



**UNIVERSITY OF GEORGIA**  
**EXTENSION**



**GEORGIA**  
BURTON 4-H CENTER ON TYBEE ISLAND

## Environmental Education Residential (Overnight) Classes

For confirmed reservations, please **submit** class selections at:  
(LINK): [Burton 4-H Center EE Class Selection Form](#)

Lead Teacher Class Selection Planner		
School: _____ Grade(s): _____ Lead Teacher: _____		
EE Class Package: _____		# of EE Class Hours: _____ \$ _____ per person
EE Class (order of preference)	# Hours	Additional Costs / Transportation
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
<b>Total # of EE Class Hours</b>		

Residential Packages		Day(s) of the Week	Arrival / Departure Times	Total # Hours of Programming
A	2-day/1-night class <i>(Chatham County Schools)</i>	A-1: Monday-Tuesday A-2: Wednesday-Thursday	3pm arrival-9am departure	6 hours
B	2-day/1-night class	B-1: Monday-Tuesday B-2: Wednesday-Thursday B-3: Thursday-Friday	10am arrival-6pm departure	12 hours
C	3-day/2-night class	Monday-Wednesday	10am arrival-9am departure	12 hours
D	3-day/2-night class	Wednesday-Friday	10am arrival-11:30am departure	14 hours
E	4-day/3-night class	Sunday-Wednesday	3 to 9pm arrival-9am departure	14 hours
F	4-day/3-night class	Wednesday-Saturday	10am arrival-9am departure	14 hours
G	4-day/3-night class	Monday-Thursday	10am arrival-11:30am departure	22 hours
H	4-day/3-night class	Tuesday-Friday	10am arrival-11:30am departure	22 hours

## Environmental Education Overnight Class Descriptions

Our Environmental Education classes vary in length. While selecting classes, please ensure that the total # of hours equals to that of your total program package. If you plan to modify the arrival and/or departure time of your program package by opting to skip meals and/or classes, your program package may result in less hours of classes. Please contact the Environmental Education Program Coordinator to determine otherwise. All classes are taught by Burton 4-H staff *except* for vendor lead classes.

**Vendor Led Classes:** Prices *are subject to change* at vendor's discretion and/or stock. UGA requires groups to pay vendors directly for their vendor led class reservations. W-9 and Sales Tax Exemption forms (ST-5) are required for vendors. Groups unable to provide these forms will be subject to 7% Georgia sales tax. Burton 4-H Center will make the reservation and send your information to the vendor for invoicing and required forms (as requested by vendor). Please arrange your own transportation for the group and we will send a Burton Instructor to guide your driver and/or escort group to the location.

ENVIRONMENTAL EDUCATION PROGRAM SUMMARY		
Barrier Island Ecosystems	Zoology (Study of Animals)	Experiential Learning
Beach Ecology (2 hours)	Planktonology (1 hour)	Campfire: Songs, Skits, Stories & (s)more! (1 hour)
Salt Marsh Ecology (2 hours)	Cheloniology (Sea Turtles) (1 hour)	Scotobiology(Nightwalk) (2 hours)
Maritime Forest Ecology (2 hours)	Ophiology (Snakes) (1 hour)	"Choosies" (2 hours)
Duskwalk-Beach Ecology (2 hours)	Ornithology (Birds) (2 hours)	Dolphin Cruise* (2 hours)
	"Coastal Critters" <i>(Reptile 1 hour + Marine Invertebrate 1 hour combo)</i> (2 hours)	Discovery Trawl EcoCruise* (2 hours)
	Marine Invertebrates (1 hour <u>OR</u> 2 hours)	
	Herpetology (Reptiles) (1 hour <u>OR</u> 2 hours)	
Teamwork & Connections	Biological Dissections	Georgia History
Seine Nets (Surf Sleuth) (2 hours)	Teuthology* (Squid Dissection) (1 hour)	Fort Pulaski National Monument (2 hours)
Community Service (2 hours)	Ichthyology* (Shark Dissection) (2 hours)	Tybee Island Lighthouse Station* (2 hours)
Coastal Georgia Kayak Adventure* (2 to 4 hours)		

### Burton 4-H EE Class Descriptions KEY

RED =	TOPICS INCLUDE	ORANGE =	METHODS	YELLOW =	WHAT TO WEAR	BLUE =	TRANSPORTATION
PINK =	WATER RULES	PURPLE =	ADDITIONAL INFORMATION	INDIGO =	SEASONAL OR COSTS \$	GREEN =	CLASS & HOURS

## BARRIER ISLAND ECOSYSTEMS

### BEACH ECOLOGY

2 HOURS

#### Introduction to coastal Georgia's beaches.

- ☘ **Topics include:** Zones of the beach, barrier islands, biotic and abiotic factors, erosion and deposition, dune stabilization, native plant and animal species identification, and beachcombing.
- ☘ **Methods:** Students apply what they learn by going to the beach and participating in hands-on activities.
- ☘ **What to Wear:** Clothes and shoes (sandals, water shoes, crocs, closed-toe shoes) that can get wet and sandy are strongly recommended. Otherwise, plan to dress for the season with comfortable, quick-dry clothing, layers, sunscreen and/or bug spray. Students may be allowed to take their shoes off at the beach.
- ☘ **Transportation:** Burton staff will organize transportation for 13:1 or 12:2 student to adult ratio teaching groups. Overflow adults may follow the minibus to the location.
- ☘ **Water Rules:** Students will be allowed to go ankle deep in water if weather, water conditions, and instructors' permit.

### DUSKWALK-BEACH ECOLOGY

2 HOURS

#### Introduction to coastal Georgia's beaches at dusk.

- ☘ **Topics include:** Zones of the beach, barrier islands, biotic and abiotic factors, erosion and deposition, dune stabilization, identifying native plant and animal species, and beachcombing.
- ☘ **Methods:** Students apply what they learn by going to the beach and participating in hands-on activities.
- ☘ **What to Wear:** Clothes and shoes (sandals, water shoes, crocs, closed-toe shoes) that can get wet and sandy are strongly recommended. Otherwise, plan to dress for the season with comfortable, quick-dry clothing, layers, sunscreen and/or bug spray.
- ☘ **Transportation:** Walking 0.5 mile to 6th Street Beach from the Burton 4-H Center with instructors.
- ☘ **Additional Information:** *If selected this is your only evening class option.*
- ☘ **Water Rules:** Students will be allowed to go ankle deep in water if weather, water conditions, and instructors permit.
- ☘ **Seasonal:** Available from March (daylight savings end) through September. This offers the opportunity to take Beach Ecology in the evening, a cooler time of the day during our hottest months.

### SALT MARSH ECOLOGY

2 HOURS

#### Introduction to Georgia's salt marshes.

- ☘ **Topics include:** Zones of the salt marsh, plankton identification, tides, functions of wetlands, living shorelines, trophic levels, and native plant and animal species identification.
- ☘ **Methods:** Students apply what they learn by going to the salt marsh and participating in hands-on activities.
- ☘ **What to Wear:** Rain/muck boots are required. Boots can be borrowed from our famous "Wall of Lost Soles" (boot wall) on-site. Clothes and shoes that can get muddy and wet are strongly recommended.
- ☘ **Transportation:** Provided by Burton 4-H Center "muddy" school buses or 14-passenger minibuses.

### MARITIME FOREST ECOLOGY

2 HOURS

#### Introduction to Georgia's maritime forests and barrier island ecology.

- ☘ **Topics include:** Zones of a coastal maritime forest, barrier islands, biotic and abiotic factors, succession, trophic levels, food webs and chains, pioneer species, and native plant and animal species identification.
- ☘ **Methods:** Students will visit a maritime forest to identify different species and their roles in an island ecosystem.
- ☘ **What to wear:** Closed-toe shoes ONLY. Otherwise, comfortable clothing, bug spray, and/or sunscreen.
- ☘ **Transportation:** Please arrange your own transportation for the group. Your educator will guide your driver to the trails location at Fort Pulaski National Monument.

## ZOOLOGY (STUDY OF ANIMALS)

### PLANKTONOLOGY (COMING FALL 2024!)

1 HOUR

**Introduction to plankton, their vital role in aquatic ecosystems, and how to identify different species.**

- ☿ **Topics include:** characteristics of phytoplankton and zooplankton, photosynthesis, oceanic food chains and webs, trophic levels, environmental indicators, harmful algal blooms (HABs), plankton identification.
- ☿ **Methods:** Students will learn how to identify different species of plankton using a microscope and understand the effect of HABs on species of different trophic levels by playing a game.
- ☿ **What to wear:** Shoes with heel straps or closed-toe shoes. Otherwise, comfortable clothing.
- ☿ **Transportation:** The entire class is on-site.

### CHELONIOLOGY (SEATURTLES)

1 HOUR

**Introduction to the life cycle of sea turtles.**

- ☿ **Topics include:** Sea turtle life cycle, species of sea turtles, conservation, threats and impacts, sustainability, bio-facts, ecosystem roles, and loggerhead sea turtle facts.
- ☿ **Methods:** Students will get to view and meet our sea turtle animal ambassador(s), interact with bio-facts, play sea turtle related games and learn how they can help protect sea turtles.
- ☿ **What to wear:** Shoes with heel straps or closed-toe shoes. Otherwise, comfortable clothing.
- ☿ **Transportation:** The entire class is on-site.

### OPHIOLOGY (SNAKES)

1 HOUR

**Introduction to the study of snakes.**

- ☿ **Topics include:** Species of Georgia native and non-native snakes, snake anatomy, snake conservation, ecosystem roles and other importance, reptile characteristics, invasive species, common snake myths debunked.
- ☿ **Methods:** Students will learn about snakes while receiving the opportunity to have hands-on experiences with multiple Georgia native and exotic snake ambassadors.
- ☿ **What to wear:** Shoes with heel straps or closed-toe shoes. Otherwise, comfortable clothing.
- ☿ **Transportation:** The entire class is on-site.

### ORINTHOLOGY (BIRDS)

2 HOURS

**Introduction to the study of birds.**

- ☿ **Topics include:** characteristics of birds, beak and bill adaptations, niches, ecosystem roles, skills of using binoculars, field guides, and native bird species identification.
- ☿ **Methods:** Students will learn about bird anatomy and adaptations, species identification, and how to use ID guides and binoculars. Part of the class will take place at the beach and salt marsh for “birding.”
- ☿ **Transportation:** Provided by Burton 4-H Center school buses or 14-passenger minibuses.
- ☿ **What to wear:** Shoes with heel straps or closed-toe shoes. Otherwise, comfortable clothing. Shoes stay on throughout class.

### “COASTAL CRITTERS”

2 HOURS

**Introduction to a combination of reptiles, fishes, and marine invertebrates.**

- ☿ **Topics include:** Taxonomy, phyla, discovery tanks, fouling communities, using dip nets, characteristics of reptiles and amphibians, keystone species, food chains, and ecosystem roles.
- ☿ **Methods:** Students will learn about coastal reptiles and marine invertebrates with the opportunity to interact with animal ambassadors, specimens and bio-facts.
- ☿ **What to wear:** Shoes with heel straps or closed-toe shoes. Otherwise, comfortable clothing.
- ☿ **Transportation:** The entire class is on-site.
- ☿ **Additional Info:** This is our jammed pack 2-hour “combination” class featuring 1 hour of Reptiles AND 1 hour of Marine Invertebrates in the same class setting! This “combination” provides students with highlights from our 2-hour Reptiles and 2-hour Marine Invertebrates offerings.

## MARINE INVERTEBRATES

1 HOUR OR 2 HOURS

### Introduction to marine invertebrates and phyla.

- ☿ **Topics include:** Taxonomy, characteristics of invertebrates vs. vertebrates, marine phyla, invertebrate identification, fouling communities, intertidal zones, and ecosystem roles.
- ☿ **Methods:** Students will observe and interact with marine invertebrates in the discovery tanks, learn about fouling communities and zones, use dip nets for collecting marine invertebrates, use marine invertebrate identification field guides and observe their findings under microscopes.
- ☿ **What to wear:** Shoes with heel straps or closed-toe shoes. Otherwise, comfortable clothing.
- ☿ **Transportation:** The entire class is on-site.
- ☿ **Additional Info:** This class is not available if taking Coastal Critters because marine invertebrates will be covered during that class.

## HERPETOLOGY (REPTILES)

1 HOUR OR 2 HOURS

### Introduction to native and nonnative reptiles of the Southeast.

- ☿ **Topics include:** Reptile characteristics, reptiles vs amphibians, venomous vs poisonous, native vs nonnative species, keystone species, ecological roles, adaptations, misconceptions and conservation.
- ☿ **Methods:** Students will learn about reptiles by observing and interacting with our animal ambassadors.
- ☿ **What to wear:** Shoes with heel straps or closed-toe shoes. Otherwise, comfortable inside and outside clothing.
- ☿ **Transportation:** The entire class is on-site.
- ☿ **Additional Info:** This class is not available if taking Coastal Critters because herpetology (reptiles) will be covered during that class.

## BIOLOGICAL DISSECTIONS

## TEUTHOLOGY (SQUID DISSECTION)

1 HOUR

### Introduction to dissections and Mollusca anatomy.

- ☿ **Topics include:** External and internal anatomy, adaptations, squid life cycle, trophic levels, marine invertebrates, taxonomy, importance of squid and significance to humans.
- ☿ **Methods:** Students will learn dissection procedures and how unique squids are through guided dissection. This is a great first dissection class!
- ☿ **What to wear:** Required closed-toe shoes. Crocs are not considered closed-toed. Otherwise, comfortable clothing.
- ☿ **Transportation:** The entire class is on-site.
- ☿ **Additional Information:** The squids used in this dissection class are considered “by-catch” fishing bait. Squids vary in size and contain no formaldehyde. The squids will be repurposed to feed animal ambassadors at the Burton 4-H Center!
- ☿ **Costs:** There is an additional cost of \$1.50 per student (1 squid per student).

## ICHTHYOLOGY (SHARK DISSECTION)

2 HOURS

### Introduction to dissection and fish anatomy.

- ☿ **Topics include:** Marine vertebrates, fish biology, species and characteristics of sharks, shark internal and external anatomy, anatomical systems, importance of sharks, trophic levels, ecosystem roles, conservation, reasons to dissect and facts about sharks.
- ☿ **Methods:** Students will learn safe dissection procedures and how unique sharks are through a guided dissection. This is a great advanced dissection class.
- ☿ **What to wear:** Required closed-toe shoes. Crocs are not considered closed-toe. Otherwise, comfortable clothing. Students will be provided with gloves and safety eyewear.
- ☿ **Transportation:** The entire class is on-site.
- ☿ **Additional Information:** The sharks dissected are “by-catch” and are preserved in formaldehyde. For an inexpensive dissection, the sharks we purchase are considered “failed injections.” There may be latex spread throughout the shark. The specimen is still in perfect condition.
- ☿ **Costs:** \$8.50 per student (1 shark per 2 students). Prices *are subject to change* due to vendor availability and/or stock.

## EXPERIENTIAL LEARNING

### CAMPFIRE - SONGS, SKITS, STORIES & (S)MORE!

1 HOUR

#### Introduction to outdoor songs, skits and stories around a burning campfire.

- ☘ **Methods:** Campfire is a fun-filled evening for the students. Burton staff will lead the students in campfire songs, skits, jokes, games, and stories. Students have the opportunity to interact socially in an educational and recreational setting.
- ☘ **What to Wear:** Shoes with heel straps or closed-toe shoes. Otherwise, comfortable clothing and bug spray.
- ☘ **Transportation:** The entire class is on-site.
- ☘ **Additional Information:** The last ten minutes of campfire can be designated for s'mores. Burton 4-H Center will only provide "safety" s'more skewers; groups must supply the rest of s'more materials. Alternatively, s'mores can be done on the school led evening as well.

### SCOTOBIOLOGY (NIGHTWALK)

2 HOURS

#### Introduction to the study of the biology of darkness at the beach at night.

- ☘ **Topics include:** Astronomy, nocturnal, crepuscular, and diurnal animal adaptations, bioluminescent plankton, sensory awareness, and much more.
- ☘ **Methods:** Students will participate in group activities that test their senses while exploring the beach at dusk or night. Students will also get the chance to view constellations and enjoy a solo sit on the beach.
- ☘ **What to wear:** Shoes with heel straps or closed-toe shoes. Otherwise, plan to dress for the season with comfortable clothing and bug spray. Shoes stay on throughout class.
- ☘ **Transportation:** Walking 0.5 mile to 6th Street Beach from the Burton 4-H Center with instructors.
- ☘ **Additional Information:** *If selected, this is your only evening class option.*
- ☘ **Seasonal:** Available from October to Mid-March (daylight savings end). Due to seasonality, sunset times, darkness and lightness levels will vary and direct activities.

### "CHOOSIES"

2 HOURS

#### Introduction to experiential learning through guided beach activities and creating student connections.

- ☘ **Methods:** Students "choose" activities they would like to participate in that are being offered by Burton staff. Examples include but are not limited to beach combing, sports activities (volleyball, touch football, soccer, ultimate Frisbee, etc.), sandcastle building, seashell jewelry making, shark tooth hunting, and more!
- ☘ **What to Wear:** Clothes and shoes (sandals with a back strap, water shoes or closed-toe shoes) that can get wet and sandy are strongly recommended. *Clothing must be worn over bathing suits.*
- ☘ **Transportation:** Provided by Burton 4-H Center school buses or 14-passenger minibuses.
- ☘ **Water Rules:** Swimming is NOT permitted. Students will only be allowed to go ankle deep in the water.

### DISCOVERY ECO-CRUISE

2 HOURS

#### Introduction to trawling on a coastal tidal creek.

- ☘ **Methods:** Students will learn about coastal ecology and get to participate in a trawl!
- ☘ **What to Wear:** Shoes with heel straps or closed-toe shoes. Otherwise, comfortable clothing.
- ☘ **Transportation:** Please arrange your own transportation for the group and we will send a Burton staff member to guide your driver and/or escort group to location.
- ☘ **Additional Information:** Discovery Cruise has a 38 people maximum capacity on boat. Groups with more than 38 people will have to book multiple boat trips.
- ☘ **Website:** <https://www.bullriver.com/>
- ☘ **Costs:** \$15.00 per person and/or \$375.00 per boat trip minimum. Plus, \$1.50 gratuity per person.

## DOLPHIN CRUISE

2 HOURS

### Introduction to coastal mammals and Tybee Island history.

- ☞ **Methods:** Captain Derrick's Dolphin tour will cruise to the mouth of the Savannah River. Students will learn about and see dolphins from the boat.
- ☞ **What to Wear:** Shoes with heel straps or closed-toe shoes. Otherwise, comfortable clothing.
- ☞ **Transportation:** Please arrange your own transportation for the group and we will send a Burton staff member to guide your driver and/or escort group to location.
- ☞ **Website:** <http://tybeedolphinadventure.com/>
- ☞ **Costs:** \$19.50 per adult, \$16.50 per teen student (13 years old and older), \$13.50 per student (12 years old and under), plus added on \$1.50 gratuity per person.
- ☞ **Seasonal:** Sunset Tours are available for \$31.50 per adult and teen student (13 years and older), \$18.00 per student (12 years and under), plus \$4.00 gratuity per person. Times/dates vary depending on sunset.

## TEAMWORK & CONNECTIONS

## SEINE NETS (SURF SLEUTH)

2 HOURS

### Introduction to scientific data collection, fishing and team building.

- ☞ **Topics include:** Data collection, what a seine net is and how to use it, coastal fish of Georgia, and parts of a fish.
- ☞ **Methods:** Students will go to the beach and use a seine net to catch and record species living in coastal Georgia's waters. Burton staff will record student data and results for the Georgia Department of Natural Resources (DNR).
- ☞ **What to Wear:** Required to wear shoes in the water during class. Clothes and durable shoes (sandals with a back strap, water shoes, or closed-toe shoes) that can get wet and sandy are strongly suggested. No crocs allowed. Clothing must be worn over bathing suits.
- ☞ **Transportation:** Provided by Burton 4-H Center school buses or 14-passenger minibuses.
- ☞ **Water Rules:** Swimming is NOT permitted. Students will only be allowed to go knee deep in the water.
- ☞ **Additional Information:** For the safety of instructors and groups, students DO NOT go seining if there is a weather advisory, water advisory, wind advisory and/or temperature concerns. Please provide a back-up class in addition to your class selections as inclement conditions may occur even during warmer months.
- ☞ **Seasonal:** Available from March-October depending on seasonal conditions.

## COMMUNITY SERVICE

2 HOURS

### Introduction to opportunities to engage with the community and/or natural environment to continue the Georgia 4-H motto to "make the best better!"

- ☞ **Methods:** Instructors will lead students through hands-on opportunities intended to benefit visiting guests of Burton 4-H Center and Tybee Island. Opportunities include but are not limited to landscaping, weeding, planting native plants, picking up pollution at local beaches and/or salt marshes and more. Needs will be determined before arrival by full-time staff at the Burton 4-H Center.
- ☞ **What to Wear:** Closed-toe shoes and comfortable clothing to perform manual labor tasks.
- ☞ **Transportation:** The entire class is on-site, or transportation will be provided.

## COASTAL GEORGIA KAYAK ADVENTURE

2 HOURS

### Introduction to teambuilding and coastal barrier island ecology.

- ☞ **Topics include:** Barrier island ecology, birding, coastal animals, teambuilding and more.
- ☞ **Methods:** Sea Kayak Georgia will teach students how to kayak in Tybee's intercoastal waterways.
- ☞ **What to Wear:** Shoes with heel straps or closed-toe shoes and clothes that can get wet and sandy are strongly suggested. Otherwise, plan to wear comfortable, quick-dry clothing, layers, sunscreen and/or bug spray.
- ☞ **Transportation:** Please arrange your own transportation (van or cars only). Burton can provide parking passes for group vehicles. If necessary, we can provide transportation by Burton 4-H Center school buses.
- ☞ **Additional Information:** Water bottles are required on trips. Requires additional signed waivers per person.
- ☞ **Website:** <https://www.seakayakgeorgia.com/>
- ☞ **Costs:** \$50.00 per person plus 15% group gratuity.

## GEORGIA HISTORY

### FORT PULASKI NATIONAL MONUMENT TOUR

2 HOURS

#### Introduction to Georgia history and military operations at Fort Pulaski.

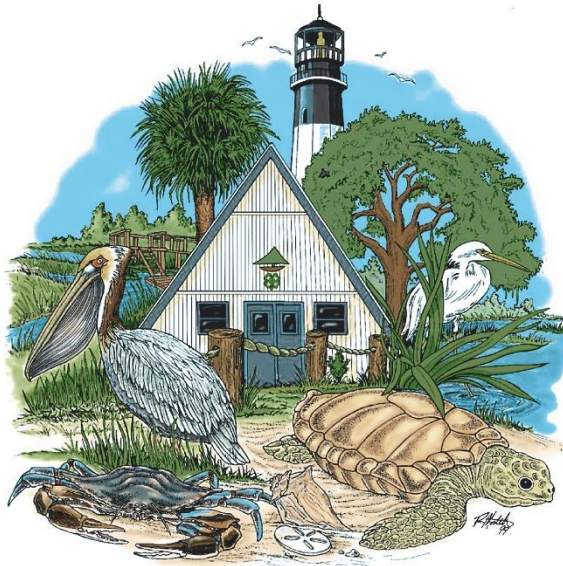
- ☼ **Topics include:** History of military technology and engineering, simple machines, Georgia history, American Civil War history, National Park Systems, Cockspur Island history and culture.
- ☼ **Methods:** Burton 4-H Educators will lead students on a historical tour inside and around the fort outside to discover uses of simple machines, American Civil War weaponry, the Third Defense Fort System, life in the 1800's, and Battle of Fort Pulaski on April 10th 1862.
- ☼ **What to Wear:** ONLY closed-toe shoes due to concerns of fire ants. Otherwise, comfortable clothing, hat, bug spray, and/or sunscreen are strongly recommended.
- ☼ **Transportation:** Please arrange your own transportation for the group and we will send a Burton staff member to guide your driver and/or escort group to the location.
- ☼ **Additional Information:** Groups can arrange a school-led visit with National Park Services.
- ☼ **Website:** <https://www.nps.gov/fopu/index.htm>
- ☼ **Costs:** Students and Adults are FREE.

### TYBEE ISLAND LIGHT STATION & MUSEUM

2 HOURS

#### Introduction to Georgia history, lighthouse, and architecture.

- ☼ **Topics include:** Mariner history of Georgia, Tybee, and Savannah from colonialization, American Civil War, Great Depression, coastal defenses and present-day operations.
- ☼ **Methods:** Students will climb to the top of the lighthouse, explore the lighthouse grounds and Fort Screven.
- ☼ **What to Wear:** No backpacks allowed. Shoes with heel straps or closed-toe shoes. Otherwise, comfortable clothing.
- ☼ **Transportation:** Please arrange your own transportation for the group and we will send a Burton staff member to guide your driver and/or escort group to location.
- ☼ **Additional Information:** 1:7 adult to student ratio is REQUIRED for climbing the lighthouse tower.
- ☼ **Website:** <https://www.tybeelighthouse.org/>
- ☼ **Costs:** \$10.00 per person.



BURTON 4-H CENTER  
on Tybee Island, GA

Updated: 3/2024