

## QUILLS

Queen's University Indigenous Land-Based Learning STEM Queen's University Biological Station

## Instructions for Biomagnification Tag Game



Full instructions can be found here: <u>http://ecolearninghive.org/sites/default/files/Lesson%20Plan%20-%20Bio%20Mag%20Tag.pdf</u>

- Game can be played outside or in the gym.
- Prepare by collecting approximately 100 small items to represent the pollutants. Some examples include beans, Lego pieces, popsicle sticks, etc.
- Assign participants the role of Osprey, Walleye, and Perch in a 1:3:9 ratio, respectively (note: species were replaced from the attached lesson plan to include local species).
- Each Perch receives 1 pollutant.
- Students play tag. Osprey can only tag Walleye, and Walleye can only tag Perch.
- When a Perch is tagged, they give their pollutant to the Walleye. When Walleye are tagged, they give all their pollutants to the Osprey.
- When a Perch loses their bean, they may be 'reborn' and receive a new bean.
- At the end of the game, evaluate how many pollutants the Osprey and Walleye have.

## Possible Discussion Questions:

- How can this be applied in your daily life? Which fish are safest to eat?
- What is a safe number of fish to consume?
- How does this affect Indigenous communities locally, Inuit communities, and communities found along the coasts?