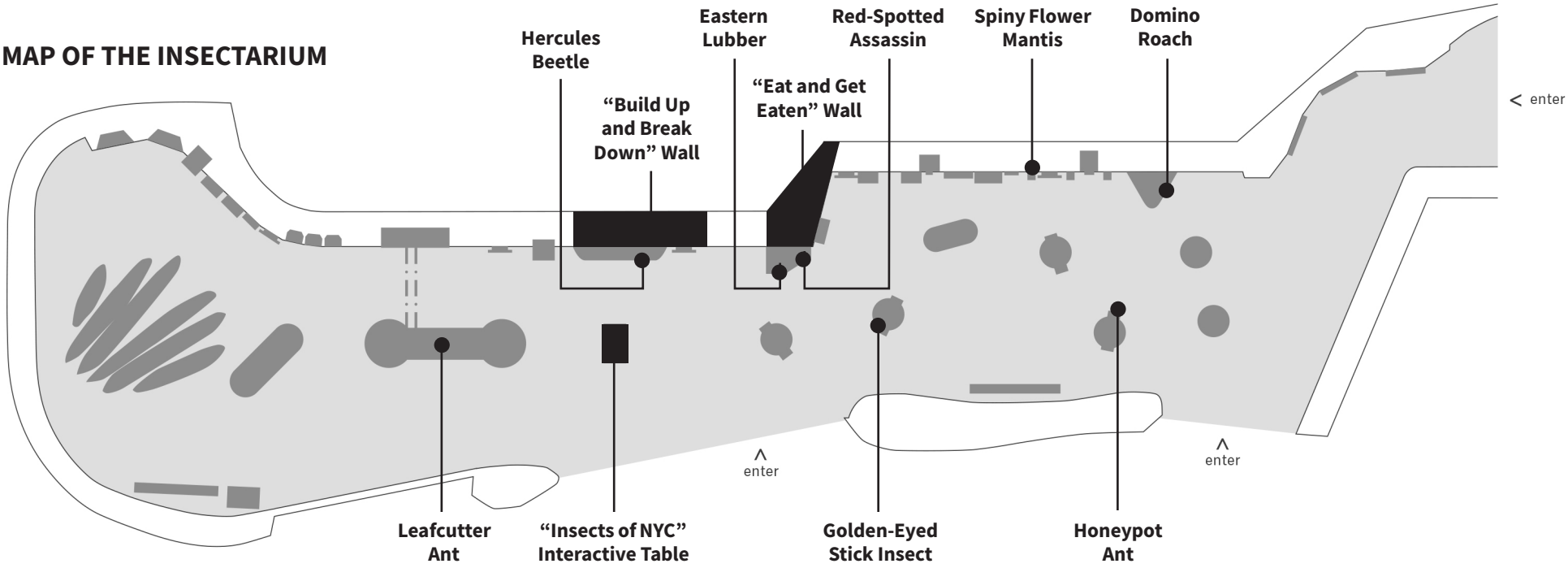
Insect Smackdown! Things to Know

MAP OF THE INSECTARIUM



ECOLOGICAL ROLES

Decomposers break down rotting plants, dung, and carcasses, which removes waste, recycles nutrients, and creates soil

Herbivores eat plants, and every plant species on Earth probably has at least one insect species that eats it

Predators eat insects and other animals, including animals bigger than themselves

ENVIRONMENTS

Boreal Forests are home to the world's largest and most ancient trees. Abundant dead wood and leaf litter support a multitude of fungi, insects, and amphibians.

Deserts can support a rich variety of species that have adapted to cope with scarce water or harsh temperatures. Many desert plants store water in succulent stems, and animals such as rodents, snakes, lizards, scorpions, and insects tend to burrow underground to be active at night.

Tropical Forests contain 50–90 percent of the world's species, including mammals, birds, plant species, and thousands of insects and microorganisms. Soils are generally poor, with most nutrients locked up in abundant vegetation.

Wetlands include bogs and marshes, and are home to an immense variety of life, including more than 40 percent of known fishes and many shellfish, amphibians, and insects.

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Insect Smackdown! Part 1: Crown the Champion

1. Choose the environment for this Insect Smackdown!

- ☐ Boreal Forest
- ☐ Tropical Forest
- ☐ Desert
- ☐ Wetland

2. Determine the winner of each bracket! Use the map to find the ***live*** insect contestants in each bracket.

- **Observe** each insect's physical traits and **read** the text panels about each one.
- **Record** what each insect eats and the traits that could help it survive in your chosen environment.
- **Compare** each pair of insects within each smackdown bracket.
- **Determine** which insect could survive in your chosen environment. Tips: Use your observations and talk about it with a partner. And if there's a tie, just choose one to advance to the next round!
- **Repeat:** Each winner advances to the next round until only one insect champion is left!

Which insect do you think could survive in the _____ *environment?*

Write chosen environment here

Hercules Beetle
DECOMPOSER
Eats: _____
Traits: _____

Domino Roach
DECOMPOSER
Eats: _____
Traits: _____

Leafcutter Ant
HERBIVORE
Eats: _____
Traits: _____

Honeypot Ant
HERBIVORE
Eats: _____
Traits: _____

Write 1st round winner here

Write 1st round winner here

Write 2nd round winners here

Insect Champion

_____

Write champion here

Sketch the insect. **Label** traits that could help it survive in this environment.

Write 1st round winner here

Write 1st round winner here

Spiny Flower Mantis
PREDATOR
Eats: _____
Traits: _____

Red-Spotted Assassin
PREDATOR
Eats: _____
Traits: _____

Eastern Lubber
HERBIVORE
Eats: _____
Traits: _____

Golden-Eyed Stick Insect
HERBIVORE
Eats: _____
Traits: _____

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Insect Smackdown! Part 2: Champion Close-Up

How does the insect's diet affect other organisms in its own natural ecosystem?

1. **Gather stats** about the insect champion by reading the text near its live insect case.

Insect Name: _____

Natural Ecosystem: _____

Ecological Role:

- ☐  Decomposer
- ☐  Herbivore
- ☐  Predator

Eats: _____

Fun Fact: _____

_____

_____

2. **Visit** these areas of the Insectarium to learn about the ecological role of the insect champion.
   - "Build Up and Break Down" wall (decomposer)
   - "Eat and Get Eaten" wall (herbivore, predator)
   - "Insects of New York City" interactive table

3. **Sketch** and **take notes** in the box about how this insect's diet affects other organisms in its natural ecosystem. Be sure to use your observations and the information you gathered.

Insect Champion

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