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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Study guide for: FIRST Grade
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 18th 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.
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.seagrant.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.
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 than 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

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

- Mainland
- Hammock
- Maritime Forest
- Dunes
- Ocean
- Estuary
- Marsh
- Beach
- Coral Reef
ACTIVITY #1
Grade 1
Marsh Madness
Worksheet: Sorting Coastal Animals

Georgia Performance Standards:
S1L1. Students will investigate the characteristics and basic needs of plants and animals.
   d. Compare and describe various animals—appearance, motion, growth, basic needs.
ELA1R1. The student demonstrates knowledge of concepts of print.
   a. Understands that there are correct spellings for words.
ELA1W2. The student writes in a variety of genres, including narrative, informational,
   persuasive and response to literature.
   e. Begins to use graphic features (charts, pictures, headings)

Objective: The students will use observation and critical thinking to sort coastal animals by
   category and characteristics, as well as identify unique body parts and appropriate habitat.

Materials: Three sets of coastal animal cards, three sorting worksheets and answer keys, and
   a Sand Tiger Shark and Blue Crab image, attached in this study guide; markers, crayons, or
   color pencils; blank paper (one per student)

Teacher’s Instructions:
1. Print and cut out the coastal animal cards, creating a stack for each sorting activity
   (Plant/Animal; Land/Water/Air; Fur/Feathers/Hard Shell).
2. Ask students if they have ever visited the marsh or a beach and what animals they saw or
   that they think might live there.
3. Use the three sets of coastal animal cards as a center activity, asking the students to sort the
   cards according to the category:
      Is it a Plant or an Animal?
      Does it live in the Land, Water or Air?
      Does it have Fur, Feathers, or a Hard Shell?
4. Create a fourth center activity where students draw a story of a Sand Tiger Shark and a
   Blue Crab, including details like fins, gills, eyes, teeth, claws, shell, legs, sand and ocean.
   Depending on their skill level, they also can label these features.
   The Blue Crab is a member of the Decapod order with five pairs of legs. It gets its name
   from its bright coloring along its frontal area. The first pair of legs is a set of powerful
   claws, and the last pair is flattened into a paddle-like shape for swimming.
   The Sand Tiger Shark averages 7 feet in length and has three rows of long pointed teeth.
   One of the most ferocious looking creatures in Georgia waters, sand tiger sharks prefer
   small fish they can swallow whole. While still in the uterus, hatchlings develop teeth and
   begin devouring unhatched eggs, as well as other hatchlings, until only one is left. After a
   yearlong pregnancy, the mother shark gives birth to a 2- to 3-foot practiced predator.

Assessment: Allow some students to show and describe their drawing to the class, pointing
   out different physical characteristics of their shark and crab.
ACTIVITY #2
Grade 1
Marsh Madness
Coastal Critters Matching Game

Georgia Performance Standards:
ELA1R3. The student demonstrates the relationship between letters and letter combinations of written words and the sounds of spoken words.
   h. Applies learned phonics skills when reading and writing words, sentences, and stories.

Objective: The students will practice language acquisition and reading to match pictures of coastal creatures with their names.

Materials: Two reading levels of coastal animal nametags and corresponding picture cards, attached in this study guide

Teacher’s Instructions:
1. Print and cut out the coastal animal picture cards and the corresponding nametags, creating a set for Beginning Readers and Advanced Readers.
2. Ask the students if they have ever visited the marsh or a beach and what animals they saw or that they think might live there.
3. Create a center activity using the two sets of coastal animal picture cards and nametags, asking the students to match each animal with its name.

Assessment: Use the provided answer key to determine whether students have matched the animals and nametags correctly.
Activity #1 Answer Key
Grade 1
Marsh Madness
Worksheet: Sorting Coastal Animals

<table>
<thead>
<tr>
<th>PLANTS</th>
<th>ANIMALS</th>
</tr>
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<tbody>
<tr>
<td>Saw Palmetto</td>
<td>American Alligator</td>
</tr>
<tr>
<td>Yaupon Holly</td>
<td>Bottlenose Dolphin</td>
</tr>
<tr>
<td>Live Oak Tree</td>
<td>Free-Tailed Bat</td>
</tr>
<tr>
<td>Resurrection Fern</td>
<td>Green Tree Frog</td>
</tr>
<tr>
<td>Spartina</td>
<td>Marsh Rabbit</td>
</tr>
</tbody>
</table>
Activity #1 Answer Key
Grade 1
Marsh Madness
Worksheet: Sorting Coastal Animals

<table>
<thead>
<tr>
<th>FUR</th>
<th>FEATHERS</th>
<th>HARD SHELL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pocket Gopher</td>
<td>Frizzle Chicken</td>
<td>Ghost Crab</td>
</tr>
<tr>
<td>Marsh Rice Rat</td>
<td>Laughing Gull</td>
<td>Fiddler Crab</td>
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<tr>
<td>Marsh Rabbit</td>
<td>Marsh Owl</td>
<td>Periwinkle Snail</td>
</tr>
<tr>
<td>River Otter</td>
<td>Marsh Wren</td>
<td>Diamondback Terrapin Turtle</td>
</tr>
</tbody>
</table>
Activity #1 Answer Key
Grade 1
Marsh Madness
Worksheet: Sorting Coastal Animals

<table>
<thead>
<tr>
<th>WATER</th>
<th>LAND</th>
<th>AIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octopus</td>
<td>Armadillo</td>
<td>Free-Tailed Bat</td>
</tr>
<tr>
<td>Leatherback Sea Turtle</td>
<td>Cow Killer</td>
<td>Laughing Gull</td>
</tr>
<tr>
<td>Right Whale</td>
<td>Marsh Rice Rat</td>
<td>Marsh Owl</td>
</tr>
<tr>
<td>Sand Tiger Shark</td>
<td>Island Glass Lizard</td>
<td>Marsh Wren</td>
</tr>
<tr>
<td>Seahorse</td>
<td>East Indigo Snake</td>
<td>Sand Gnat</td>
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</table>
Crab
Shark
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<tr>
<th>Plants</th>
<th>Animals</th>
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</table>
Water

Land

Air
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<th>Plants and Animals Sorting Activity</th>
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<tr>
<td><img src="image" alt="Saw Palmetto" /></td>
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<tr>
<td><img src="image" alt="Yaupon Holly" /></td>
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<td><img src="image" alt="Live Oak Tree" /></td>
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<tr>
<td><img src="image" alt="Resurrection Fern" /></td>
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<tr>
<td><img src="image" alt="Spartina" /></td>
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<tr>
<td>Fur, Feathers, and Hard Shell Shell Sorting Activity</td>
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<tr>
<td>-----------------------------------------------</td>
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<tr>
<td><strong>Pocket Gopher</strong></td>
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<tr>
<td><strong>Frizzle Chicken</strong></td>
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<td><strong>Ghost Crab</strong></td>
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<td><strong>Fiddler Crab</strong></td>
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<td><strong>Marsh Rabbit</strong></td>
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<td><strong>River Otter</strong></td>
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<tr>
<td><strong>Marsh Wren</strong></td>
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<tr>
<td><strong>Diamondback Terrapin Turtle</strong></td>
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</tbody>
</table>
### Activity #2 Answer Key

**Grade 1**

**Marsh Madness**

**Coastal Critters Matching Game**

<table>
<thead>
<tr>
<th><strong>Beginning Readers</strong></th>
<th><strong>Advanced Readers</strong></th>
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<tbody>
<tr>
<td>Bat</td>
<td>American Alligator</td>
</tr>
<tr>
<td>Crab</td>
<td>Armadillo</td>
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<tr>
<td>Dolphin</td>
<td>Fiddler Crab</td>
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<tr>
<td>Frog</td>
<td>Jellyfish</td>
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<tr>
<td>Owl</td>
<td>Marsh Rabbit</td>
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<tr>
<td>Rat</td>
<td>Octopus</td>
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<tr>
<td>Shark</td>
<td>Right Whale</td>
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<tr>
<td>Snail</td>
<td>Seahorse</td>
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<tr>
<td>Snake</td>
<td>Sea Turtle</td>
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<tr>
<td>Turtle</td>
<td>Stingray</td>
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<tr>
<td>Dolphin</td>
<td>Frog</td>
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<td>Owl</td>
<td>Rat</td>
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<td>Shark</td>
<td>Snail</td>
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<tr>
<td>Snake</td>
<td>Turtle</td>
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</tbody>
</table>
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.
200 E. St Julian Street. Suite 601
Savannah, GA 31401