Surveying Local Vegetation Habitats

In Task 5-2, the team learned more about different human and natural potential mosquito habitats in your research site. Another factor that can influence the presence of mosquitoes in your area is the vegetation. Vegetation is a term used to describe all of the plants found in a particular area or habitat. Many mosquitoes, eggs, and larvae will use the natural vegetation (the plants) in and around your research site as habitats or places to live, breed, and develop. Other types of vegetation can help keep mosquitoes away and can be useful for mosquito management.

**Objective**

In this task, the team will survey the vegetation in the area to understand how it could affect the mosquitoes living in your research site.

**In this task, the team will be focusing on the following questions from the question map.**

- Where do mosquitoes live and breed?
- What influences this?

1. Go to the Task 5-3 folder and get the Vegetation Survey form. There are two versions of this task. Mosquito A involves collecting data by hand. Mosquito B involves using some additional technology. Choose the version that works for you. It might be helpful to do both if you can. In that case, start with Mosquito A and then do Mosquito B.

2. As a team, conduct the vegetation survey in and around your research site.

3. If you're able, collect leaf or plant samples to create a research site vegetation book. Use the plant collection instructions in the task folder as needed.

4. As a team, discuss:
   - Based on your habitat and vegetation survey of your research site, how could this information be useful when thinking about where mosquitoes live and develop in your local community?
   - How could this information be useful when thinking about the problem question: How can we ensure health for all from mosquito-borne diseases?
   - How could this information be useful when developing solutions to manage mosquitoes in your local community?
   - Changes in vegetation can also affect mosquitoes in your local area. How could you monitor vegetation changes in your research site into the future? How could this information be useful to address the problem question into the future?
**Task 5-3 Conducting Mosquito Habitat Vegetation Survey—Mosquito A**

Use the following form to survey the vegetation in your research site. For plants that potentially repel mosquitoes, see the list below the table.

Name:

Date:

Survey start time:

Survey end time:

Weather:

- Clear
- Scattered clouds
- Complete cloud cover
- Rain
- Wind: calm, breezy, gusty

Air temperature:

**Vegetation Survey Table**

<table>
<thead>
<tr>
<th>Type of plant</th>
<th>Total # of plants of that type</th>
<th>Notes (include any other helpful information about location of plants in research site)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flowers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bushes or shrubs</td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Ground cover (not grass)</td>
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<td></td>
</tr>
<tr>
<td>Fungus, moss, and lichen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plants that potentially repel mosquitoes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Plants that might potentially repel mosquitoes (not all are scientifically verified; more research still needs to be done).

- Artemisias (mugwort, wormwood, sagebrush)
- Basil
- Citronella grass
- Common lantana (big sage, white sage, tickberry)
- Lavender
- Lemon balm
- Lemon grass
- Lemon thyme
- Lime basil
- Stone root (horsebalm, richweed, ox-balm)
Task 5-3 Conducting Mosquito Habitat Vegetation Survey—Mosquito B

Using Technology to Identify Plants and Build a Local Field Guide

Use the following technology resources to help you identify plants and build a local field guide.

Leafsnap: http://leafsnap.com/

PlantNet Plant Identification: https://identify.plantnet-project.org/

FlowerChecker: http://www.flowerchecker.com/

Research Site Vegetation Survey

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Date:

Survey start time:

Survey end time:

Weather:

- Clear
- Scattered clouds
- Complete cloud cover
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- Wind: calm, breezy, gusty

Air temperature:

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