

Activity Guide

Learning Objectives

Build awareness of:

1. The many different breeding habitats used by container mosquitoes. There are 30 categories used in the **GLOBE Observer Mosquito Habitat Mapper App**.
2. The three life-cycle stages of a mosquito that are in the water (egg, larva, and pupa). The **GLOBE Mosquito Habitat Mapper App** focuses on the larval stage but asks if the mosquito eggs, larvae, or pupae are also found in the sample or nearby.

Mosquito Habitats and Hideouts can be played as one of three games: Bingo, Name That Habitat, or Sketch That Habitat.

Play Bingo

PREPARE

- Print out different **Bingo Boards** for each player, plus one **Bingo Call Sheet** (page 4 of this guide, which shows images of mosquito breeding sites and life-cycle stages with names).
- **Suggestions:** laminate and reuse boards and call sheets. If using PowerPoint slides for your Bingo Call Sheet, download them (observer.globe.gov/toolkit), mix up the slides' order, and display.
- Collect or create markers for players or groups to use. Markers could be pennies, small rocks or other objects (to create markers, you can use the template on page 9 of this guide).
- **Suggestions:** To make sturdier markers, you could (1) print or paste paper markers onto cardboard or laminate and (2) cut them out. Use dry-erase markers on laminated Bingo Call Sheets or Bingo Boards.

PLAY

- Hand out a different Bingo card to each player.
- Players place a marker over the center square, which is a “free” space.
- The “caller” randomly selects a mosquito habitat site or life-cycle stage card and calls out its name.
- Players place a marker over the mosquito habitat or life-cycle stage image if it is on their card.

WIN

- A player or team covers a row of spaces in any direction (vertically, horizontally or diagonally) and calls out **“Bingo!”** (also see variations on page 8 of this guide).
- The caller checks the player or team’s card. If they are correct, they win the round. If not, they are either (1) disqualified from that round, or (2) invited to keep playing.
- Continue until a selected or predetermined number of winners have called out **“Bingo!”**

Activity Guide

Play Name That Habitat

Player selects a card of a mosquito habitat or life cycle and describes it without using the name; other player(s) guess the habitat or life cycle based on the description and clues. This game can be played as one large group or broken into smaller groups.

MATERIALS

- **Playing Cards** of habitats and life cycle stages (pages 5 and 6 of this guide). Alternately, a PowerPoint file for projecting is provided with habitats on individual slides.
- White board or projection screen (optional).
- Timer (use a game timer/hourglass or app).

Play Sketch That Habitat

*A player **sketches** a habitat or life cycle (drawing the name from the list on page 7 of this guide); others must guess the name of this habitat or life cycle.*

MATERIALS

- **List** of habitats and life cycle stages (page 7 of this guide). Note: this game uses the habitat or life cycle names only, not the images.
- White board, paper pad, flip chart, or butcher paper.
- Timer (use a game timer/hourglass or app).

Mosquito Habitats and Hideouts

Supplemental Resources

Call Sheets and playing cards

- **Bingo Call Sheet:** one page; use with Bingo or Name That Habitat
- **Playing Cards:** two pages; use with Bingo or Name That Habitat
- **List of mosquito habitats and life cycle stages:** Use with Sketch That Habitat, Name That Habitat, or Bingo

Bingo Resources

- **Bingo Variations**
- **Bingo Marker Template**
- **30 Bingo Boards** (see separate file)

Mosquito Habitats and Hideouts

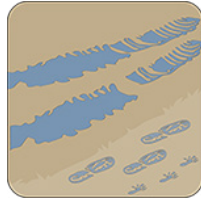
Bingo Call Sheet



Abandoned car



Animal dish or trough



Animal, people or tire tracks



Birdbath



Can, bottle, cup



Ditch



Estuary



Grill



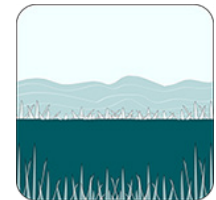
Hollows in plants



Hollows in trees



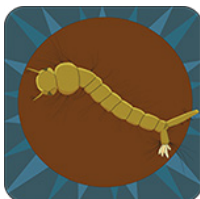
House or structure



Lake or pond



Mosquito eggs



Mosquito larva



Mosquito pupa



Mosquito trap



Ovitrap



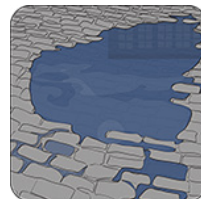
Plant pot



Pool



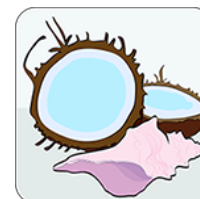
Public works



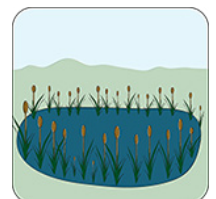
Puddle



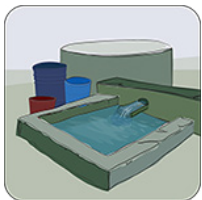
River or stream edge



Shells (animal or plant)



Swamp



Tank



Tire



Trash container



Trash/discarded objects



Water jars



Well or cistern

Mosquito Habitats and Hideouts

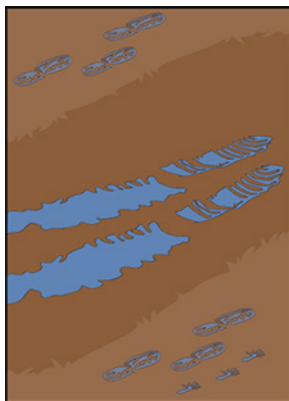
Playing Cards



Abandoned car



Animal dish
or trough



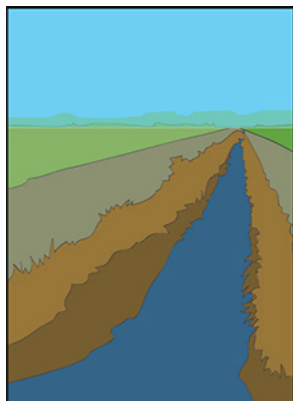
Animal, people,
or tire tracks



Birdbath



Can, bottle, cup



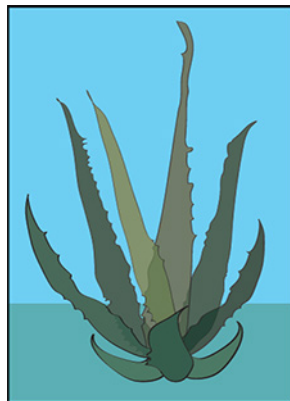
Ditch



Estuary



Grill



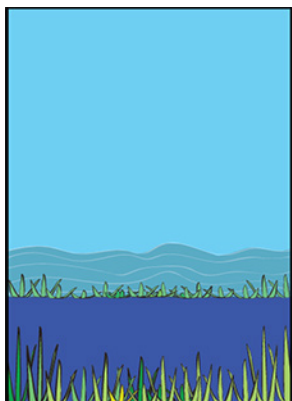
Hollows in plants



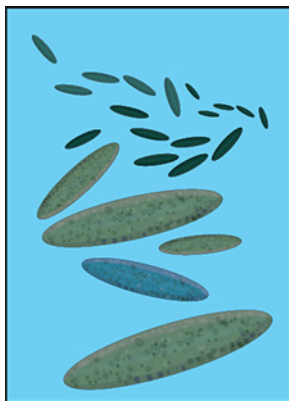
Hollows in trees



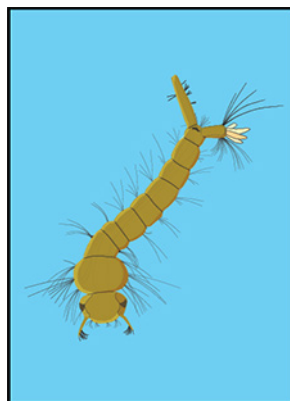
House or structure



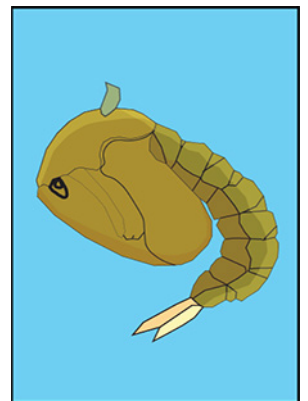
Lake or pond



Mosquito eggs



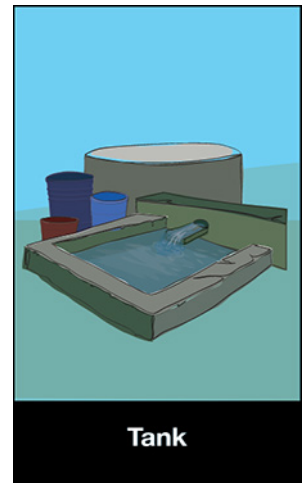
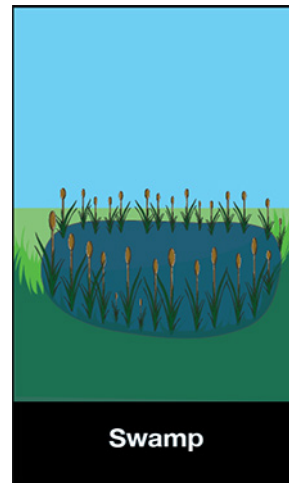
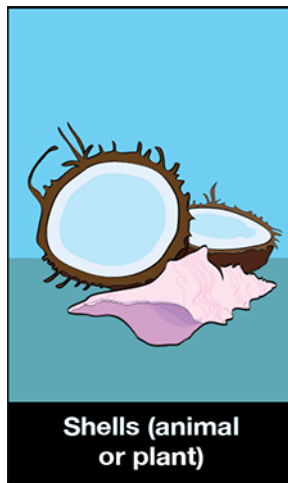
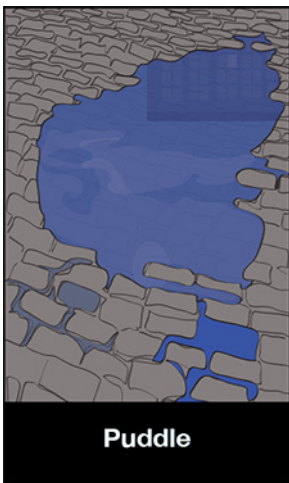
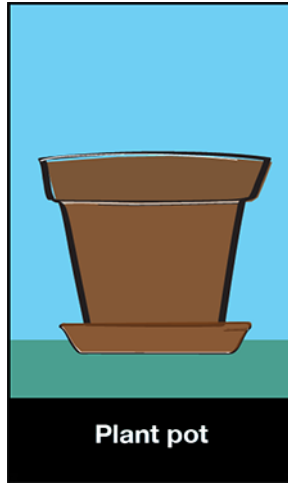
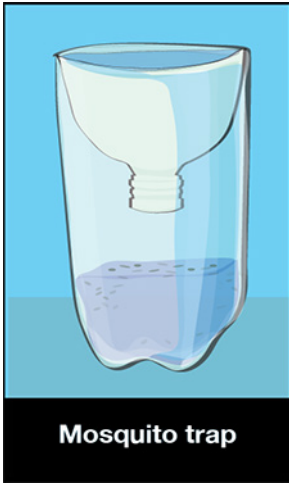
Mosquito larva



Mosquito pupa

Mosquito Habitats and Hideouts

Playing Cards



Mosquito Habitats and Hideouts

List of Mosquito Habitats and Life Cycle Stages

Abandoned car

Animal dish or trough

Animal, people or tire tracks

Birdbath

Can, bottle, or cup

Ditch

Estuary

Grill

Hollows in plants *(e.g, puddle on leaf, bamboo)*

Hollows in trees

House or structure *(gutters, downspouts)*

Lake or pond

Mosquito eggs

Mosquito larva

Mosquito pupa

Mosquito trap

Ovitrap

Plant pot

Pool

Public works *(bridges, culverts, etc)*

Puddle

River or stream edge *(pooled water)*

Shells *(animal or plant)*

Swamp

Tank *(water storage)*

Tire

Trash container

Trash/discarded objects

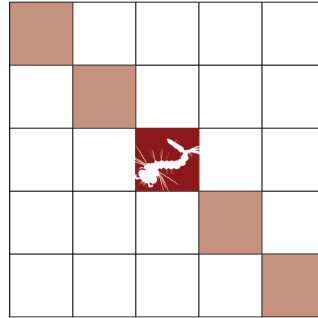
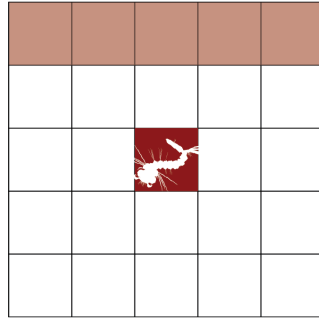
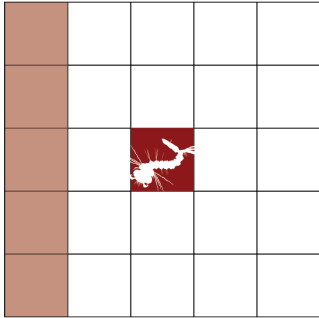
Water jars

Well or cistern

BINGO VARIATIONS

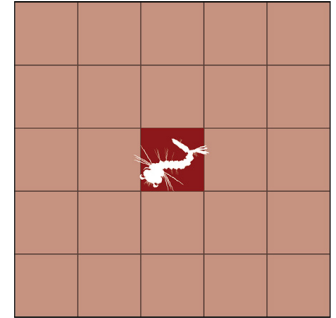
STANDARD PLAY

Cover one row in any direction (vertically, horizontally or diagonally)



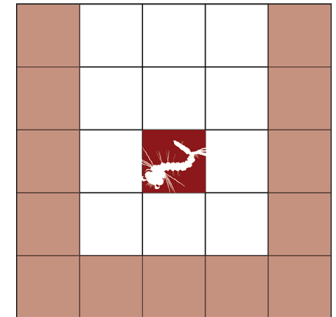
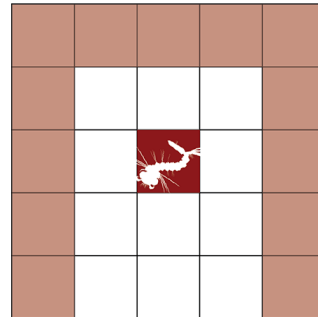
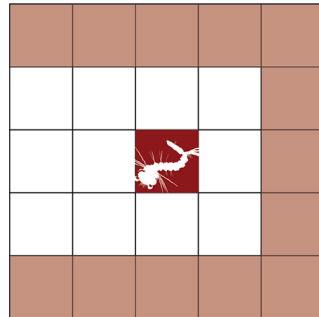
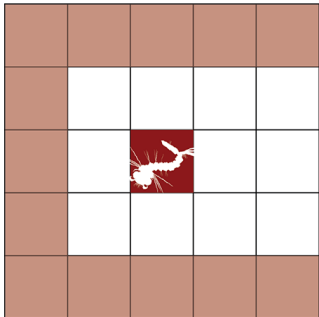
BLACKOUT

Cover all squares



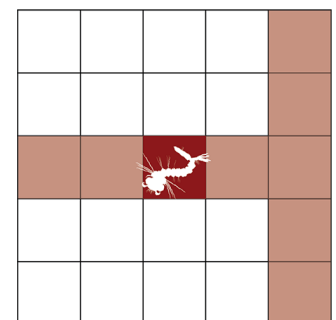
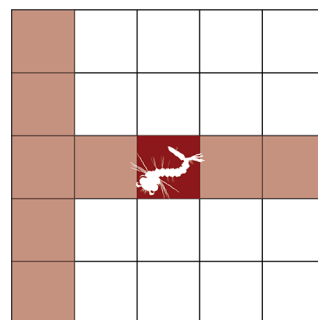
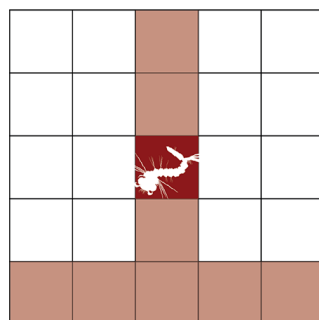
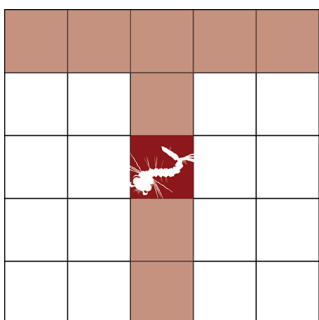
U-SHAPED

Cover three outside rows to form the letter “U”

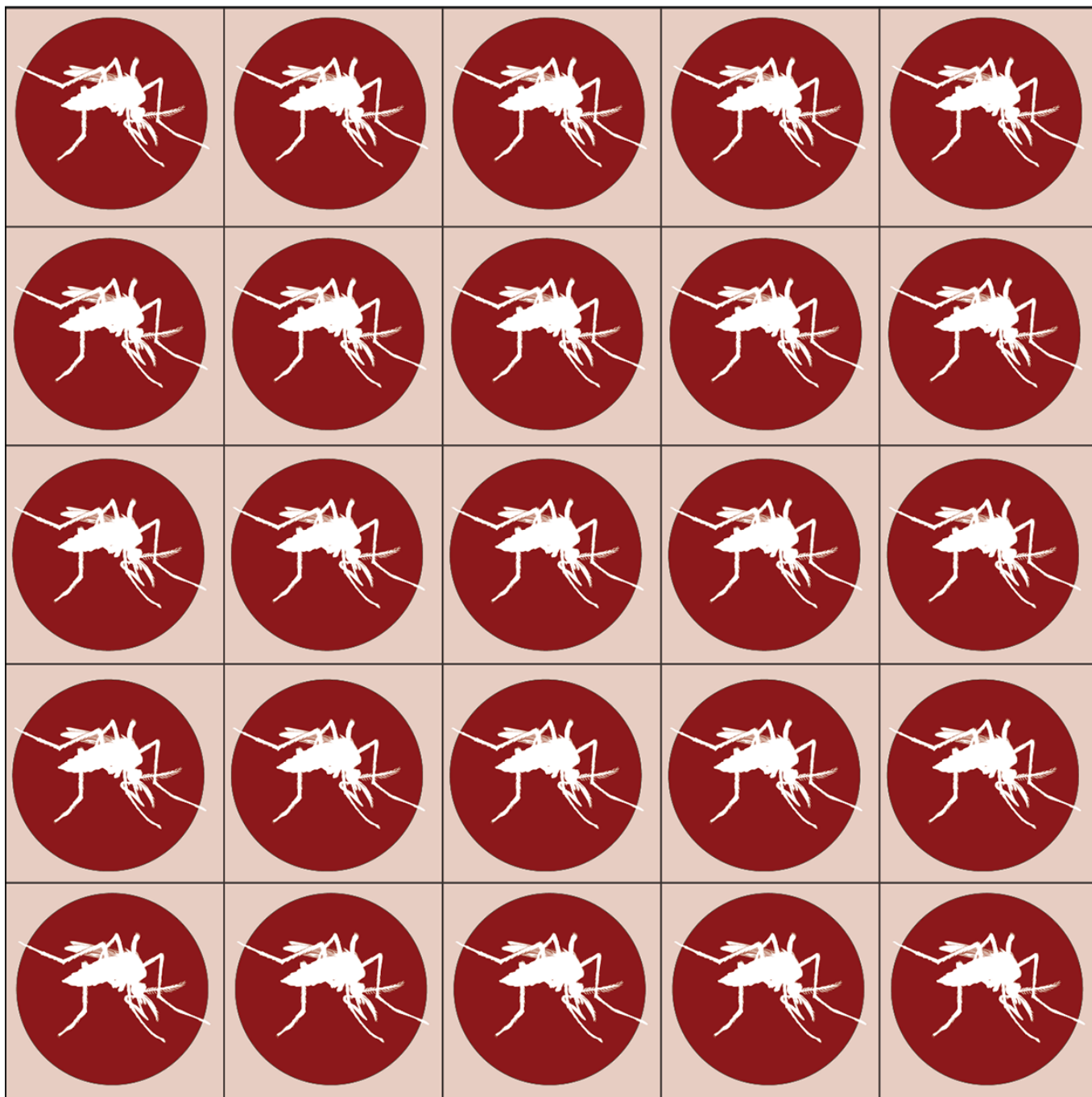


T-SHAPED

Cover spaces in the shape of the letter “T”



BINGO MARKER TEMPLATE



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for GLOBAL
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- Share your observations with scientists.
- Combining your ground observations with satellite observations can help NASA scientists better predict when and where mosquito-borne disease outbreaks might occur.
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