



GIRL SCOUT PROGRAM GUIDE 2019-2020



www.deeringestate.org

305.235.1668 EXT. 241



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PLANNING YOUR VISIT

BADGE PROGRAM

Troops may choose from a selection of one **(1) Field Study Activity** and one **(1) Guided Tour/Hike** for their visit. Or they may choose **(2) Field Study Activities**. Programs are generally scheduled in a 3 hour block from 10:00 AM to 1:00 PM, but start and end times are flexible and your group is welcome to stay the day until 4:00 PM after your program has concluded. *Note: We DO NOT provide badges.*

SERVICE PROJECT

Troops can decide from a variety of service projects depending on age and requirement. *Note: We DO NOT provide any of the materials needed for the project. Approval of the project is REQUIRED.*

RESERVING YOUR TRIP

- Select your desired program/project and please choose a few possible dates for your trip. Reserving early is recommended, as our availability and dates fill up quickly as we strive to serve a wide array of troops and school groups.
- Email vanessa.trujillo@miamidade.gov or call **305.235.1668 ext. 241** to make your reservation. Our staff will be happy to help find a date that works.
- Once you have made your reservation, **please check your email for a confirmation letter** that will include your finalized date, time and cost, as well as **pre-visit materials** to supplement your program.
- Please call our office if you don't receive a confirmation within 48 hours of your booking.
- Please ensure all participants have closed toed shoes; we recommend that scouts, troop leaders, and chaperones bring a water bottle, sunscreen, and insect repellent as needed. Water fountains and restrooms are located on the Main Estate grounds, but not in the natural areas.
- If your group has any special needs, please let us know at the time of your booking and we will be happy to accommodate your requests.

If there are any changes to your reservation, including the number of participants that you plan on bringing or any cancellations, please contact us as soon as possible so we can update your reservation.





PROGRAM	COST	MINIMUM PARTICIPANTS
Land-based Adventure	\$15 per scout	12 scouts
Kayak/Canoe Adventure*	\$25 per scout	12 scouts

Note: cost for the kayak/canoe adventure includes entrance into the park as well as cost for the activity. Also, ONLY ages 7+ can participate in the kayak/canoe adventure.



WHEN YOU ARRIVE

- Please provide an accurate head count of participants upon arrival at the Visitor Center; this should have been communicated no less than 48 hours before the trip arrival to ensure proper staffing. This will help us to ensure that all participants are accounted for at the end of the field study program.
- Please drop off and pick up participants at the Visitor Center, located on the South side of the parking lot just off of SW 168 St. and Old Cutler Road; bus parking is also provided in this area.
- Please ensure all participants have closed toed shoes; we recommend that scouts, troop leaders, and chaperones bring a water bottle, sunscreen, and insect repellent as needed. Water fountains and restrooms are located on the Main Estate grounds, but not in the natural areas.

For water related programs (Catching Critters, Canoeing/Kayaking) - Please bring an extra set of dry clothes if you would like to change after the days activities, including dry shoes and socks.

FIELD STUDY ACTIVITIES



Our programs can fulfill requirements for multiple badges in multiple categories including, but not limited to STEM, Outdoors, Life Skills, etc. The badges listed under each activity are examples of which badges can be earned. However, each program can be catered to different badges if requested ahead of time.

WATER FILTRATION

Badge/Journey: Inventor & Water (Girl Scout)

Subject: Ecology

Participants will learn about the natural filtration process of water as it goes from surface water to ground water. They will explore how water is filtered naturally in nature to become drinkable. Through a hands on experiment, participants will design their own water filter using nature materials to see what creates the cleanest water.

ETHNOBOTANY

Badge/Journey: Outdoor Art Creator & Flowers (Girl Scout)

Subject: Ecology

Participants will learn about the relationships that exist between people and plants. By exploring our natural areas, the participants will make their own field guide to show how plants found within our local community have been used by past and present civilizations. In the end, they will take home their own homemade field guide that describes these relationships between plants and people.

CRITTER EXPLORATION

Badge/Journey: Bugs (Girl Scout)

Subject: Entomology

Participants will learn about the different bugs and insects in south Florida by catching them using nets in our natural areas. Then they will use magnifying glasses and microscopes to study the insects' body plans, wings, and the adaptations that make them different from one another. Participants will compare them and work together to group them by type: beetles, butterflies, weevils, etc.

FISHERIES MANAGEMENT

Badge/Journey: Eco Learner (Girl Scout)

Subject: Marine Science, Social Studies

Participants will experience the “tragedy of the commons” as it relates to fishing resources. Through a fishing simulation, participants will model several consecutive seasons of a commercial fishery and explore how technology, population growth, and sustainable practices impact fish catches and fisheries management.

FIELD STUDY ACTIVITIES



ARCHAEOLOGY EXPLORATION

Subject: Social Studies

Participants will learn about the people and cultures that existed in South Florida before modern development. They will utilize critical thinking skills and hands-on discovery learning methods to uncover real artifacts and their historic uses. Groups will apply archaeological survey methods to discover bones, pottery, and artifacts from a culture that once thrived thousands of years ago.

SCAT FORENSICS

Badge/Journey: Animal Habitats (Girl Scout)

Subject: Biology

Participants will learn about food chains in ecosystems and the different animals that inhabit South Florida's different ecosystems. They will then explore different areas of the Estate using a key to try and determine which animals can be found here by searching for scat and tracks.

CATCHING CRITTERS

Badge/Journey: Animal Habitats & Eco Friend (Girl Scout)

Subject: Marine Science, Ecology

Participants will wade out into the seagrass beds of Biscayne Bay to explore the aquatic life of our seagrass communities, using nets to catch fish, shrimp and crabs (along with anything else that shows up!). Discovery based learning methods are applied in giving all participants a hands-on approach to the introduction of Marine Science. Staff will identify the different species that are caught, and give participants the chance to touch any animals that are safe to handle. *Note: Participants must wear closed toed shoes during this activity. Crocs and sandals are not allowed for safety reasons. This activity is considered a land-based adventure.*

MARINE CRITTER DISSECTION

Badge/Journey: Eco Friend & Animal Habitats (Girl Scout)

Subject: Biology, Marine Science

Participants will become professional biologists, learning about the unique characteristics of various marine animals as well as their anatomy and physiology. After an introduction, they will be led in groups through a step-by-step dissection of a squid or fish allowing them to get a hands-on understanding of both the external and internal anatomy of these important marine animals.

LIFE OF LITTER

Badge/Journey: Eco Friend & Think Like a Citizen Scientist (Girl Scout)

Subject: Marine Science, Ecology

This land-based marine science activity will demonstrate the real implications of littering in our oceans. Participants will learn how long it takes for the earth to decompose some of the most commonly found pieces of litter. After a quick presentation and hands-on activity, participants will then get down-and-dirty on the Estate grounds, documenting and recording litter found on the ocean's shoreline. *Note: This activity must be paired with the Marine Debris Hike.*

FIELD STUDY ACTIVITIES



OWL PELLET INVESTIGATION

Badge/Journey: Animal Habitats (Girl Scout)

Subject: Biology

Participants will learn about food chains in ecosystems, and the role that owls play in South Florida ecology. By applying the scientific method, they will be able to uncover the mysteries of what lies within an owl pellet. Participants will dissect their own pellet using a dichotomous key to identify the bone fragments found inside the pellet.

BUILD YOUR OWN TERRARIUMS

Badge/Journey: Animal Habitats (Girl Scout)

Subject: Ecology, Marine Science

Participants will make their own terrarium while learning about how a self-sustaining enclosed environment mimics many functions of our own ecosystem. They will learn about the water cycle as well as about nutrient cycling as they hike around the park collecting specific materials to add to their terrarium, such as a seedling, soil, sand, and gravel. *Note: This activity requires participants to bring their own empty 2 L bottle.*

ANIMAL ENCOUNTER

Badge/Journey: Animal Habitats & Eco Friend (Girl Scout)

Subject: Biology

Participants will be introduced to some of the local wild life we have here at the Estate. They also will get to see some of the different invasive species we find in South Florida. Participants will learn about these animals while having the opportunity to hold them, touch them, and take pictures with them. Some of our animals include a red tail boa, king snake, rat snake, tarantula, and more.

PLOT SURVEY

Badge/Journey: Think Like a Citizen Scientist (Girl Scout)

Subject: Biology, Ecology

Participants will hike to the Pine Rocklands to do their own plot survey. Through this method they will learn what biodiversity is and why it is important. Utilizing the scientific method they will develop their own plot survey to measure biodiversity, identify different fauna and animals, and record their own scientific data. In the end they will be able to calculate biodiversity within our Pine Rocklands.

BUTTERFLY/ANOLE COUNT

Badge/Journey: Think Like a Citizen Scientist (Girl Scout)

Subject: Biology, Ecology

Participants will go out into natural areas to see how many different kinds of animals they can find. Depending on the option, they will learn about the local species and where they live. Participants will get to see how these animals have adapted to living in certain habitats. Participants will go out and see how many of certain species they can find to determine population dynamics.

FIELD STUDY ACTIVITIES



ROCKET LAUNCH

Badge/Journey: Inventor (Girl Scout)

Subject: Physics

Participants will learn about the scientific method. Utilizing film canisters and other provided materials, they will develop their very own rocket. They will come up with their own hypothesis and design their rocket. Participants will then launch their rockets to see if their hypotheses are correct. After each launch, they will go back to the drawing board to make improvements and see who can get their rocket to launch the highest.

WING DESIGN CHALLENGE

Badge/Journey: Inventor (Girl Scout)

Subject: Physics, Biology

Participants will learn about the different wing designs of birds and how these designs give them a competitive advantage. Utilizing this knowledge and the scientific method, the participants will design their own set of wings and test to see how far they can make them fly. After each flight they will go back to the drawing board to make improvements and see who can get their wings to fly the farthest.

OIL SPILL CHALLENGE

Badge/Journey: Inventor & Eco Learner (Girl Scout)

Subject: Ecology, Marine Science

Participants will be challenged to clean-up a simulated oil spill. Before the activity, they will learn about oil spills and their impacts on the marine environment. In teams, they will simulate their own oil spill and be challenged to see how much oil they can clean from the water within an allotted time using only the materials provided.

Then, we will qualitatively compare their oil spills and discuss the difficulties of removing the oil. *Note: This is a messy activity and we recommend participants wear clothes they don't mind getting dirty and possibly stained.*

PLANKTON TRAWL

Badge/Journey: Inventor (Girl Scout)

Subject: Marine Science, Engineering

Participants will become an ocean engineer and marine biologist for the day as they design and build their own plankton nets. They then will test their designs by collecting plankton in Biscayne Bay. Using microscopes they will see what kind of plankton their nets were able to collect and learn how to identify these microscopic creatures. Participants will also learn how important plankton are to the health of the ocean.

ANIMAL ADAPTATIONS

Badge/Journey: Animal Habitats & Inventor (Girl Scout)

Subject: Biology

Participants will learn about Darwin's Finches and the different beak adaptations they have. They will then be challenged to create their own beak designs that are best suited for gathering the chosen food sources. Using given materials they will modify the beaks to create the most efficient design for food collection. A competition will be held to see which group's beak design can collect the most food in allotted time.

GUIDED TOURS/HIKES



HISTORIC HOUSE MUSEUM TOUR

Take a tour of the Deering Estate's historic buildings, including the Stone House and the Richmond Cottage, to find out how the Estate has changed hands, developed and grown since the first settlers built their houses here in South Dade.

FLORIDA NATURAL AREAS EXPERIENCE HIKE

Badge/Journey: Hiker & Eco Trekker (Girl Scout)

Join our naturalist staff for an hour long hike through the Deering Estate's protected natural areas. Along the way, learn about native plants and animals and the Cutler Burial Mound, a centuries-old significant Tequesta site and important archaeological site.

SCAT HIKE

Badge/Journey: Eco Trekker & Eco Learner (Girl Scout)

Explore our Natural Areas as you try to find evidence of what animals make the Deering Estate home. Participants will explore certain areas to see what animals are in the area and also see what they have been eating to check on health of our local wildlife.

MARINE DEBRIS HIKE

Badge/Journey: Think Like a Citizen Scientist & Outdoor Adventurer (Girl Scout)

Participants will be given a Citizen Science Worksheet and trash bags while being guided into the natural areas of the Estate. There they will study and collect the litter found throughout the park. Participants will classify what the litter is made out of and how long it will take to decompose. This data will be shared with the Ocean Conservancy as part of a Citizen Science partnership to improve understanding of marine pollution.

NIGHT HIKE

Badge/Journey: Hiker & Outdoor Adventurer (Girl Scout)

Participants will hike through our protected natural areas at night and look for nocturnal animals. They will hear animal sounds and learn how to tell the difference between them. They will also have the chance to see the sky with minimal light pollution making it the best place to study the stars. This hike is great for participants who are trying to learn about astronomy, nocturnal animals, animal sounds, and how to build a campfire. *Note: We do not provide flashlights; participants can bring their own. Also, campfire with s'mores would count as the second activity.*

SERVICE PROJECTS



The projects listed below are not all the available projects. Troops can pitch projects as long as it coincides with our mission and it must be approved by our coordinator. Materials and tools are NOT provided.

OWL NESTING BOX

Build and set up owl houses for our resident owls. These houses will provide safe areas for nesting for Eastern Screech Owls, Barn Owls, and Barred Owls.

CAMPFIRE RESTORATION

Restore our campfire area by building comfortable bench seating and storage to hold campfire equipment.

GARDEN RESTORATION

Build an edible/butterfly garden at the Cultural and Ecological Field Station (CEFS) to help with local butterfly and bird populations.

NATURAL AREAS RESTORATION

Maintain the hiking trails in the natural areas at CEFS by removing invasive/non-native vegetation as well as adding wood/rocks to line the paths.

SCIENTIFIC WORK BENCHES

Build scientific benches for visiting researchers at CEFS. This will allow them to process samples of ongoing projects at the Estate.

VISITOR OUTDOOR SEATING

Build Adirondack chairs that will be placed around the Royal Palm Grove, down by the bay, and around our garden areas. Visitors will be able to enjoy the bay breeze throughout the day.

