

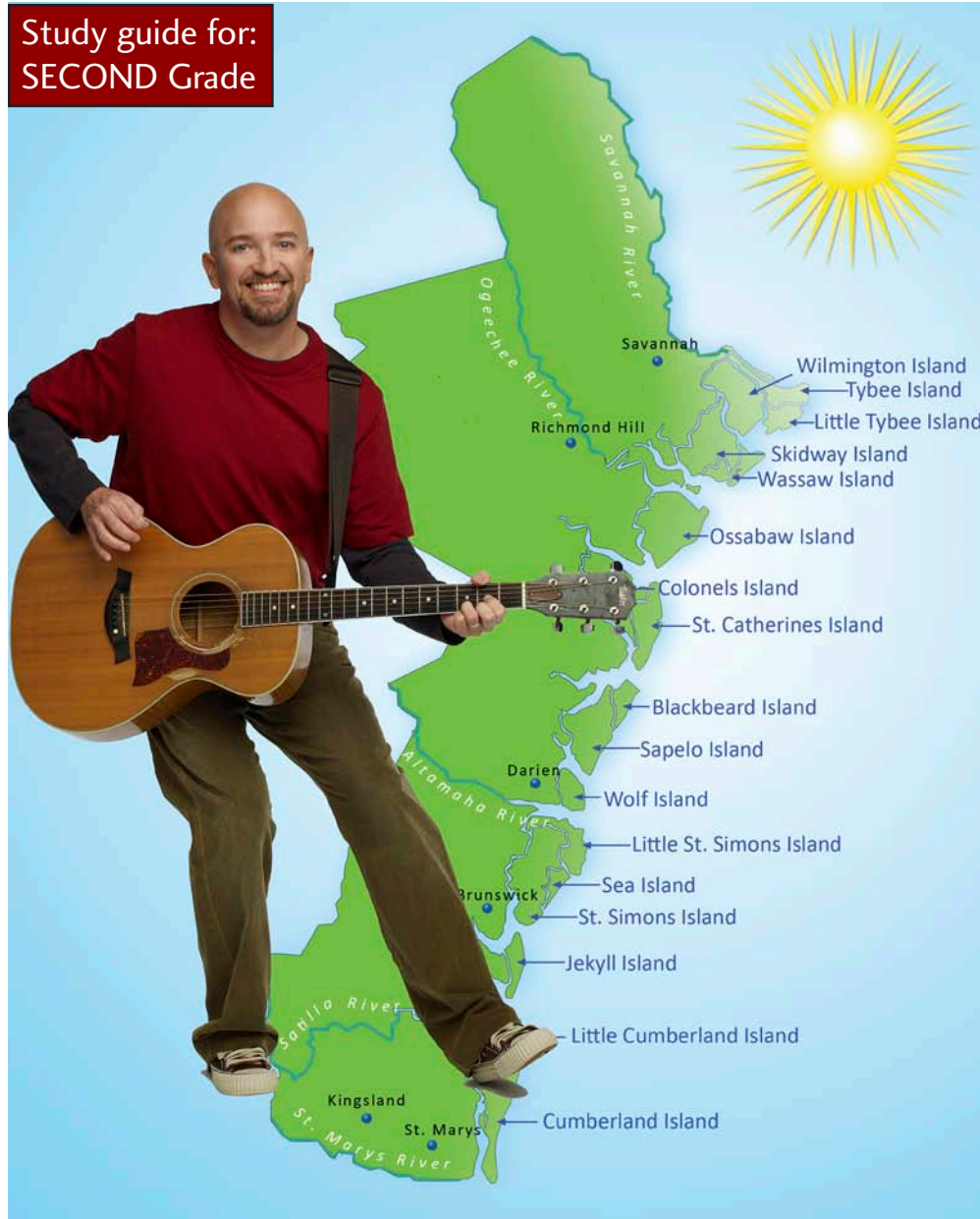


## MARSH MADNESS

### Roger Day

Nashville-based musician Roger Day (Parent's choice award winner) will perform his latest show, Marsh Madness, co-commissioned by the Georgia Sea Grant and the Savannah Music Festival. Songs such as Fiddler Groove, Jesse the Turtle Girl, Alligator in My Refrigerator and Mosquito Burrito will be featured in this 50-minute educational performance.

Study guide for:  
**SECOND Grade**



### Welcome from the SMF Education Director:

We are thrilled you can join us for the performance of Roger Day's Marsh Madness presented by the Savannah Music Festival. Our education music series features grade-appropriate performances by renowned musicians and educators. A variety of musical genres complement school curriculum and demonstrate the dynamic relationship between the performing arts and history, literature, and world cultures.

In this document, you will find educational activities designed to enhance learning before and after the performance. This study guide meets Georgia's Performance Standards (GPS) and has been carefully crafted by Georgia Sea Grant and UGA Marine Extension Service, and Jennifer Cole, instructional coach at Winterville Elementary School.

Below you will find the links to activities and content. If you wish to access a complete list of GA Performance Standards for all grades and subjects, visit:  
<http://www.georgiastandards.org>

Thank you for attending the 2012 Savannah Music Festival. We hope this experience will improve your student's creativity, teamwork and self-expression!

Sincerely,

Ricardo A. Ochoa, Director of Education

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## Overview

Nashville-based musician Roger Day will perform his latest show, *Marsh Madness*, co-commissioned by the Georgia Sea Grant Foundation and the Savannah Music Festival. Songs such as “Fiddler Groove”, “Jesse the Turtle Girl” and “Mosquito Burrito” will feature plants and animals that live in and around the barrier islands of Georgia. The song cycle deals with the importance of habitat and watershed health, the abundance of creatures that depend on the state’s water resources and how individuals can help protect the coastal eco-system. The material in the songs addresses state science teaching standards for grades three through five.

## History of *Marsh Madness*

In 2009, Georgia Sea Grant and the Savannah Music Festival commissioned award-winning children's musician Roger Day to create a series of songs about the Georgia Coast. Roger went with UGA Marine Extension (MAREX) educator John "Crawfish" Crawford out to Sapelo Island, staying at UGA's Marine Institute in order to experience first-hand the marshes, mosquitos, critters and beaches of Georgia's coast. Georgia Sea Grant also commissioned a group of elementary science teachers to help Roger incorporate concepts into his songs that meet state science standards and to develop 3rd-5th grade curricula that would accompany the performance.

The resulting *Marsh Madness* song catalog was then performed during the 2010 Savannah Music Festival at 10 elementary schools and the Trustees Theatre for a total of 5,000 children. Afterwards, Roger took the *Marsh Madness* show on the road, performing at schools from North Carolina to Ohio.

## Georgia Coast

The coast of Georgia is rich in history, beauty, mystery and natural wonders. Although Georgia is the largest state east of the Mississippi, it is only the 18<sup>th</sup> state in shoreline length (out of 21 states). Georgia’s coast is abundant in fresh and saline wetlands, rivers and tidal bays.

Georgia’s coast contains a series of eight barrier island complexes containing 13 barrier islands. Like all barrier islands, these protect our coastline from storm surges and tidal action. Unlike other barrier island complexes in the U.S., however, Georgia’s are largely undeveloped. At the end of the 19th Century, a number of wealthy northern industrial families, among them the Carnegies, Vanderbilts and Rockefellers, purchased Georgia’s “Golden Isles” as private hunting retreats. Jekyll, Cumberland, Ossabaw, Sea, Sapelo, St. Catherines and Wassaw Islands were all privately owned until the middle of the 20th Century. Having so much land in private hands for such a long period of time kept it from being developed, which in turn left much of Georgia’s coastal salt marshes relatively undisturbed.

Georgia's coastal zone experiences the second highest tidal range on the U.S eastern seaboard. Twice a day, the tides rise and fall from six to eight feet, submerging and then exposing Georgia's 378,000 acres of salt marsh. Aside from Louisiana, Georgia's salt marsh estuaries are the largest in continental U.S. With the marshes ranging from 4 to 8 miles wide, the 100 miles of Georgia's coast contain approximately one-half million acres of marshland. This is about one-third of all the salt marshes on the eastern coast of the United States. These precious lands nourish one of the most biologically productive ecosystems on earth.

The forest community on the southern barrier islands is maritime live oak predominant. Live oaks, southern magnolias, and cabbage palms shade understory species such as the red bay, yaupon and American holly, sparkleberry, wax myrtle, saw palmetto, vines, Spanish moss, and many kinds of ferns and woods flowers. Other hardwoods that form the canopy of island forests are water oak, laurel oak, tulip, sweetgum, red maple, pignut hickory, tupelo, and the introduced sycamore, but these are not as abundant as in the mainland coastal plains forests.

Today state and federal governments own and manage most of Georgia's barrier islands as parks, sanctuaries or wildlife preserves. Because they have experienced relatively little degradation, Georgia's salt marshes are an ideal laboratory for ecosystem study. Two internationally recognized marine research centers, The University of Georgia's Marine Institute on Sapelo Island and the Skidaway Institute of Oceanography on Skidaway Island, are located on Georgia's coast.

Georgia's coastal zone is rapidly growing in population, development and industry. Between 2000 and 2030, state projections anticipate a coastal population rise of 50 percent. However, even with this potential coastal growth, less than one third of Georgians live within 50 miles of the coast, an unusual characteristic for a coastal state. The bulk of the state's population lives in the Piedmont region and is far removed from coastal issues.

# GEORGIA'S COAST AND BARRIER ISLANDS



## About the Artist



Since graduating in 1985 from Washington & Lee University in Virginia, **Roger Day** has made a career as a singer/songwriter, originally on the college coffeehouse circuit. Born and raised in Birmingham, Alabama, he wrote his first children's song one Christmas for his family. The enthusiasm from his nieces and nephews encouraged him to continue writing and soon he had enough songs for an entire show. Before his coffeehouse performances, he began to meet with student volunteer groups to put on community service shows at a local Head Start program. For these shows, Roger was recognized by the National Association of Campus Activities with its highest public service award, The Harry Chapin Award for Contributions to Humanity.

In 1998, Roger released his first children's CD, *Rock 'N' Roll Rodeo*, followed by *Ready to Fly* in 2001. In 2007, *Dream Big!* was released. Radio Disney played the title song and another song, "I like Yaks," went to number 1 on Sirius/XM's *Kids Place to Live*. Roger's fourth release *Why Does Gray Matter?* features "the brain" as a theme for every song. Roger has won two Parents' Choice® Recommended Awards and two Parents' Choice® Gold Awards. Roger also has a family concert DVD, *Roger Day Live!* for which he won The Film Advisory Board Award for Outstanding Family Video.

Roger currently lives in Franklin, Tennessee, with his wife Jodie and their three children. An Eagle Scout, Roger spends his free time as a volunteer leader for Boy Scout Troop 137.

## Internet Resources

### **Roger Day**

<http://www.rogerday.com/about.php>

### **National Oceanic & Atmospheric Administration, Sea Grant**

<http://www.seagrants.noaa.gov/>

### **Georgia Department of Natural Resources, Coastal Resources Division**

<http://coastalgadnr.org/>

### **The University of Georgia's Marine Education Center and Aquarium**

<http://www.marex.uga.edu/aquarium/>

### **The University of Georgia, The Marine Extension Service**

<http://www.marex.uga.edu/>

### **Coastal Georgia Adopt-A-Wetland Program**

<http://www.marex.uga.edu/shellfish/wetland.html>

### **Know the Connection, Coastal Georgia**

<http://knowtheconnection.com/>



## **SAVANNAH MUSIC FESTIVAL CONCERT ETIQUETTE**

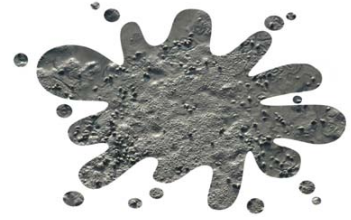
A live music performance can be very exciting. All of the people involved in the production, both cast and crew, work very hard to be sure they give a great performance. It is the job of the audience members to help the performers give their best performance possible. The audience can do this by practicing the rules of concert etiquette.

- Follow the directions of your teachers and the M.C. prior to the performance.
- If you are visiting the Trustees theater, arrive at the theater early. Doors open at 10:00 AM. Performance begins sharply at 11:00 AM.
- Visit the restroom before the performance begins.
- If you have a cell phone please turn it off. If it must be on, put it on vibrate.
- Pay attention to announcements that are made prior to, and after, the show.
- Don't speak during the performance...whispering is still speaking, so only in an emergency or if the performer ask you to participate.
- Do not take pictures during the performance. It can be very distracting to the performers and can cause a mishap.
- Remain in your seat for the entire performance. It is rude to get up in the middle of a quiet moment...rude to the performers and your fellow audience members.
- Do not eat or drink in the theater. If you must have a cough drop, or something of that nature, do not make noise with the wrapper.
- Do not put your feet up on the seats or balcony and do not kick the seat in front of you.
- Don't put or throw anything on the stage.
- Do laugh when the performance is funny.
- Do applaud when it is appropriate during the performance.
- Do applaud when the performance is over...this tells the performers and crew that you appreciate their work.
- Stand and applaud if you really thought the show was great.
- Stay seated until your school is called after the performance.

# **I Love to Study Mud!**

from *Marsh Madness*

by Roger Day



When I graduate from college, and my brain is really big  
I'm gonna be a scientist—that's my perfect gig  
First, I'll catch the ferryboat, and I'll sail to Sapelo  
There's something there I really love, don't you know

And I'll learn so much about it, I'm gonna get a Ph.D!

I LOVE TO STUDY MUD - MARSH MUD

I LOVE TO STUDY MUD - MARSH MUD

When I step onto the island, I'm gonna take a great big whiff  
Woo... wait a minute... man... that smells so bad, somebody get me a  
handkerchief  
See the marsh mud's like a chocolate soup that you can smell for miles around  
It's the perfect place to wear these boots and stomp around

I can't wait to learn the things the marsh mud teaches me

I LOVE TO STUDY MUD - MARSH MUD

I LOVE TO STUDY MUD - MARSH MUD

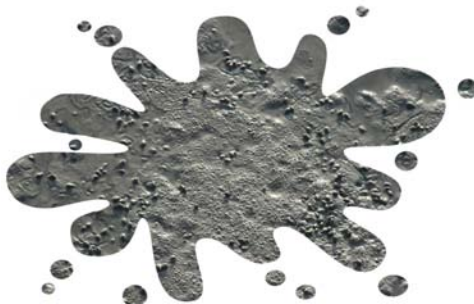
Not only are we gonna smell mud. We're gonna spell mud too!

M-U-D!

M-U-D!

M-U-D!

M-U-D!



## Vocabulary

**Adaptation**- an alteration or adjustment, often hereditary, by which a species or individual improves its condition as it relates to its environment

**Barrier island**- long, narrow island lying parallel to the mainland and separated from it by bay, lagoon, or marsh, usually occurring in chains

**Canopy**- the uppermost branchy layer of a forest

**Coast**- the area where the land meets a large body of water

**Community**- populations of all species that occupy a particular habitat and interact within that habitat

**Consumer**- an organism, usually an animal, that feeds on plants or other animals

**Decomposer**- an organism, usually a bacterium or fungus, that breaks down the cells of dead plants and animals into simpler substances.

**Ecosystem**- all of the organisms of a community and their environment that form an interacting system

**Estuary**- partially enclosed coastal body of water with one or more rivers or streams flowing into it and with a free connection to the open sea

**Habitat**- the area or environment in which an organism lives

**Hammock**- areas of higher elevation in the salt marsh that support shrubs and trees

**Island**- land surrounded by water on all sides

**Maritime Forest** - the forests by the sea that are characterized by live oaks, palms, and palmettos

**Ocean**- the body of salt water that covers more the 70% of the earth's surface

**Producer**- organisms that make their own food through a process called photosynthesis

**Salt Marsh**- an area of coastal wetland periodically flooded with salt water and dominated by grasses and grass-like plants

**Sandbar**- submerged or exposed line of sand accumulated by wave action

**Sand Dunes**- a hill of sand piled up by the wind

**Understory**- the plants of a forest that grow low to the ground



*Turkey Vulture*

## Featured Marsh Animals

**Alligator**- a large reptile with sharp teeth and powerful jaws that live in swampy areas

**Ghost crab**- also called *sand crabs*, they dominate sandy shores and dig deep burrows

**Fiddler crabs**- burrowing crabs in coastal regions; the males have one of their pincer-like claws very much enlarged; during high tide, they plug their burrows and stay in them until low tide

**Mosquitoes**- two-winged insects in which the female of most species is distinguished by a long proboscis for sucking blood

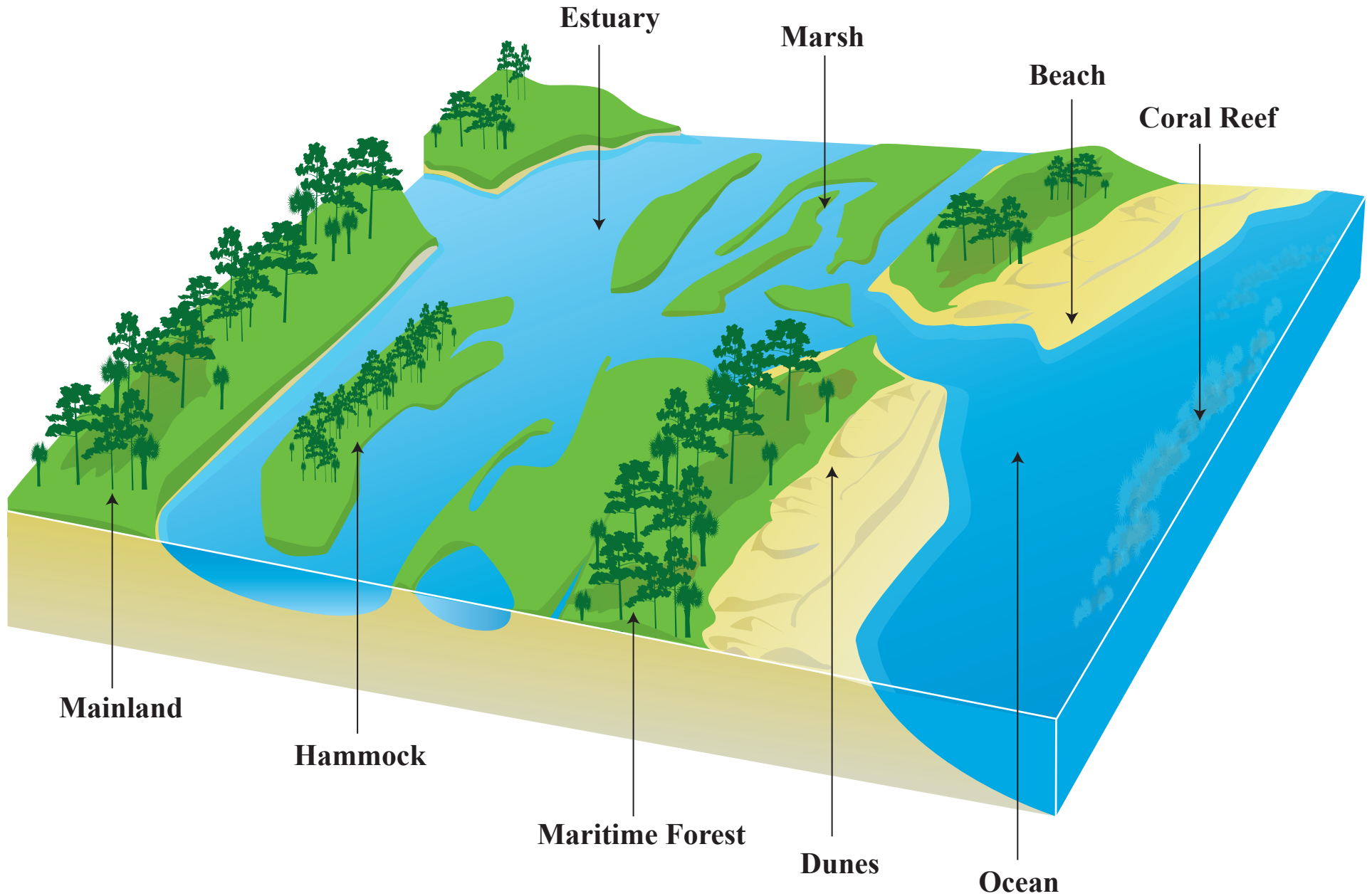
**Periwinkle snail**- known as a shore snail, they are tiny and found among rocks, on wood pilings between high and low tides, underneath docks, and in mud pools

**Sea turtle**- large turtles with limbs modified into flippers for swimming in the ocean

**Turkey vulture**- a carrion feeder, eating almost any type of dead animal but when frightened it responds by swiftly regurgitating its last meal in the direction of whomever or whatever frightened it



# Georgia's Coastal Features



**ACTIVITY #1**  
Grade 2  
Marsh Madness  
Handout: Life Cycle of a Sea Turtle

**Georgia Performance Standards:**

S2L1. Students will investigate the life cycles of different living organisms.

- a. Determine the sequence of the life cycle of common animals in your area: a mammal such as a cat or dog or classroom pet, a bird such as a chicken, an amphibian such as a frog, and an insect such as a butterfly.

S2CS5. Students will communicate scientific ideas and activities clearly.

- b. Draw pictures (grade level appropriate) that correctly portray features of the thing being described.

**Objective:** The students will investigate and draw the life cycle of a sea turtle

**Materials:** Markers, crayons, or color pencils; Life Cycle of a Sea Turtle handout, attached in this study guide (one per student)

**Teacher's Instructions:**

1. Before distributing the handouts give a brief background on sea turtles, found below.
2. Review the life cycle of a sea turtle with the students.
3. Distribute the Life Cycle handouts to each student.
4. Using the captions on the handout, ask the students to draw the part of the life cycle inside the bubbles the sea turtle is going through.

**Assessment:** Allow some students to present their handout to the class, review the life cycle, and show his/her pictures to the other students.

**Sea Turtle Background:**

There are seven species of sea turtles, five of which are found in the waters off Georgia's coast. The loggerhead sea turtle is the only species to nest regularly on Georgia's barrier islands. The other four species, the hawksbill, Kemp's ridley, green, and leatherback, prefer more tropical nesting locales but use the Georgia coast for food and shelter. State and federal law protect all five of the sea turtle species found in Georgia, specifically the Endangered Species Act.

Like all sea turtles, the loggerhead is completely adapted to life in the ocean and depends on land only for reproduction. Only the female returns to the beach. When female turtles reach maturity (15-30 years), they leave the water and dig a nest in the sand on the beach, deposit the eggs, cover the nest, then return to the water. After incubating for about eight weeks, the eggs hatch, and the hatchling turtles emerge from the nest and scamper to the ocean. In each nesting season, a female may lay up to six clutches, each containing 100-150 small, white, leathery eggs. This process takes place every 2-3 years for each female. Generally, female turtles nest on the same beaches each season, with some variations. It is widely believed that hatchlings, when grown, return to their natal beaches to nest. The species nest in Georgia from late May to mid-August.

For more detailed information, visit [www.KnowTheConnection.com](http://www.KnowTheConnection.com)

## ACTIVITY #2

Grade 2

Marsh Madness

Worksheet: Georgia's Unique Coast

### Georgia Performance Standards:

SS2G1 The student will locate major topographical features of Georgia and will describe how these features define Georgia's surface.

- a. Locate all the geographic regions of Georgia: Blue Ridge Mountains, Piedmont, Coastal Plain, Valley and Ridge, and Appalachian Plateau.

S2CS4. Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters.

- b. Use a model—such as a toy or a picture—to describe a feature of the primary thing.

**Objective:** Students will learn about geographic features of the Georgia Coast, identifying the progression of land formations from the sea to the mainland.

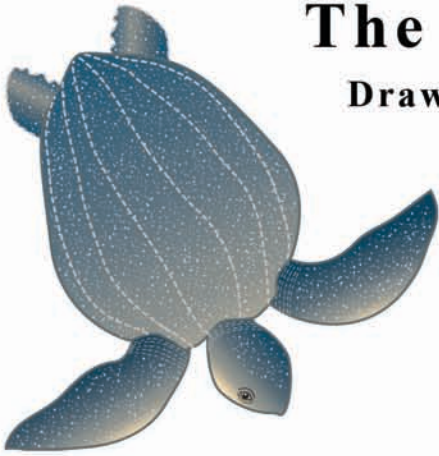
**Materials:** Writing utensils; Georgia's Coastal Features poster, vocabulary list, and Georgia's Unique Coast handout, attached in this study guide (one per student)

### Teacher's Instructions:

1. Print out or project onto the wall the Georgia's Coastal Features poster
2. Discuss each of the labeled graphics starting from the sea and moving inland, referring to the vocabulary list
2. Distribute Georgia's Unique Coast worksheets to each student.
3. Explain to the students how to fill in the handout:
  - a. Using the vocabulary words found in the box, fill in the blanks to describe geographic features found on Georgia's coast.

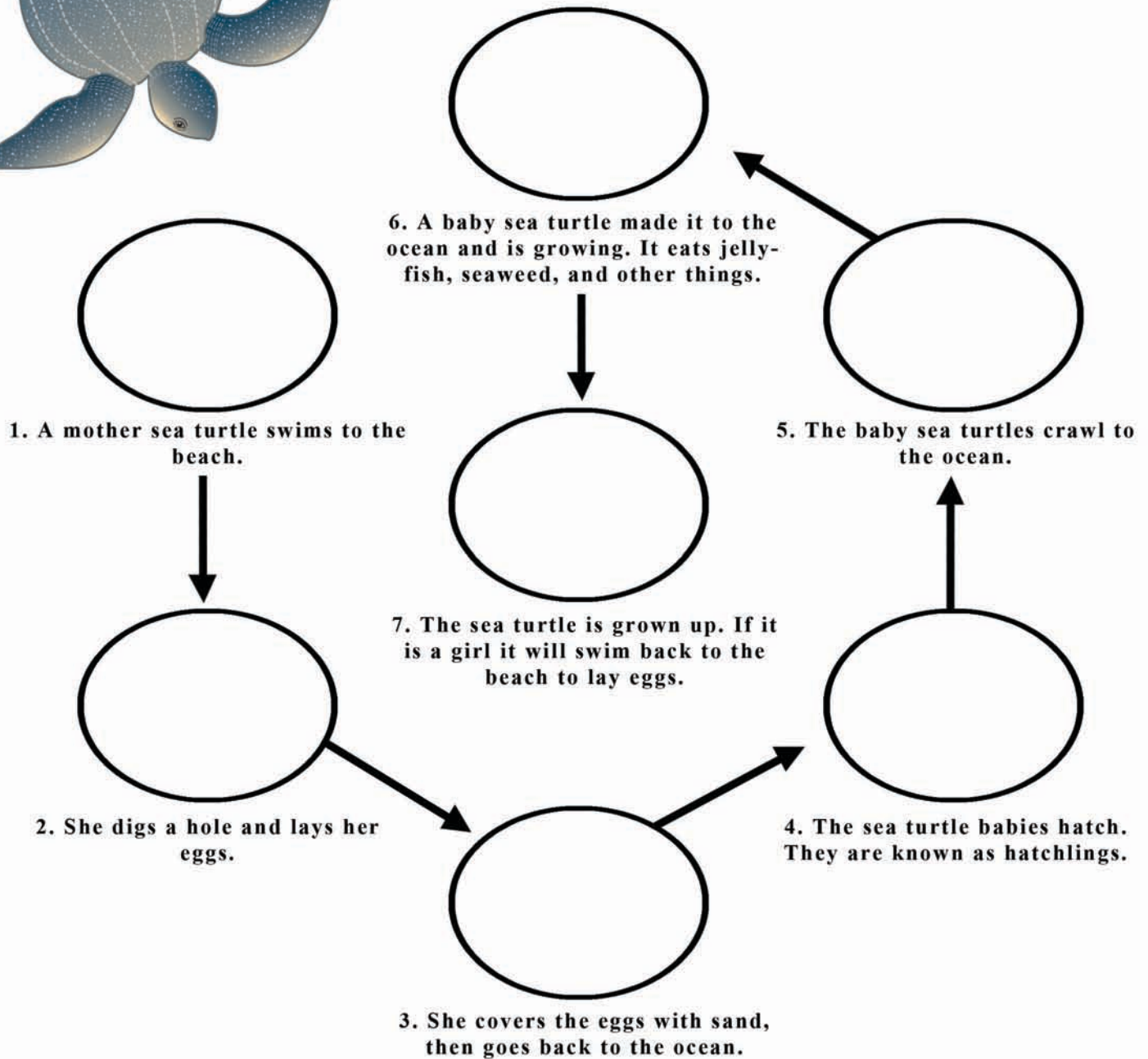
### Assessment:

Grade the papers to assess whether the students can locate major physical features of Georgia's coastal zone.



# The Life Cycle of a Sea Turtle

Draw a picture of each stage in a sea turtle's life.



# Georgia's Unique Coast

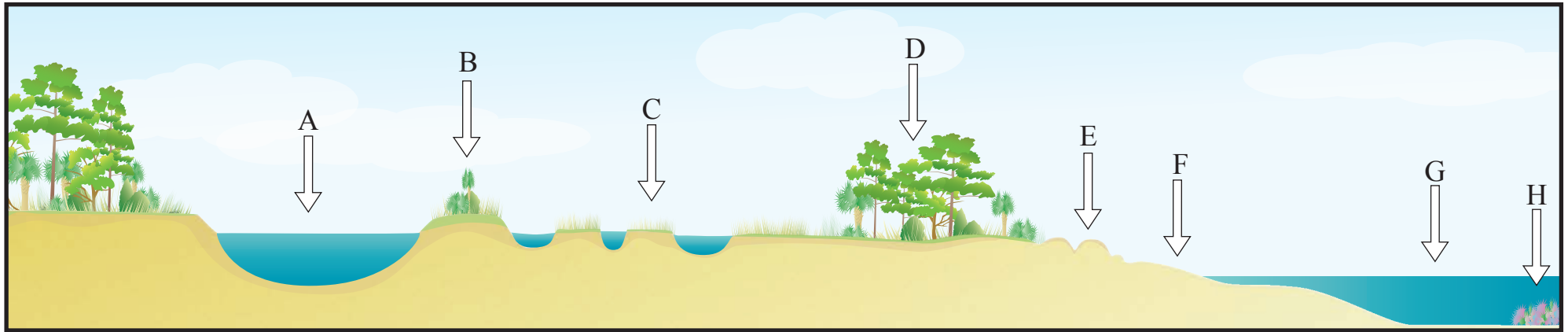
Using the words in the box below, label each of the geographic features found on the Georgia Coast.

Beach  
Dune

Estuary  
Hammock

Maritime Forest  
Marsh

Ocean  
Reef



A. \_\_\_\_\_

B. \_\_\_\_\_

C. \_\_\_\_\_

D. \_\_\_\_\_

E. \_\_\_\_\_

F. \_\_\_\_\_

G. \_\_\_\_\_

H. \_\_\_\_\_

## **Study Guide Feedback Form**

The following questions are intended for teachers and group leaders who make use of the Savannah Music Festival and Georgia Sea Grant study guide.

1. In what grade are your students?
2. Which show did you see? When?
3. Was this your first time at an SMF educational performance?
4. Was this the first time you used an SMF Study Guide?
5. Did you download/use the guide before or after your field trip?
6. Did you reproduce the grade-appropriate activity sheet for your class?
7. Do you think the study guide and activity helped your students better understand the material?
8. Do you think the study guide and activity helped you meet state science teaching standards?
9. Additional information and/or comments:



Fax this form to us at (912) 236-1989.  
Your feedback will be greatly appreciated.  
Thank you for visiting the Savannah Music Festival.  
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Savannah, GA 31401

