

# Rainbow Trout Release

**Time:** 15 min

## **Activity Overview**

Students will learn about the importance of assisting a land locked lake with stocking fish and why 'put and take' fisheries are important to nature. Students will assist in releasing rainbow trout into Heart Lake.

**\*This activity will be led by a Toronto Regional Conservation Authority (TRCA) Staff member. You will be assisting with the activity. Students will take part in releasing the fish**

## **Objectives**

Students will learn about raising and stocking fish. 'put and take' fisheries and why these help nature.

## **Setup**

The fish release will be set up in the morning by TRCA staff. An inflatable 'slide' will be set out into the lake and held in place with rope and t-bars. Help set up the orange traffic cones and caution tape to create a lineup for students. There is one large tent that will be set up in case on increment weather. Deep 'buckets' will be off to the side to transfer the fish. Make sure these are easily accessible. An additional tent and fish tank may be set up for viewing purposes after the students release their fish.

## **Materials**

- 20 orange traffic cones
- 1-2 rolls of caution tape
- 1 inflatable slide
- 1 large event tent
- 20 to 30 deep buckets for releasing fish
- optional: 1 large fish tank

## **Safety**

Ensure students are aware of their surroundings. Students should not be getting too close to the lake.

## **What will I be doing? (Procedure):**

### **Instructions**

Ask teachers to have their students form an orderly line in the queue. No student should be past the last orange cone and caution tape. If they are past this mark, kindly ask them to return to the line or they will not be able to participate. Ask the students in line to get in groups of 1, 2 or 3 for their fish release.

Volunteers will each grab one 'bucket' and form a line to the fish holding tank. When volunteers are at the front of the line, the TRCA staff will place 1-3 Rainbow trout in the bucket along with enough water to fill the bucket. The volunteer will take the bucket with fish over to the front of the student line. The volunteer will then ask the students how large their group are and to join them in releasing the fish in the bucket.

The volunteer will carry the bucket with fish over to the fish slide. At this point in time the volunteer can ask the students if they would like to name their fish and if they can guess what the species of fish are (Rainbow trout)

When the volunteer and the students reach the fish slide, the volunteer can ask if the students

would like it assist in releasing the fish. At this point in time, the students can help to tip the bucket forward on the slide to help release the fish. The volunteer should have their hands on the bucket at all times.

Once the fish have been released the volunteer can then ask if the students would like to go over to the fish tank to see and hear about fish in the lake. Please let the students know they can not get back in the line. We only have time for everyone to release fish once. At this time the volunteers will take their empty bucket and go back into the line at the fish holding tank.

Volunteers at the fish tank can talk to the students about the fish. The fish in the tank will most likely be Pumpkinseed sunfish or Rock Bass (TRCA staff to confirm) but they will be species that are native to Heart Lake. Volunteers can tell students that the trout they released are stocked fish and don't occur naturally in the lake but that people like to catch them. This takes the pressure off of the native fish because there are more fish to catch.

## **Background Information**

Typically in Ontario fish can be categorized into 4 categories. Native fish, stocked fish, non-native fish and invasive species. For this activity we will be focusing on native fish and stocked fish.

**Native fish:** Native fish occur naturally in nature. In Heart Lake there are pumpkinseed, rock bass, largemouth bass and bullhead catfish that occur naturally in the lake. Heart Lake is a closed ecosystem meaning that for large aquatic species like fish, there are no ways to be able to get in and out of the lake. This is good because it is less likely for invasive and non-native aquatic species to get into the lake. The problem with an enclosed ecosystem is that it has limited resources. If people or birds or animals were to catch and eat all of the fish in the lake, there would be no more fish as there is no way for them to get into the lake. For lakes like this a stocking program may be a good idea.

**Stocked fish:** These rainbow trout are grown in a fish hatchery at Glen Haffy conservation area and are brought here for stocking. A group of TRCA staff grow these fish from eggs until the size that you see now. It is determined that this is the best size to release the fish at in terms of being able to transport them and how likely they are to survive when they are released. If they were released as smaller fish they may not be fast enough to be able to get away from predators. These fish are released into this lake to help the native species thrive in what is called a 'put and take' fishery. Humans, birds and animals like catching and eating these fish. As such, there are more fish to catch and eat, giving the native fish a better chance to survive, spawn and create more fish.

**Rainbow Trout:** Rainbow trout are considered a cold water species. This means that they prefer when the water temperature is lower than 4 degrees Celsius. All of the native species in Heart Lake are warm water species. These are species that prefer water temperature between 14 and 20 degrees Celsius. This means that by stocking rainbow trout into Heart Lake, the trout are unlikely to compete with the native fish for resources including food and spawning habitat. This also means the Rainbow trout are unlikely to eat the other fish, making them a perfect species to stock in this scenario.