

Video Title: Lesson 04—Bugs! (Aquatic Invertebrates)

Brief Description	Tiffany Furlong describes and shows what an aquatic invertebrate is and where to find them. The video shows what you need and how to catch bugs in a pond and in a stream. The video shares different information about the Mayfly, Dragonfly, Caddisfly, and Water Scorpion
KEYWORDS	Aquatic invertebrates exoskeleton Riparian area habitat predatory lifecycles Mayfly Dragonfly Caddisfly Water Scorpion Pollution intolerant rectal gills camouflage nutrient cycle food chain decompose
Curriculum Links By grade- Big Ideas- Content	<p><u>Science</u></p> <p>K-Plants and animals have observable features -adaptations of local animals Daily and seasonal changes affect all living things- Changes that living things make to accommodate seasonal changes.</p> <p>Grade 1- Living things have features and behaviours that help them survive in their environment- names of local animals, structural features of living things in the local environment, behavioural adaptations of animals in the local environment</p> <p>Grade 2- Living things have life cycles adapted to their environment- metamorphic and non-metamorphic life cycles of different organisms- similarities and differences between offspring and parent</p> <p>Grade 3- Living things are diverse, can be grouped, and interact in their ecosystems- biodiversity in the local environment</p> <p>Grade 4- All living things sense and respond to their environment- The ways organisms in ecosystems sense and respond to their environment.</p>
Inquiry Questions	How does an insect change throughout their lifecycle? What do insects need to survive? Why are aquatic invertebrates important? What is different between a pond and a stream? Why are there different insects living in a stream then a pond? What makes a healthy pond? What makes a healthy stream? How do salmon feed the trees?
Background interesting facts, "Nature Nuggets"	<ul style="list-style-type: none"> • A Dragonfly breathes through its butt or has rectal gills. • Mayflies are pollution intolerant, if you find them in your sample it means that the water is clean. • The male Water Scorpion carries the eggs
Outdoor Activity	Take a field trip to a local wetland.
Links to related Resources	<p>HCTF Education Let's Go to the Pond: https://www.hctfeducation.ca/wp-content/uploads/2015/10/Lets-Go-To-The-Pond-V8-1.pdf</p> <p>Pond ID cards: https://www.hctfeducation.ca/wp-content/uploads/2015/10/Pond-Life-Field-ID-Cards-3-Up-July-8.pdf</p> <p>Ducks Unlimited Canada Resources: https://www.ducks.ca/resources/educators/</p> <p>Coloring sheets of aquatic creatures: http://www.pskf.ca/publications/sheets/index.html</p>

Book list	<ol style="list-style-type: none">1. Around the Pond (Who's Been Here?)by Lindsay Barrett George2. Over and Under the Pond by Messner, Kate- 20173. Series: Backyard books “Are you a Dragon fly”, “Are you a Grasshopper”, etc. (very good for lifecycles) by Judy Allen and Tudor Humphries4. Take A Wetlands Walk by Kirkland, Jane - 2008
Notes/Misc	Students (independently and in groups) could do their own inquiry projects on specific aquatic invertebrates and present them.