Megan Allen

Field Trip Lesson Plan

What fish live in our river?

Grade Level: 2nd Grade **Topic:** Interdependent Relationships in Ecosystems

Required Time: Pre-Field Trip Activities – One 30-minute class

Field Trip – 1/2 day; starting in the morning Follow up activities – One 30-minute class period

Standards:	**2-LS4-1** – Make observations of plants and animals to compare the diversity of life in different habitats. **W.2.7** – Participate in shared research and writing projects.
Learning Objectives:	Students will: • identify the fish that can be found in our local river system • observe the diversity of the fish found in the river • identify Brook Trout, Brown Trout, Cutthroat, Lake Trout (Mackinaw), and Rainbows by the markings on the fish • recognize the food source the fish rely on in the local river • follow fish as they travel down the river system
Prior Knowledge:	Building on our first field trip to the river, where students were collecting and classifying plankton. Students will be introduced to the fish that live in our local river system. The fish that inhabit different parts of the Green River are: Brook Trout, Brown Trout, Cutthroat, Lake Trout (Mackinaw), and Rainbows. We will also briefly discuss some of the food sources these fish rely on. More information will be provided to them by the Game & Fish Department. - "Young brook trout feed on plankton and progress to insects until they are adults. Brook trout feed on a wide variety of organisms including worms, leeches, crustaceans, insects, mollusks, fishes, amphibians and also small mammals. The stomachs of some brook trout contained traces of plant remains" (Conservation). - "Lake trout generally feed on a variety of organisms such as insects, fishes, and crustaceans. Some populations feed on plankton throughout their lives. Plankton feeding lake trout grow more slowly, mature earlier and at a smaller size, die sooner and a teen smaller maximum size then there piscivorous cohorts" (Conservation).
Materials:	Before leaving school to head to the Game & Fish Department, students will need to make sure they have packed: • colored pencil & their field journals • possibly a lunch
Field Trip:	The class will head to the Wyoming Game & Fish Department located in Green River; only 20 minutes away from school. Students will be broken up into smaller groups – if there are 50 students, then there would be 5 groups, 10 students per group. While working in the different groups, students will be encouraged to take note and write down questions they have for the fish biologist. - Upon arriving, one group of students will meet up with a fish biologist. The fish biologist will take the students down to the river where they will have samples of river water; very similar to the ones we collected previously. Students will get to look at the different microorganisms and check the classifications for each organism. - A second groups of students will meet along the greenbelt that travels along the river. This group will learn about the different sub-habitats for the different types of fish that are found along the river. - A third group of students will learn about all of the different fish that are found in the Green River. This group will meet at Overlook Park next to the Game & Fish department;

	however, they will not be closest to the river. They will get to see different pictures of the fish found in the river and they will learn some of the different attributes they possess. - The fourth group of students will visit the Game & Fish building. Inside the building is are several different displays of the fish that can be found at different parts of the Green River. - The final group of students will learn about the different fish hatcheries located up and down the Green River. These students will get to see samples of the fish at different stages of their life cycle – including: fish eggs, larva, fry, juvenile fish, smolt, and adult fish. The students will also get a copy of a map that indicates all the different fish hatchery locations along the river. - After students have visited the different stations, we will all meet together back at the Game & Fish building. Since this is a ½ day field trip – depending on the time, students may need to eat lunch before returning to the school.
Classroom Follow-up Activities	* The next day, students will be given time to talk about the field trip to the Game & Fish Department in Green River. Using their field journals, students will take a Fish Identification Quiz. Students will not be graded on their quiz; however, they will talk about how many fish they were able to identify. Due to the fact that this quiz focuses on fish from all over Wyoming and not just the southwestern region - students will have the ability to add information to the information in their field journals while working on the fish identification quiz. There are 28 different Wyoming fish identified in this quiz. https://wgfapps.wyo.gov/fishexam/default.aspx
Grades:	Students will essentially get a participation grade. Either they participated in the activities from the field trip or they did not. The teacher will keep track of students that are paying attention during the Game & Fish presentation and look over their notes in their field journals.

References:

Conservation, Fish and Wildlife Service/Fish and Aquatic. "Brook Trout." *U.S. Fish and Wildlife Service*, https://www.fws.gov/fisheries/freshwater-fish-of-america/brook_trout.html. Accessed 23 July 2021.

Fish Identification Quiz. https://wgfapps.wyo.gov/fishexam/default.aspx. Accessed 23 July 2021.