Interactive Virtual Tour Instructor Guide

San Antonio Creek

To implement this tour, you will need:

The tour link: https://my.matterport.com/show/?m=mJ2DxxvTWP8

A way for your students to view/interact with the tour:

- Option 1: smartphones with Google Cardboard or other viewers
- Option 2: students view the tours via personal computers or tablets with individual headphones
- Option 3: project the tour on a screen at the front of the room for students to view together

Background Information

This tour is of the San Antonio Creek. Throughout the tour, students and educators can travel through the locations within the creek and observe the unique varieties of plants, identify wildlife habitats, explore the lush landscape, and view the scientific tools used by researchers. Learners can work through the tour at their own pace, viewing the different areas and media that provide additional information.

Purpose Statement and Learning Objectives

This iVisit tour aims to introduce learners to San Antonio Creek and its various plant species, wildlife, and habitats.

Learning Objectives:

After completing this tour, students will be able to...

- Name the state in which San Antonio Creek can be found.
- Explain the importance of maintaining a biodiverse ecosystem.
- Discuss the technique fisheries scientists use to isolate fish within a specific section of a stream.
- Understand the correlation between a fish's weight, total length, and overall health.
- Interpret how the "Depletion Approach" is used in fisheries management.
- Describe why fish population assessments are conducted.
- Identify the benefits of fish sampling.
- Define "log habitat".
- Explain the role of underwater vegetation in creek habitats.

This material is based upon work supported by the National Institute of Food and Agriculture and the U.S. Department of Agriculture, under award number 2021-70003-35432. Created 2024.

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Key Terms

Backpack Electrofishing

Biodiversity

Block Nets

"Closed Population"

Depletion Approach

Fish Population Assessment

Fish Sampling

Log Habitat

Microhabitats

Passes

Water Oxygenation

What You and Your Students Will See in the Tour

This tour includes a panoramic view of San Antonio Creek in New Mexico. Learners can expect to view the creek and the surrounding vegetation. You can click the white circles along the ground to move through the tour. Throughout the tour, there are information points you can click on to learn more information and view additional media about the area. You can use the following outline to guide students through the tour. You can navigate the tour using different options:

1. Navigate to the first stop and use the arrows to progress through the creek area from beginning to end.
2. From the floorplan view, move to a specific area in San Antonio Creek. This button is found on the bottom left side of the screen.
3. Use the mouse to move and look around. To move through the tour, click the white circles along the floor.

Welcome to San Antonio Creek

Starting point- Welcome to San Antonio Creek

- Begin the tour by viewing the informational "Welcome" icon above the stream.
    - San Antonio Creek is located in Northern New Mexico and is known for its rich biodiversity.
    - Introduction to fishery science and management.
- Navigate to the "Block Nets" (slide 2 of 6 for reference).
    - Block nets assist scientists when isolating fish in a particular section of a stream.
- For reference, maneuver towards the Fish Population Assessment (slide 3 of 6).
    - Examine different methods scientists use to assess the fish population in a given body of water.
    - Installation of block nets both upstream and downstream to create a "closed population."
    - Learn about the backpack electrofishing method.
    - Familiarize yourself with the "Depletion Approach" and how passes are used.

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- Guide yourself down the creek to the Fish Sampling video, characterized by the gray icon with the beaker (slide 4 of 6 for reference).
    - View the media to watch fish sampling occur in real-time.
- Continue downstream to the Log Habitat (slide 5 of 6 for reference).
    - Learn about the uses of wood in the creek and how it contributes to habitat formation.
- Finally, navigate to the end of the stream, before the fallen tree, and click on the "Underwater Vegetation" icon (slide 6 of 6 for reference).
    - Observe how vegetation supports the entire creek system.

Acknowledgments

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Project funded by:

United States Department of Agriculture – Higher Education Challenge Grant

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