

Bugs, or invertebrates, are those animals without backbones or skeletons, and they are all around us! Invertebrates includes spiders, beetles, butterflies, moths, dragonflies, snails, pill bugs, worms, ants, slugs, bees, walking sticks, mussels, and so many more! We often use the term "bug" for all things crawling and flying like these.

Tiny but mighty, bugs help run the world and keep things moving for all of us bigger animals. They help by maintaining healthy soil, recycling nutrients, pollinating plants like flowers and crops, helping to control "pests", filtering water, and forming the basis of our food chain. Without these little critters who crawl, squirm, slither, and fly we would be in trouble. MDIFW estimates conservatively that Maine is home to over 16,000 species of terrestrial and freshwater invertebrates.

Let's Begin:

Use the attached worksheet to see what diversity you can find around you, whether you are on a nature walk, in your backyard, or in the school yard see what is out there!

- Print this off or use it on your phone, tablet, or other device. (Print and laminate then use crayons or dry erase markers to keep using it.)
- Use as a scavenger hunt.
- Use as a bingo game.
- Use as a checklist to help you study some of the various types of invertebrates in Maine.

Some things to consider:

- 1. When exploring with kids make sure the area is safe, and set boundaries.
- 2. Remind children how to observe invertebrates with their eyes and not touch.
- 3. If handling invertebrates make sure to be gentle, use nets and containers with air holes, and be careful not to pinch any body parts in lids, nets, or with our hands. We are so big to them and even gentle hands can cause harm on accident.
- 4. Be sure to leave any invertebrates that can bite or sting on their own and just observe them.
- 5. If the invertebrate is in a web, nest, tunnel, or has eggs just observe and do not disturb. We wouldn't want to wreck their hard work or disrupt their reproduction. The same goes for any invertebrate that is eating, in a coccoon, or hard to catch keeps escaping.
- 6. If catching invertebrates do not hold them more than a few minutes for observation, and make sure they aren't overheating in direct sun or getting too wet, unless they are supposed to be in water, and again release them soon. Take pictures to add observations later.
- 7. Always release invertebrates where they are found, which means as close to the exact location as you can, even a few feet is too far for some. Also if found under something heavy like a rock or log, put the heavy object down carefully (with adult help). Then put the animal down next to it covered with some loose leaves, and allow it to crawl under on their own as to not get squished.
- 8. Use field guides or apps like iNaturlist to help idetnify from pictures or the invertebrate in-hand.
- 9. Have fun! Make observations!

BUGS ALL AROUND!

FLY	INSECT EGGS OR A COCOON	BEE OR WASP	DRAGONFLY
BEETLE	CATERPILLAR	PLANT THAT HAS BEEN EATEN BY A BUG	SPIDER
SLUG OR SNAIL	BUTTERFLY	INSECTION A FLOWER	CRICKET OR GRASSHOPPER
INSECT USING CAMOUFLAGE	A BUG'S HOUSE	BONUS: A BUG NOT ON THIS LIST!	ANT

Created by Maine Master Naturalist Melissa Sweet, 2023