#### GLOBE Observer

# ) Mosquito Habitat Scavenger Hunt

Learners will discover mosquitoes and investigate the habitats they need for breeding. They will take a walk around their site to look for objects on the Mosquito Breeding Habitat Scavenger Hunt. Learners will share their findings, see if their predictions were correct, and describe why these objects/areas are mosquito breeding habitats.

#### Purpose

The purpose of this activity is to explore areas and objects that are possible mosquito breeding habitats. Mosquitoes lay their eggs in or around water. Anything that collects water could become a **mosquito breeding habitat**.



Time

30-45 minutes

Photo courtesy of James Gathany, CDC Public Health Image Library (PHIL), #7861.

- This may be done all at one time or for a shorter amount of time over multiple days in various locations.
- 15 minutes for read-aloud of mosquito literature of choice

#### Materials

- Literature selection for read-aloud, such as Grandmother Mosquito by Fritz Petropoulos
- Pencils or pens
- □ Hand lenses
- □ Mosquito Habitat Scavenger Hunt Activity Sheet (included below)
- □ (Optional) Dry erase markers to use with laminated sheets

#### Safety

When learners go outside to search for mosquito habitats, please wear long sleeves, long pants, and appropriate footwear. Apply insect repellent and always use caution to make observations safely.

#### What to Do

- 1. If time permits, share a fun mosquito read-aloud.
- 2. Lead a discussion about what makes an ideal mosquito breeding habitat, including the following facts:
  - a. Mosquitoes look for standing water to be present in habitats to lay their eggs.
  - b. Most mosquito species are active between 50°F (10°C) to 100°F (38°C).
  - c. Mosquitos depend on plants for food; they eat plant nectar.
  - d. Female mosquitoes will bite an animal for the blood they need to be able to develop eggs.
- 3. Introduce the activity, read through all of the items listed on the scavenger hunt and make **predictions** about which items will be found.
- 4. Pair partners to find as many objects on the scavenger hunt sheet as they can find; younger learners will need to be paired with an older learner or an adult.
- 5. Once they locate the object, check the box below it. Make a list of any additional mosquito habitats that they find on the back of the sheet.
- 6. Discuss the items each pair found.

#### **Questions for Review**

- 1. How do factors in the environment such as **land cover**, temperature and **precipitation** affect mosquito habitats?
- 2. Of the items found on the scavenger hunt, what do the learners think would make the best mosquito breeding areas? Why?

#### Key Words

Land Cover: a general term used to describe what is on the ground covering the land

Mosquito Breeding Habitat: a place in which mosquito eggs, larvae, and pupae can live and grow

Precipitation: a form of water such as rain, snow, sleet or hail that falls to the Earth's surface

Prediction: an educated guess

#### **Modifications and Extensions**

Of the items you found on the scavenger hunt, list the top 5 you think are the best mosquito breeding habitats. Go back outside to where you and your partner found these items list the land cover type, air temperature, and cloud/tree cover shading the item in your observation journal. Note that the best time to do this is between 3:00 and 4:00 pm. This is the time of day that it is more likely to be at the highest temperature

Devise a plan to reduce the mosquito breeding habitats around your site. Take action on your plan and monitor the results of your plan.

### Acknowledgements

This resource was adapted by the NASA Earth Science Education Collaborative (NASA award NNX16AE28A) for GLOBE Goes to Camp. It is based on the <u>GLOBE Observer Mosquito Habitats</u> and <u>Hideouts</u> activity.

## Mosquito Habitat Scavenger Hunt



Animal dish or trough



Grill



Pool



River or stream edge



**Trash container** 



Tracks (animal, people, or tire)



**Bird bath** 



Can, bottle, or cup



ts Hollows in trees



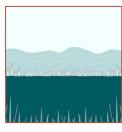
**Public works** 



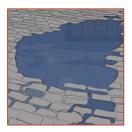
Shells (animal or plant)



Well or cistern



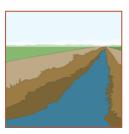
Lake or pond



Puddle



Tire

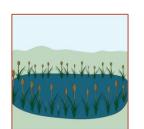


Ditch





Plant pot



Swamp



Water storage jars