

LESSON 5: TROUT FOOD SOURCES

Grade-Level Outcomes

Primary Outcomes

Movement concepts, principles & knowledge: Applies the terminology associated with exercise and participation in selected individual-performance activities, dance, net/wall games, target games, aquatics and/or outdoor pursuits appropriately. (S2.H1.L1)

Lifetime activities: Demonstrates competency and/or refines activity-specific movement skills in 2 or more lifetime activities (outdoor pursuits, individual-performance activities, aquatics, net/wall games or target games). (S1.H1.L1)

Embedded Outcome

Personal responsibility: Employs effective self-management skills to analyze barriers and modify physical activity patterns appropriately, as needed. (S4.H1.L1)

Lesson Objectives

The learner will:

- identify three common invertebrates.
- compare and contrast the three common invertebrates.
- infer where (above or below the surface) an invertebrate is found based on its structure.
- make an accurate cast to a target.

Equipment and Materials

- Fly rods
- Fly reels
- Cones
- Bug targets
- PowerPoint
- Aquatic invertebrate handout

Introduction

Today, you will learn about the types of insects that fish eat. Because a fly mimics an insect, it's important to match the fly to the types of insects that fish feed on.

Show a short clip of fish taking an adult caddis off the top of the water. Ask leading questions to draw students' attention and check understanding of previous knowledge. Introduce the idea of the fly imitating a common trout food source (caddis, mayfly, stone fly).

Instructional Task: Introduction of Aquatic Invertebrates

■ PRACTICE TASK

Introduce invertebrates with the aquatic entomology PowerPoint or with the aquatic entomology handout.

Key Concepts

- Mayfly adults have a sail wing.
- Caddis fly adults have a tent wing.
- Stone fly adults have a flat wing.
- Mayfly nymphs can be differentiated from stone fly nymphs because they are typically much smaller and have three tails (usually).
- Caddis fly nymphs typically have long, trailing legs.

Students work to complete the aquatic entomology handout.

Refinement

A check for understanding will confirm whether or not students understand the task or are on the right track in completing the task.

Student Choices/Differentiation

Provide both the PowerPoint presentation and handout to support student learning.

What to Look For

Student engagement and student talk centered around fish food sources.

Instructional Task: Casting to Targets

■ PRACTICE TASK

Once students have completed the handout, they will move to the casting stations to reinforce invertebrate identification.

Students will:

- cast to laminated picture targets of the big three food sources.
- identify the fly correctly after hitting the target or pass the fly rod to a partner.
- make at least three effective basic casts and identify three different insects correctly in a row.

Refinements

- The distance of the target from the casting group can be manipulated for each group, depending on students' ability level.
- Partners will want to pay particular attention to the casting loop during this activity to monitor the caster's turnover.

EMBEDDED OUTCOME: S.4.H.1.1.1. Students must apply the correct strategies of the basic cast in order to complete the task. This may require a high level of persistence. Provide encouragement and positive feedback about persistence and effort as students practice.

Student Choices/Differentiation

- Vary the length of the rod and the distance to the targets.
- Students choose their partners.

What to Look For

- Students are engaged in the activity and using the correct technique for a basic cast.
 - Students are engaging their line hands correctly.
 - Students are letting the line load.
 - Student talk is centered on correct technique and positive identification of the aquatic invertebrates.
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Formal and Informal Assessments

- Completed handouts
- Success in hitting targets
- Journal entry

Closure

- What is a distinguishing characteristic of the mayfly adult? The caddis fly adult? The stone fly adult?
- How are the three common invertebrates similar and different?
- What characteristics can be used to identify an invertebrate as a nymph or an adult?
- How was your basic cast affected as a result of the additional learning today?
- Next class, you'll learn about different fish species and refine your casting.

Reflection

- Were students able to focus on their basic casting technique while at the same time applying the additional learning of the life cycle of aquatic invertebrates?
- Were they able to hit the targets?
- Do they need to adjust their direction or distance?

Homework: Fly Fishing Journal Entry

- Communicate through your writing how to differentiate between the adult and nymph versions of the three common aquatic invertebrates.
- You will be turning in your journals next class.

Resources

Troutnut: www.troutnut.com

AQUATIC ENTOMOLOGY



ADULT MAYFLY.



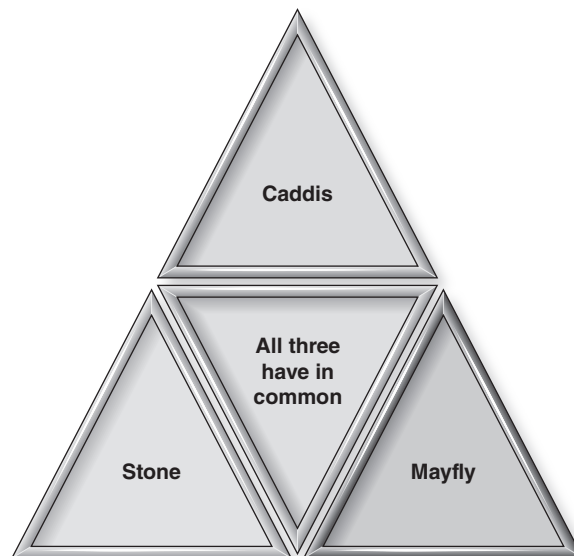
ADULT CADDIS FLY.



ADULT STONE FLY.

1. Closely observe the wings on each invertebrate.
 - a. Which invertebrate wing is flat on the insect's back?
 - b. Which invertebrate wing is like a pup tent (an upside down V)?
 - c. Which invertebrate wing is like the sail of a sailboat?
2. What are two characteristics that they all have in common?
 - a. _____
 - b. _____
3. Based on the structures these invertebrates have, are they likely to live above or below the surface?

Use the handout from the textbook *School of Fly Fishing* (page 145) to compare and contrast the mayfly nymph, the stone fly nymph, and the caddis fly nymph in the following diagram. The outer triangles should have one distinguishing characteristic for each invertebrate. The central triangle should be a characteristic they all have in common.



From L.C. MacDonald, R.J. Doan, and S. Chepko, eds., 2018, *Lesson planning for high school physical education* (Reston, VA: SHAPE America; Champaign, IL: Human Kinetics).