

Using Technology to Teach Riparian Education



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GERONIMO CREEK GEOCACHING

STUDENT WORKBOOK

Belongs to: _____



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GPS How-To

Navigating to a Waypoint

1. Press the Power button (5) to turn on the unit.
2. Use the thumb stick like a joystick to scroll through the options.
3. In the Menu screen, find and click on "Where To."
4. In the next pop-up screen, click on "Waypoints."
5. Use the thumb stick to select the waypoint you want to find, then click the thumb stick button. Push Go (bottom of screen).
6. Zoom in on the screen as much as possible by pushing the Down Zoom button (1).
7. Push the Menu key (4) Twice to go back to the Menu screen. Scroll to Compass. Click on Compass.
8. Here you will see a compass with an arrow. Turn yourself until the arrow is pointing forward.
9. Walk forward keeping the arrow pointing forward.
10. Your distance to the waypoint is the number shown at the top right corner of the Compass screen. You are near the waypoint when the distance is within 10 ft.
11. To go to the next waypoint, go back to #3 above.

Device Overview



Point 1: Elephant Ears



Clues

- ◆ These plants are usually found in clusters.
- ◆ The leaves of the plant look like elephant ears.
- ◆ It grows along the water's edge.

Coordinates

N 29° 35.448'
W 97° 56.010'

Questions

1. Why do you think the elephant ears are called elephant ears?

2. Where do you think elephant ears usually grow?

Advanced Question

1. Do you think elephant ears are harmful to the environment? If so, how?

Background Information

Elephant ears are an invasive species from Southeast Asia. They are sometimes grown as an ornamental plant in flower beds along homes. However, they prefer to grow on the banks of streams or lakes. They are fast growing and can quickly eliminate native species along lake or creek banks. Because they grow so fast and densely, they reduce biodiversity and alter natural habitats and ecosystem processes.

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Point 5: Erosion



Clues

- ◆ Located along a steep bank or small cliff.
- ◆ Some of the exposed roots seem to be "floating."

Coordinates

N 29° 35.412'
W 97° 56.087'

Questions

1. Why do you think these roots are uncovered?

2. Describe the process of erosion?

Advanced Question

1. What do you think caused this erosion?

Background Information

Runoff erosion is caused by the excess rain that runs across the land trying to reach the creek picking up dirt or sediment. The sediment is later deposited somewhere downstream and affects the environment there. Sediment is considered a pollutant. This process does not happen over a single day of rain, but instead over a period of weeks or months depending on how hard the rainfall is. This runoff occurs due to the soil being fully saturated or rain is falling quicker than the soil can absorb it.

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RIPARIAN SYSTEMS



<http://www.gbra.org/riparian/index.html>



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