

# YOUR MISSION ENCOUNTER ORCHIDS

## MISSION ACCOMPLISHED

After you are done exploring, take your completed mission back to The Shop and share your work with the Expedition Discovery Volunteer to claim your pin!



Date of Exploration: \_\_\_\_\_

Time of Exploration: \_\_\_\_\_



## Your Mission, Should You Choose to Accept it: ENCOUNTER ORCHIDS

Today you are working as a botanist and an explorer. To complete your mission, you will learn about a very special family of plants...orchids! Orchids are one of the most diverse flowering plant families, so we have lots to look at and explore.

There are lots of things that make orchids unique, or different from other kinds of flowers. Even though there are over 100,000 different kinds of orchids, there are certain clues that we can look for, as plant detectives, to help us know if what we are looking at is this special kind of plant. These plants can be found not only all over the Garden, but also all over the world!

### READY EXPLORERS, LET'S GO!

#### 1. Find the Richard H. Simons Rainforest (#29) on your map.

There are several paths to explore in the rainforest, so pick your favorite.

- We are on the lookout for orchids. Orchids can be found all over the world, and can look lots of different ways, but the ones most people are familiar with are tropical orchids, like the ones we can find here in the rainforest.
- In the rainforest, many orchids are **epiphytic**, which means they live on other plants (usually trees) without hurting the host. Find a plant that is growing on a tree, and sketch it below. Label the parts of the plant that you can see.



- We can use some clues to tell if the plant we're looking at is an orchid. Tropical epiphytic orchids often have large, dark green leaves and visible roots. It is easiest to identify an orchid when it is blooming, or has a flower on it. Tropical orchid flowers are often bright colors, with elaborate petals, and one petal is usually different from the rest. Keep in mind, A orchid plant is still an orchid, even without a flower, and they live here year-round.

Do you think the plant you sketched is an orchid? \_\_\_\_\_

#### 2. Find The Hsiao Labs on your map (#27) on your map (hint: they're close to the Wings of the Tropics Butterfly Conservatory). Find the Million Orchid Project Lab.

- South Florida used to be covered in native orchids, but unfortunately, through poaching and habitat loss, there aren't many left. South Florida's orchids are unique and special to Florida. In this lab, we're working on growing more of our native Florida orchids to put back into the community. To learn more, watch the video to the right of the lab windows.
- Look into the lab. Can you see anyone working? These scientists are working to grow orchids from seeds, that look like dust, and are very tricky to keep alive. How many different kinds of orchids can you spot growing in the window? \_\_\_\_\_
- What is one reason you think we should protect native plants?

\_\_\_\_\_

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**FUN TIP!** If you want to see some native orchids, there are many scattered around the Garden, including the pine pink (*Bletia purpurea*) in the Pine Rockland exhibit (#37).



3. Find #19 on your map, and explore the Montgomery Palmetum.

- As you walk to the Palmetum, keep your eye out for orchids. Remember, they can be growing in pots, on trees (and they can be pretty high up!), or in the ground.
- There are lots of kinds of orchids on display in the palmetum, because there are lots of great palms and trees to support epiphytic orchids. How many orchid plants can you find attached to one tree or palm?
- Some orchids are bright colors to attract their pollinator. Find a bright colored orchid, and take a selfie with it.
- Some orchids look like insects to attract their pollinator. Find an orchid that looks like an insect. Sketch the flower and an orchid below.



4. All Great explorers record their adventures

- What was the most interesting thing you saw today?

\_\_\_\_\_

- What is one thing you learned today?

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- What do you want to explore on your next visit?

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Buildings, Exhibits, Collections and Points of Interest

- |   |                                     |   |
|---|-------------------------------------|---|
| 1 Shehan Visitor Center and The Shop at Fairchild | 12 Learning Garden                  | 23 Tropical Plant Conservatory  |
| 2 Geiger Tropical Flower Garden                   | 13 Montgomery Garden House          | 24 The Clinton Family Conservatory featuring the Wings of the Tropics Butterfly Exhibit |
| 3 Adam R. Rose & Peter R. McQuillan Arts Center   | 14 Garden House Lawn                | 25 Glasshouse Café  |
| 4 Danielson Vine Pergola                          | 15 Mulch Path                       | 26 DiMare Science Village   |
| 5 Sibley <i>Victoria Amazonica</i> Pool           | 16 Bailey Palm Glade                | 27 Hsiao Labs   |
| 6 Tropical Flowering Tree Arboretum               | 17 Cycad Circle                     | 28 Burns Science Building   |
| 7 Lougheed Spiny Forest of Madagascar             | 18 Moos Sunken Garden               | 29 Richard H. Simons Rainforest   |
| 8 Historic Gatehouse                              | 19 Montgomery Palmetum              | 30 Garden Club of America Amphitheater & Lougheed Palm Grove                            |
| 9 Allée & Overlook                                | 20 The Children's Garden            |   |
| 10 Corbin Education Building                      | 21 Whitman Tropical Fruit Pavillion |   |
| 11 South Florida Butterfly Garden                 | 22 Rare Plant House                 |   |