-LITERACY.W.3.2: Write informative explanatory texts to examine a topic and convey ideas and information clearly.

CCSS.ELA-LITERACY.SL.3.1: Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

Lost LA Episode
This lesson aligns with the Lost LA episode “Wild L.A. ” This episode discusses how the grizzly bear, once a common sight in southern California, became extinct. In this lesson, students will study the cause and effect of urban growth in the Los Angeles area and its effects on the local grizzly bear population and how this relates to local populations of animals today, specifically mountain lions.
https://www.kcet.org/shows/lost-la/episodes/wild-la
The video lasts approximately 11:06 minutes. It is the first segment of the show.

**Overview of Lesson**

Students will learn about the significance of the grizzly bear in California through an exploration of primary sources and illustrations that trace how it interacted with local populations as well as what factors led to its eradication in the Los Angeles area. Students will use their understanding of the plight of the grizzly bear and apply their knowledge to the present issues that face the local mountain lion population, in particular, P22.

**Sources**

A. *Flag of California showing the grizzly bear*
B. *Photograph of Grizzly Bear*
C. Article *Monarch: The Sad, Amazing Story of the Bear on California’s State Flag*
D. Article: *Arroyo Seco Foundation: A Grizzly History of the Grizzly Bear in California*
E. An artist’s depiction shows an early *Tongva settlement* in the Ballona Wetlands. The Tongva are thought to have first settled in what’s now the Los Angeles area between 9,000 and 2,500 years ago. (Detail of painting by Mary Leighton Thomson)
F. Video: *Lost LA Wild L.A. The Lost Grizzly*
G. Reading from Valley Center History Museum “Grizzly Bear”
H. Illustration: *Lassoing a Grizzly Bear*
I. Article: *Helping Urban Wildlife in California: This week in NWF History*

**Procedures**

1. The teacher will introduce the lesson by showing the picture of the flag of California *(Source A)*, or if possible, having a physical flag in the classroom for the students to look at. The teacher will ask:
   
   What animal do you see on the flag? Most students will, of course, reply “a bear”... (teacher response) This is correct, but do you know what kind of bear? The teacher will show the picture of the grizzly bear *(Source B)*

2. The teacher will then explain to the students that this is, in fact, a grizzly bear and that at one time grizzly bears were found all over the Los Angeles area.
   
   Ask if the students have ever seen a bear? Where?

3. The teacher will then review the objectives for this lesson, which is that the students will learn about how the grizzly bear was once an indigenous species (one which is native to the area as opposed to one which is introduced). There are several factors which occurred during the 1800s when people were moving to California that caused the population of bears to diminish and finally disappear.

4. Next, the teacher will read “Monarch: The sad, amazing story of the bear on California’s state flag “ *(Source C)* with the students which will give them a better
understanding of how the flag of California came to have a Grizzly bear on it (optional if time allows).

Check for Understanding:
Students will write a letter from the point of view of the Grizzly Bear talking about what life was like for them before many people came to live in the area. In the letter, students should explain where they lived, what they ate, and how they survived.

5. The teacher will then introduce the inquiry question: **What impact has urban development had on biodiversity in the Los Angeles area?**

6. Breaking down the question: What is **biodiversity**? **Biodiversity** is the variety of living things in a given place. Los Angeles is a biodiversity hotspot. Grizzly Bears were once part of this biodiverse landscape. Through this lesson, students are going to learn about why they are no longer found in Southern California.

7. The teacher will review the **Arroyo Seco Foundation: A Grizzly History of the Grizzly Bear in California** *(Source D).* This article further explains that Grizzly Bears were an abundant species in Los Angeles in the middle of the 1800s.

8. Review the objectives of the lesson and restate the inquiry question: **What impact has urban development had on biodiversity in the Los Angeles area?**

9. The teacher will show the picture of the **Tongva settlement** *(Source E).* Discuss the fact that the indigenous population lived alongside the grizzly, hunted it but also held it in high regard. It was a part of their folklore and religious ceremonies.

10. Show KCET **Lost LA, Wild L.A. The Lost Grizzly** *(Source F).*
Ask students to take notes about:
   - Where the grizzly bear lived
   - What it liked to do
   - Why it was hunted

11. The students will then discuss their observations after watching the video, in particular, what they feel was the main reason that the grizzly bear became extinct in California.

The teacher explains that before Spanish settlement in the 1700s, it's estimated that approximately 10,000 grizzly bears inhabited what modern-day California is. It's thought that the bears lived across almost the entirety of the state, from its most southeastern to its northeastern corners. The bear's diverse diet stemmed from California's varied climates, ranging from plant sources like grasses, seeds, and berries, to animal sources such as deer, fish, and carrion—including beached whale carcasses. California in the mid-1800s was becoming a busier place. Gold was found in northern California, and people were coming to California for land. Towns were beginning to be built in areas where the Grizzly
Bear lived and as the video pointed out, they liked to share some of the things that humans like to do and share many of the same spaces. Grizzly Bears were considered a threat by the increasing human population, competition for the land, and its resources. So who was going to win?

12. Next students will read Valley Center Historical Museum Article: “Grizzly Bear” (Source G) which describes an account of a bear being hunted in a town in Southern California. Have the students annotate the reading to answer the following questions:
   - Why was the Grizzly Bear hunted in California?
   - Who hunted the Grizzly Bear?
   - What happened to the Grizzly Bear after the gold rush began?

13. The teacher will show illustration Lassoing a Grizzly Bear (Source H) and have students either
   1. Complete the graphic organizer Handout 1: Observe, Think, Wonder, or
   2. Orally discuss the illustration using Handout 2: Brainstorm Sentence Starters

14. Discuss with students how the previous learnings have shown that one of the significant factors impacting the extinction of the Grizzly Bear in California was the growth in human population, towns, and cities and the subsequent loss of habitat for the Grizzly Bear. It was a “them or us” scenario in which the bear was to eventually be eradicated.

15. In the next part of the lesson, the students will learn about P22. P22 is a mountain lion who lives in Griffith Park. Distribute Helping Urban Wildlife in California: This week in NWF History (Source I)

16. Ask the students, in groups, to find any similarities between the plight of the Grizzly Bear and the mountain lion.

17. Students should make the connection that although it is too late to help the Grizzly Bear, there may still be time to help the mountain lions. Additionally, students should be asked to identify what is currently being discussed as possible ways to help the mountain lion. (Building a wildlife crossing so that the mountain lions can cross the freeway to get a larger hunting area and to find mates)

Assessment
Students will research an endangered species currently living in California and will address what issues that species has faced with (habitat destruction, pollution, lack of resources, etc.) Students can choose how they would like to display their research (i.e. PowerPoint, a written essay, iMovie, diorama, trifold, poster, etc.)

Extension Activity

LOST LA CURRICULUM PROJECT
Students will work together to come up with a practical solution such as a wildlife corridor or crossing for their particular species and build a model of their idea.

Bibliography


• Masters, Nathan. “California’s Lost Grizzly.” Lost LA, season 1, episode 1, KCET, 16 Jan. 2016.


• Thomson, Mary Leighton. Wiyot’s Children. www.library.ca.gov/content/images/californiahistory/symbols/flag.jpg.
SOURCE A

Picture of the California State Flag. Library of Congress.
https://www.library.ca.gov/content/images/californiahistory/symbols/flag.jpg
SOURCE B
SOURCE C


Note: An artist’s depiction shows an early Tongva settlement in the Ballona Wetlands. The Tongva are thought to have first settled in what’s now the Los Angeles area between 9,000 and 2,500 years ago.
SOURCE F

https://www.pbs.org/video/californias-lost-grizzly/
"Grizzly Bear." Valley Center History Museum. 
www.vhistory.org/exhibits/grizzly-bear/.
SOURCE H
Lassoing a Grizzly Bear. Col. Albert S. Evans/Wikimedia Commons PD. 1870.
https://welovebears.club/what-happened-california-grizzly-bear/
Name:

What do you wonder?

What do you think?

What do you observe?
Brainstorm Sentence Starters

These sentence starters can be used for illustrations, readings, or for providing text evidence in student writing.

- For example: _____ quoted, “...”
- On page _____, it states...
- In paragraph _____, the text says...
- The author wrote, “...”
- The graphic/illustrations/map/chart indicates...
- According to the text...
- _____ provides proof that...
- From what I read in the text, I understand...
- Based on _____ in the text, I think...
- I think the author means _____ because he/she says _____.
- _____ is an example of _____