

Habitat Alterations of a Riparian Ecosystem

Summary

This field trip is designed to physically immerse students in the concept of habitat alteration by visiting a location along the Jordan river that possesses highly altered, relatively pristine, and restored habitats. Students will rotate between three stations focusing on biotic and abiotic habitat alterations within which they will identify native and exotic species, measure water quality, and gain historical perspectives on land use practices along uses the Jordan river. This trip is designed to take 3.5 hours and can accommodate between 30 and 60 students. This trip was originally designed for 8th grade but can be properly scaled for 6-10th grade.

Main Core Tie

Science - Biology

[Standard 1 Objective 3](#)

Additional Core Ties

SEEd - Grade 6

[Strand 6.4: STABILITY AND CHANGE IN ECOSYSTEMS Standard 6.4.4](#)

Group Size

Large Groups

Materials

- One instructor for each station plus additional adults to rotate with students
- Pencils (one per student) clipboards (at least one per every 3 students)
- handouts for each station found within individual station lesson plans (one per clipboard)

Background for Teachers

TGLL (Think Globally, Learn Locally) is a NSF-sponsored science education program based at the University of Utah. TGLL partners graduate students in the biological, geological and atmospheric sciences with middle and high school teachers in the Salt Lake City School District to enhance and promote inquiry-based science teaching and learning.

TGLL aims to promote learning around five environmental themes: habitat alteration, pollution and disturbance, invasive species, climate change, and infectious disease. Graduate students work with teachers to design authentic science activities that apply science core concepts to larger scientific issues.

This field trip was originally designed for schools with an assigned TGLL graduate fellow, however it could be adapted for use by others.

Site

The bend in the river site is located at 1030 West Fremont Ave, Salt Lake City, Utah 84104

If you are interested in utilizing this site please contact them at (801) 587-9027

For schools working with TGLL fellows, these individuals will possess needed background knowledge for the implementation of each station.

For schools not associated with TGLL, specific background for each station is provided within the station specific lesson plan.

Student Prior Knowledge

Most of the front loading for this field trip can be found in the introductory lesson plan listed under

materials.

Specific front loading for each station is found within the station specific lesson plans.

Intended Learning Outcomes

1. Use Science Process and Thinking Skills

a. Observe objects, events and patterns and record both qualitative and quantitative information.

b. Use comparisons to help understand observations and phenomena.

3. Demonstrate Understanding of Science Concepts, Principles and Systems

a. Know and explain science information specified for the subject being studied.

4. Communicate Effectively Using Science Language and Reasoning

a. Provide relevant data to support their inferences and conclusions.

5. Demonstrate Awareness of Social and Historical Aspects of Science

a. Cite examples of how science affects human life.

6. Demonstrate Understanding of the Nature of Science

i. Understand that science and technology may raise ethical issues for which science, by itself, does not provide solutions

Instructional Procedures

Planning

Contact the bend in the river site and reserve a day for the field trip.

Find 4 instructors (one is needed for each station except one station requires 2) and negotiate transportation

At the site

Introduction: introduce students in large group to the bend in the river site.

Divide students into three equal groups (10-20 students) and send them with one of the station leaders.

Rotate students from one station to another every hour until all students have attended all stations.

Bring students back together as a large group and discuss major points and findings

Authors

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