

# Pond Insect Investigation Activity Packet

Minnesota Valley National Wildlife Refuge



*Grade Level: 2-3*

## *Activities in this packet:*

- Scoop it Up! Activity, [page 2](#)
- Pond Life Nature Journal, [page 5](#)
- Pond Life Scavenger Hunt, [page 6](#)
- [Key to Pond Life](#)
- Video Links
  - Introduction to Pond Insects <https://youtu.be/s2pVmJFFjfA>
  - 'Eliza and the Dragonfly' Story Reading <https://youtu.be/d-zrmcwI9OE>
  - Virtual Field Trip: Pond Insect Investigation <https://youtu.be/EhEzXtgg5Ao>
  - Dress Like a Pond Insect <https://youtu.be/9D891BBi5Ks>



## *Resources*

- Aquatic Insects: Voracious predators, architects, and environmental indicators  
<https://www.youtube.com/watch?v=-qSNXRxJWtc>
- Complete vs. Incomplete Metamorphosis for kids: Larva, pupa, nymph, naiad defined:  
<https://www.youtube.com/watch?v=HpC7zkQLw4>

## *Other Activities*

- Critter Catch Game (Match Game) <http://www.troutintheclassroom.org/teachers/library/catch-critter-game>
- [Bugs Don't Bug Me Coloring Book](#)

# Pond Insect Investigation

## Scoop it Up!



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### *Gather these materials:*

- 2 buckets or old large yogurt containers
- Smaller containers like an ice cube tray, small yogurt container, microwavable dinner tray (look through your recycle bin, just make sure it's clean!)
- Spoons for scooping
- Download and print: [Key to Pond Life](#)

### *Vocabulary to know:*

**Macro-invertebrate:** organisms that don't have a backbone and are large enough to see without a microscope

### *Looking closer:*

1. Watch the **Virtual Field Trip: Pond Insect Investigation** <https://youtu.be/EhEzXtgg5Ao>
2. Scoop some water from the pond into your bucket.
3. Next, using either a net or another container scoop some water from near the bottom of the pond or by some plants in the water.
4. Pour the contents into the larger bucket.
5. Look closely! Do you see anything moving?
6. Scoop some water and pond life into the smaller containers.
7. Observe the creatures you found.
  - How do they move?
  - Can you tell how they breathe?
  - Do they have wings?
  - Do they have tails?
8. Draw your creatures in your nature journal, [see page 5](#).
9. Identify which creatures you've found using the Key to Pond Life. Write them in your nature journal.
10. Return all pond life back to the location where you found them. They can't live on land or in your bathtub.

Look closely at the anatomy of the macro-invertebrates that you collect

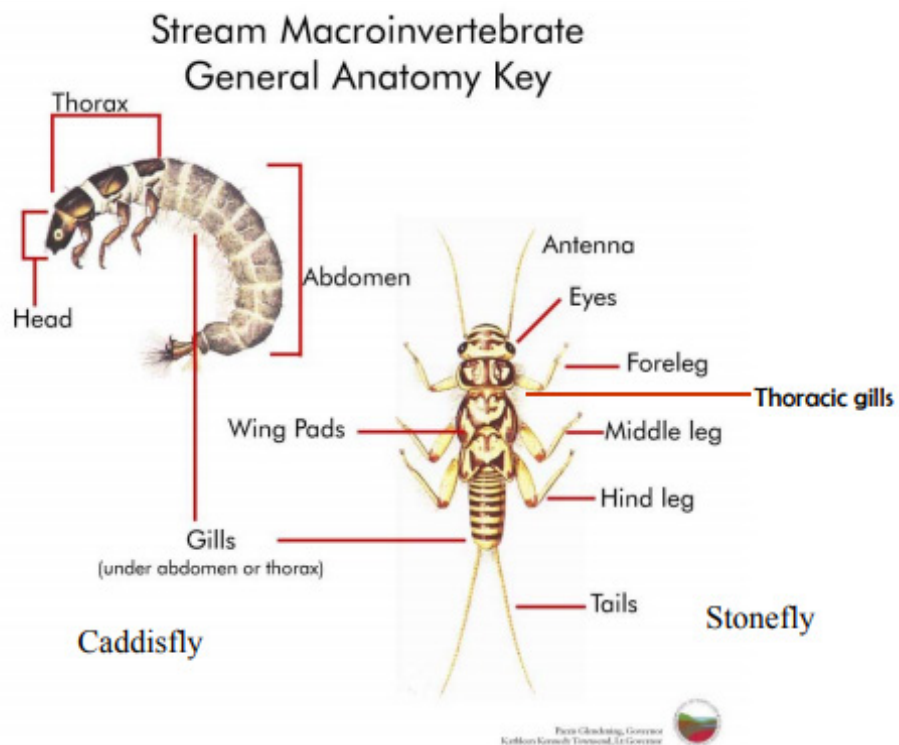
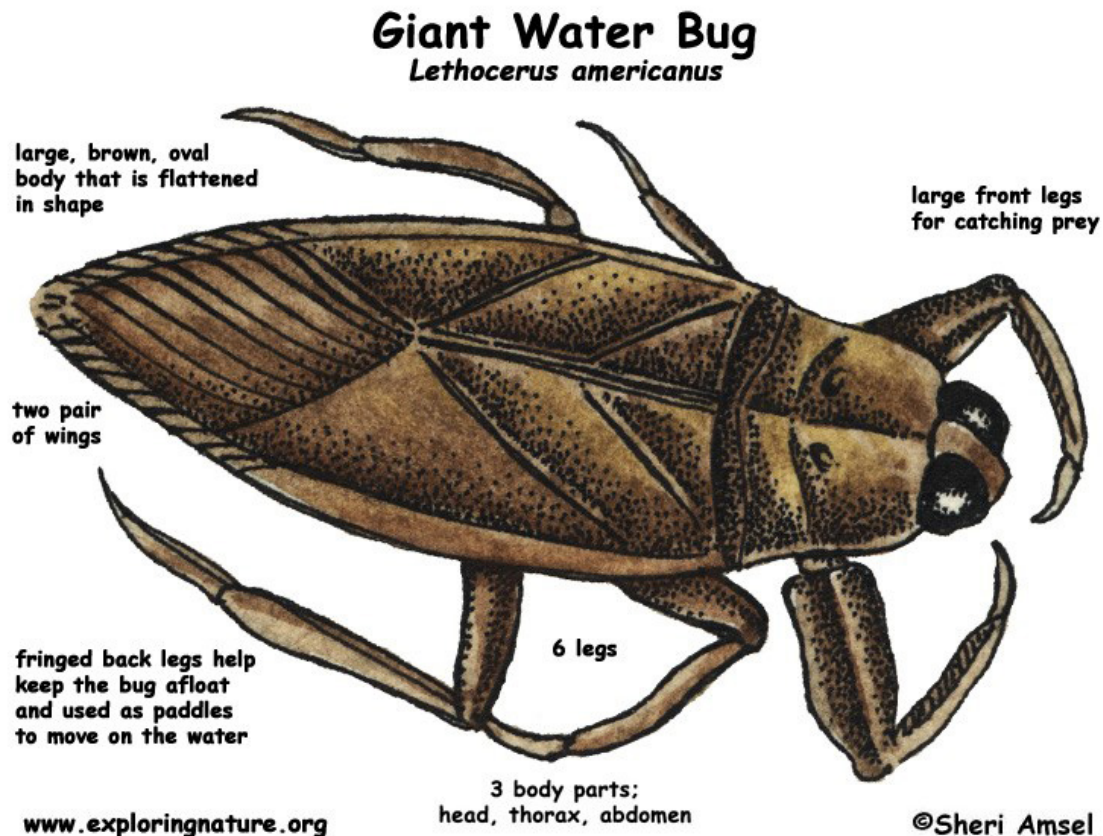


Figure 6. Insect Anatomy

Image from Maryland DNR <https://dnr.maryland.gov/education/Documents/Aquatic%20Insect%20Ecology.pdf>

*The larva, which live in the water, look much different than the adults that have emerged and now live on land and fly.*

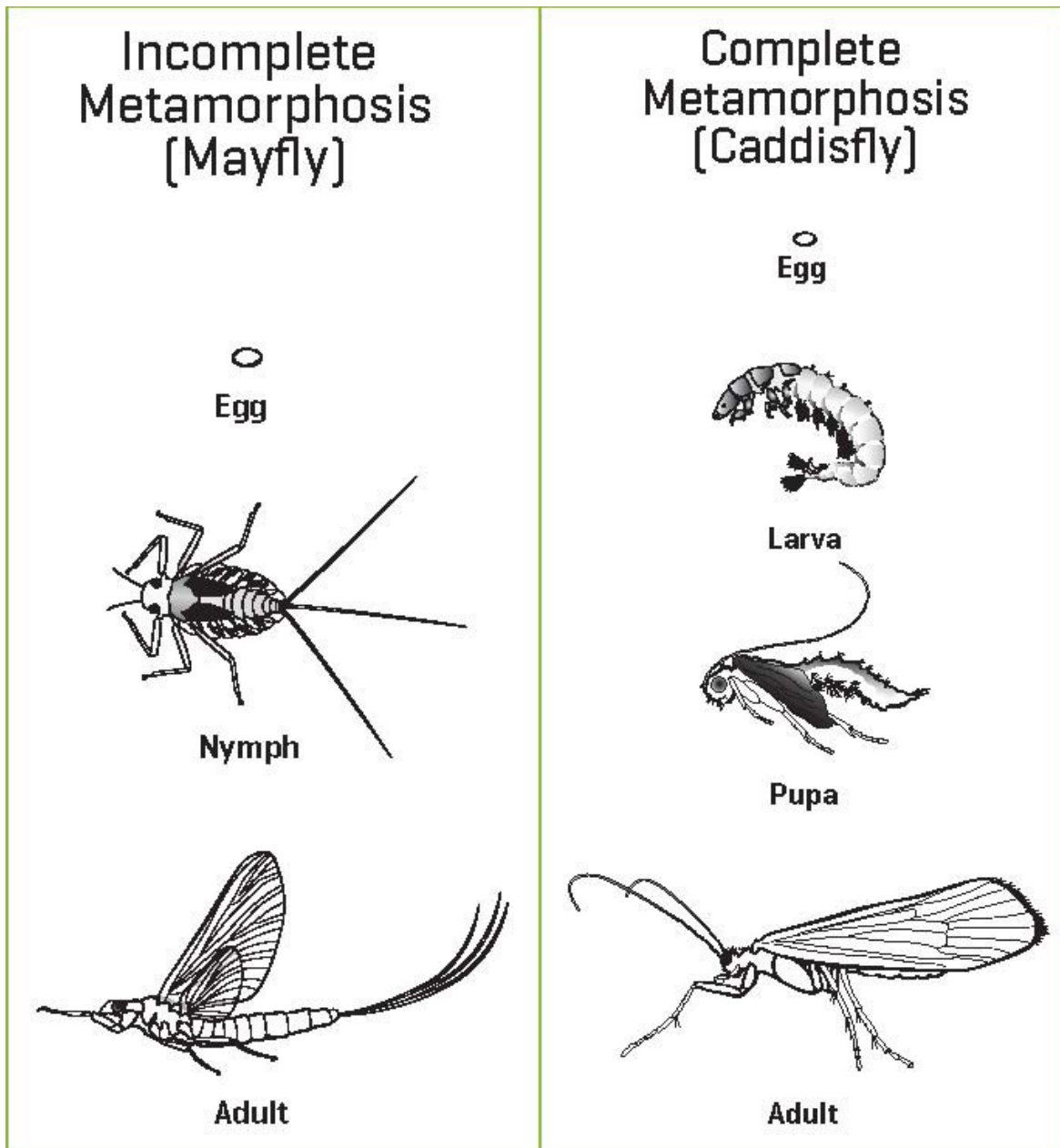
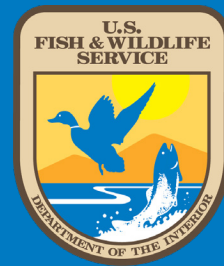


Image from Stroud Water Research Center <https://leafpacknetwork.org/learn/linking-trees-streams/>

Check out the Complete vs. Incomplete Metamorphosis for kids: Larva, pupa, nymph, naiad defined: <https://www.youtube.com/watch?v=HpC7zkQLw4>

# Pond Insect Investigation

## Pond Life Nature Journal



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#### Gather these materials:

- Nature Journal or blank paper
- A wetland area out your window, in your yard, on the street, at a local park
- Pencil/crayons/colored pencils/markers
- Scoop it Up! activity from [page 2](#)

#### Pond Life Journal:

1. After scooping water from the pond, record what you see in your nature journal.
2. Do this several times from spring to fall, recording your observations each time. After a few visits to the pond, compare how things have changed. Write your answers on a blank page in your nature journal.
  - Do you notice new insects or that some are no longer present? Why do you think this is? Are there new plants present in the pond?
  - Have you caught any large organisms like fish or frogs?
  - How have some of the organisms changed? Have tadpoles become frogs? Have dragonfly larva turned into the adults?

*May 20, 2020*

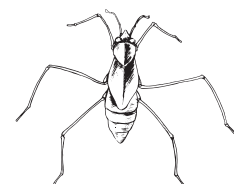
*Location: City park pond  
Temperature: 65° degrees F  
Weather: Partly cloudy*

*I scooped water from the pond and put it in a bucket. I put some pond weeds in the bucket too. When I first looked in the bucket I didn't see anything. After five minutes things started to move and swim around!*

*I wonder what I will see next time!*



*Water Boatman*



*Water Strider  
This one was walking on the water!*

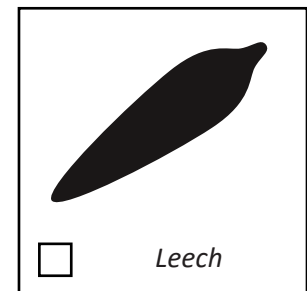
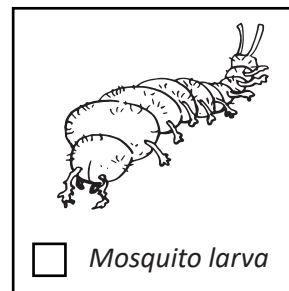
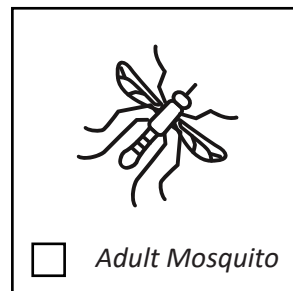
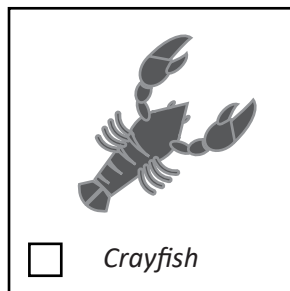
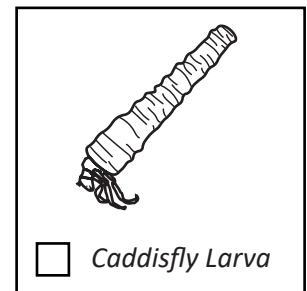
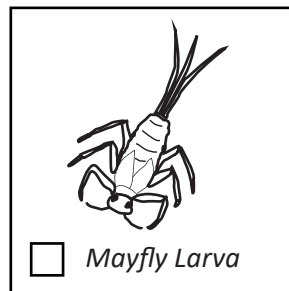
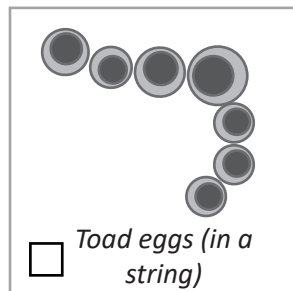
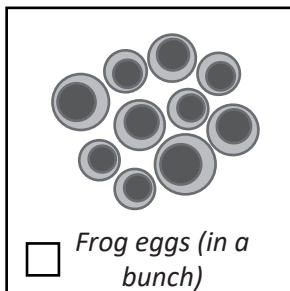
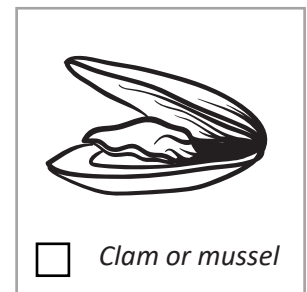
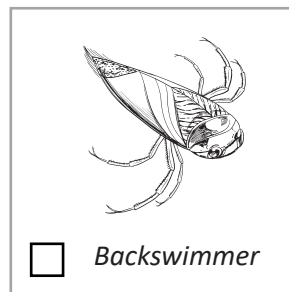
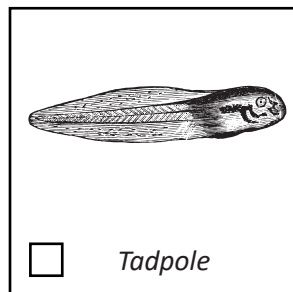
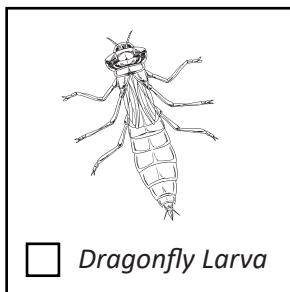
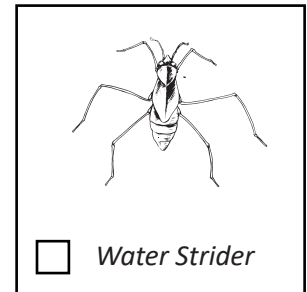
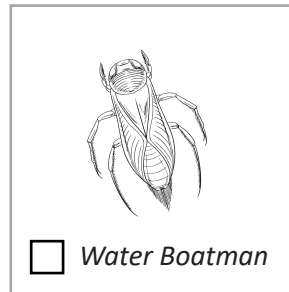
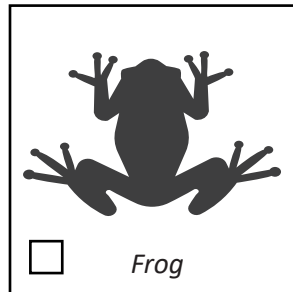
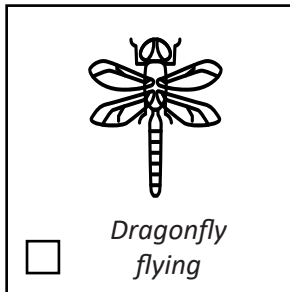


*Dragonfly Nymph*

# Pond Life Scavenger Hunt

Date: \_\_\_\_\_

Check the box when you find an item below



Some images provided by Vecteezy.com

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