



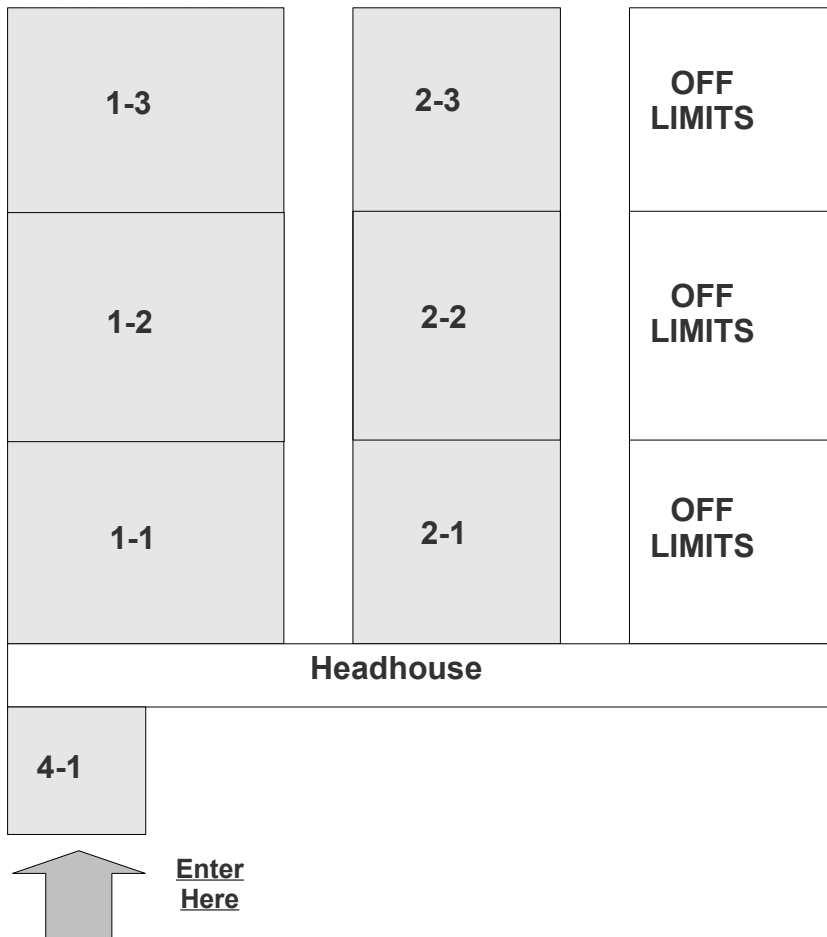
## Ecology & Evolutionary Biology Greenhouse Scavenger Hunt

Welcome to the EEB Greenhouses! We have one of the most diverse collections of living plants in the northeastern US and we hope you discover some interesting things while you explore the greenhouses.

(Teachers & chaperones please review these rules with students)

### Rules:

- No running or horseplay - damp floors may be slippery
- No eating or sampling of any plant materials – many are poisonous
- Be cautious of plants with thorns or sharp branches
- DO NOT handle plants except in the presence of a staff member
- Please DO NOT remove plant labels from pots
- There may be other groups using the greenhouses,  
     - *please be considerate of others using the facility*
- Your scavenger hunt takes place in the (7) numbered zones shown on map at right. Greenhouse #3 (hatched) is not open for this activity.
- Greenhouse staff are available to answer questions, feel free to ask for assistance if you need it. Have fun!!
- We are open to the public year-round Monday thru Friday, 8am-4pm  
     Come back and explore with your family and friends!!



## Room 4-1 – Epiphyte Room

**Epiphytes** are plants that live high in the canopy of the rainforest, free of a ground-based existence. There are more than 25,000 species of plants adapted to this niche.

---



This **Ant-Plant** attaches to the side of a tree and has a **symbiotic relationship** with special ants that live inside the hollow, swollen base of the plant. The plant provides a house for the ant and the ants keep predators from eating the plant – everybody wins!

I am a **Ghost Orchid**. I grow on trees but have special green roots to help me gather energy from the sun. That's because I have no leaves!! When I'm ready, I'll produce a small white flower, but most of the time you'll find me as just a clump of green roots



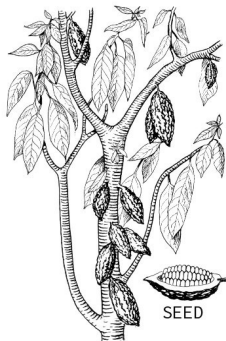
Anthurium – vase shaped leaves & trash roots

## Room 1-1 – The African Tropics

---



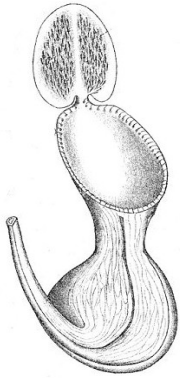
A Mangrove is a special kind of plant that is adapted to living in **brackish** (salty) water. The special prop roots allow it to resist tides and storms and the protected environment around its roots provides a nursery for many marine animals to live and breed.



The **Chocolate Tree** is really from the **American tropics** but it is currently visiting Africa here in the greenhouse. Its growing in the ground, but if you look carefully you may find a yellow fruit hanging from the trunk of the tree near the ground. Inside this fruit are cocoa seeds which are used to make chocolate and cocoa.

## Room 1-2 – The Asian Tropics

---



I am a climbing vine found in the steamy jungles of Borneo & Sumatra. The soils I live in don't provide too much nutrition, so I have evolved specially modified **leaf pitchers** that capture & eat small insects. A few of my relatives exist solely by eating 'poop'!

The **Corpse Flower** has the largest flower in the world and smells like a dead body. It only opens for about a day and may only flower once every 3-6 years. Most of the time I can be found as a really, really big leaf – so big some people think I'm a tree – but I'm really just ONE leaf!!



Living in the dark rainforests of Thailand, I am a fern with **vivid, iridescent blue** leaves. My leaves are specially adapted to absorb wavelengths of light that other plants don't use.

## Room 1-3 – The New World Tropics

---



The **Heliconia** is found throughout Central America and has a brightly colored flower stem that hangs down into gaps in the rainforest understory. These brightly colored **bracts**, which are modified leaves, attract hummingbirds as pollinators. If you look real close, you can see my curved flowers inside the bracts.

The **Sensitive Plant** has very fine, feathery foliage and occasionally has small purple flowers. This plant doesn't like to be eaten by insects however, so if an insect lands on it, the tiny **leaflets** will fold up and the leaf will drop, hopefully getting rid of any insect pests! Feel free to try it yourself, but please save some for others to try.



## Room 2-1 – Mediterranean Climates

The first room in the cool house is devoted to Mediterranean type climates which are characterized by having cool, moist winters and hot, dry summers. The area around the Mediterranean Sea is the most widely known of these biomes, but also include the Fynbos of South Africa, the Chapparal of southern California, Mattoral of Chile and western Australia. These areas have frequent wildfires during the dry season.

---

Gray leaves  
Fire adaptations

## Room 2-2 – Desert Climates

The second room is the xeric, or desert, room. This room is once again organized geographically with New World (Americas) on the right and Old World (Africa/Asia) on the left. The plant that first comes to mind when most people think of the desert is the cactus – however cacti (with one exception) are only found in the New World (on the right side of the room).

---



I survive the brutally hot desert summer in the Cape Region of South Africa by dying back to a very tough, **woody caudex** that resembles an Elephants Foot.

You may have to look carefully to find me. I'm called **Living Stones** and I get my name by camouflaging myself to look like tiny pebbles. Notice the variety of shapes and colors when you look at me and my relatives



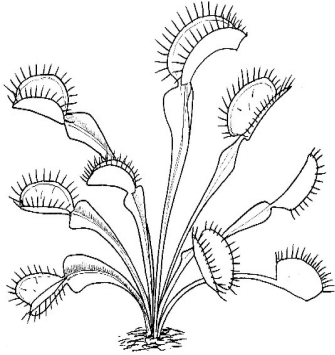
Cactus  
(mousetail?)



## Room 2-3 – Temperate Climates

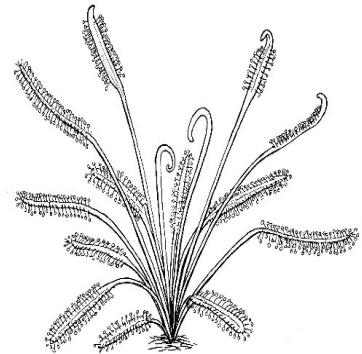
The final room in your explorations are the temperate biomes – much like what we live in here in CT. Distinct seasons with cold winters and moderate to warm summers. Rainfall can vary widely. Our collections have many plants from temperate Australia and New Zealand, China & Japan as well as American areas. There are also many examples of aquatic plants on display in this zone.

---



This plant has specially modified leaves which act as active traps to capture insects (mostly flies) and digest them. The traps can be green, or may be red on the inside to mimic a piece of rotten meat.

This plant has glistening hairs along its surface which are coated with a sticky, slimy substance that ensnares small gnats and other insects. The hairs of this plant then wrap around the captured insect and slowly devour it.



This plant has leaves that are modified into fluid filled pitchers that attract and drown unsuspecting insects which are then digested by the plant. The small red *Sarracenia purpurea* is native right here in Connecticut!



The yellow *Sarracenia*'s are found in the southern USA and are quite fond of yellow-jackets and wasps.

## Horsetails



---

## Questions for All Zones

1. What is the prettiest plant you've seen in the greenhouse today? Where does it come from?

---

---

2. What is the most interesting plant adaptation you've seen in the greenhouse today?

---

---

3. Is there a plant you'd like to see in the greenhouse? Ask a staff member – we may have it here somewhere amongst our thousands of plants.

---

---

---

## Feedback:

We'd love to hear what you think of your visit to the EEB Greenhouse facility today – what made it special and what we can do to improve the experience.

You can write us a note, drop us an email, or leave a comment on our Facebook page which is linked from our website.