

# Your Mission, Should You Choose to Accept it: JURASSIC GARDEN

Imagine what our planet looked like 240 million years ago. You may see dinosaurs roaming, but upon closer inspection you may notice the plants that grow around them. Scientists think plants first existed 200 million years before dinosaurs appeared!

Today, we are working as botanists, scientists who study plants. One way to understand plants today is to understand the history of plants.

Some of the earliest known plants have relatives that are still around today. Let's explore the Garden and find a few, and investigate how plants have changed over time, and how we can study them today.

### TIME TO EXPLORE!

## 1. Use your map and explorer skills to locate the *Victoria amazonica* Pool.

- This water garden is full of plants that evolved from one of the earliest flowering plants on Earth, the water lily. Scientists believe water lilies evolved as early as 125 million years ago. Fossils of ancient water lilies have been found in the fossilized impressions of dinosaur footprints!
- The largest water lilies in this pond are called *Victoria amazonica*. They have enormous floating leaves that can grow up to 3 meters (10 feet) wide. Some people have even said that one leaf could hold up to 65 lbs. Draw a picture of yourself sitting on a lily in the middle of the pond.

### 2. Find the DiMare Science Village on your map

- Look to the left of the front door for a large fossil on the wall. This fossil is more than 35 million years old.
- People who study plant fossils are called paleobotanists. Be a paleobotanist and study this fossil. What do you see? What is one thing you can observe about the plant leaf in the fossil? Sketch the fossil.



• This fossil is of a plant that is now extinct. But, can you find a plant that has a similar leaf shape to the fossilized plant? Take a photo of yourself by that plant.

### 3. Find the Cycad Circle on your map to continue your adventure.

- In this area, we can observe a very ancient group of plants called cycads.
- As we move backwards in time, we see the rise of cycads. Do you see any plants that look like this:
- Cycads are often mistaken for palms. But, palms have flowers, like the *Victoria amazonica* that we saw earlier. Cycads will never produce flowers, instead, they have cones, like a pine tree. Cycad cones tend to be close to the ground, and frequently rely on beetles to move their pollen. Can you find a cone? Take a photo

<ul> <li>Be gentle as you explore cycads, because OUCH they can be very sharp.</li> <li>Why would plants be sharp or have thorns?</li> </ul>		North Entrance	
<ul> <li>What prehistoric creatures might these plants have been protecting themselves from?</li> </ul>		(Main Entrance)	E \$
Sketch an encounter between a prehistoric plant and a prehistoric creature.		Old Cutler 1	2 43 43
	South Entrance (Staff Parking)	10 11 12	Hammock Lake
Plants have changed a lot over time, and they're still changing to this day. Imagine what plants might look like a million years in the future. Write or sketch your idea below.	Old Co	14 16 16 16 16 16 16 16 16 16 16 16 16 16	Glade Lake  Royal Palm Lake
	Buildings, Exhibits, Collections	27	
	<ol> <li>Shehan Visitor Center and The Shop at Fairchild</li> <li>Geiger Tropical Flower Garden</li> <li>Adam R. Rose &amp; Peter R. McQuillan Arts Center</li> </ol>	<ul> <li>Learning Garden</li> <li>Montgomery Garden House</li> <li>Garden House Lawn</li> </ul>	Tropical Plant Conservatory The Clinton Family Conservatory featuring the Wings of the Tropics Butterfly Exhib
3 . All Great explorers record their adventures	<ul><li>Danielson Vine Pergola</li><li>Sibley Victoria Amazonica Pool</li></ul>	<ul><li>15 Mulch Path</li><li>16 Bailey Palm Glade</li></ul>	25 Glasshouse Café 26 DiMare Science Village
What was the most interesting thing you saw today?	<ul> <li>Tropical Flowering Tree Arboretum</li> <li>Lougheed Spiny Forest of Madagascar</li> <li>Historic Gatehouse</li> </ul>	<ul> <li>17 Cycad Circle</li> <li>18 Moos Sunken Garden</li> <li>19 Montgomery Palmetum</li> </ul>	<ul> <li>27 Hsiao Labs</li> <li>28 Burns Science Building</li> <li>29 Richard H. Simons Rainforest</li> </ul>
What is one thing you learned today?	<ul> <li>9 Alleé &amp; Overlook</li> <li>10 Corbin Education Building</li> <li>11 South Florida Butterfly Garden</li> </ul>	<ul> <li>The Children's Garden</li> <li>Whitman Tropical Fruit Pavillion</li> <li>Rare Plant House</li> </ul>	Garden Club of America Amphitheater & Lougheed Palm Grove