

# MYRTLE BEACH

## STATE PARK

4401 South Kings Highway  
Myrtle Beach, SC 29575  
(843) 238-5325



We invite you and your students to visit our park and participate in an educational program. Located in the heart of the Grand Strand, Myrtle Beach State Park is one of the most popular public beaches along the South Carolina coast. This 312-acre oceanfront park plays a major role in preserving and maintaining a portion of the natural heritage of South Carolina's coastline. This traditional state park was built by the Civilian Conservation Corps in the 1930s and has the distinction of being the first state park open to the public in South Carolina. The park includes a campground, cabins, nearly a mile of beach, picnic areas, a fishing pier and nature center. In addition, a nature trail provides a rare opportunity to see one of the last stands of maritime forest on the northern coast of South Carolina. Because of this distinction, the forest has been declared a Heritage Trust Site.

### Location

Myrtle Beach State Park is about 2

miles north of Highway 544 on U.S. 17 Business. The park is 4.5 miles south of the intersection of Highway 501 and U.S. 17 Business. The park is located on the beachfront side of Highway 17.

### Facilities

Myrtle Beach State Park is located in the heart of the Grand Strand. This 312-acre park is a piece of green paradise in the middle of vast development. The maritime forests of the Grand Strand have virtually disappeared, but the state park protects over 100 acres of this rare and unique forest. The park also offers 1-mile of undeveloped beachfront that is characterized by beautiful sand dunes and sea oats.

This park offers bathroom facilities, picnic areas, picnic shelters, 1-mile of beachfront, fishing pier, nature center, 1.5-mile nature trail through the maritime forest, camping, cabins, playground equipment, and fishing pier gift store with drinks, microwave sandwiches, and gifts. The park is open 7 days a week from 6 a.m. to 10 p.m. During the months of December, January and February, the park is open until 8 p.m.

### Reservations and Program Information

Ann Malys Wilson, Interpretive Ranger  
Nature Center- 843-238-0874

Email- [awilson@scprt.com](mailto:awilson@scprt.com)

The nature center hours are varied, so please call for current hours. The nature center does have an answering machine-

please leave your name, phone number, reason of call, and the best time to be reached during the day. The best times to call for information or to make a reservation are 7:30 a.m. to 9 a.m. and 2 p.m. to 3:30 p.m. The nature center is closed on Sundays and Mondays.

The park begins booking reservations for the school year on the second Monday of August.

### Meeting Spot

The Discover Carolina program will meet at Shelter B2. Show park admission your confirmation letter and follow the road straight until you come to a sharp T intersection near the fishing pier. Take a left hand turn. Shelter B2 will be the second shelter on the right.

### Meeting Time

School groups should arrive at the park 15 minutes prior to the time of the program. This will give groups time to gather their items and go to the restroom. Students should be allowed to go the restroom before they meet with the interpreter and start the program. The location of the restroom facilities are listed on the enclosed map.

### Day in the Life of a Sea Turtle Program and Lesson Description

Students will learn how South Carolina State Parks have a positive impact on sea turtles through education, management, and habitat conservation. Students, through simulated hands on activities, will learn: what habitat needs are for sea turtles, how trained and permitted personnel protect and relocate sea turtle nests (if in inappropriate habitat), how and why nest inventories collect data, and what information can be gained from the South Carolina Sea Turtle Stranding Network.

This 1.5-hour program is offered

September, October, March, April and May. A teacher led activity is provided for the time frame when a class is not with the Interpretive Ranger.

### Before the Program at Myrtle Beach State Park

Students should be divided into 5 groups that will work well together while at the beach. Put them into groups Blue, Green, Red, Purple and Yellow. Make sure students know which group they are in before they come to Myrtle Beach State Park. It helps us to put their color on the name tag. There should be a chaperone for each group. These chaperones will be extremely important to ensure that each group is following the correct procedures and staying on task while on the beach. We have enclosed an informative letter to send home to your chaperones.

### What to Wear at Myrtle Beach State Park

Students should wear clothes and shoes that will get sandy from crawling while on the beach. They should be prepared for the weather at the beach- it may be windy, chilly or hot! Participants need to wear shoes at all times.

Give all students name tags that are legible from 6 feet away. This will help us to interact better with your students. A piece of masking tape works well. Keep in mind, the name tags need to be durable, since the students will be down on the beach. We don't want to create more litter on the beach!

### Things to Bring to Myrtle Beach State Park

- Plenty of drinks - it can get quite hot on the beach!
- A garbage bag to collect waste when everyone is done eating. There are garbage dumpsters nearby; please help keep our park clean when done eating. We will provide either a bin or bag for recyclables only- beverage containers



and any plastic 1-7. Please help keep trash out!

- Hand Soap
- First Aid Kit

### Driving to Myrtle Beach State Park

To better prepare the students for the program at Myrtle Beach State Park, teachers should have the students observe their surroundings as they are driving to the park. Whether the route takes them down Highway 501, Highway 544, or Highway 17, students should notice the roads, cars, restaurants, gas stations, hotels, golf courses, stores, and houses, etc. The Grand Strand is an area experiencing rapid growth and development. As you enter Myrtle Beach State Park, have the students take note of the lack of major development. They should notice the maritime forest, birds, squirrels, sand dunes, etc. Even though the state park is small in acreage, it is still an important refuge for animals, plants and even humans. Students will learn how important habitat preservation is as they learn about coastal habitats during their field experience at Myrtle Beach State Park.

Myrtle Beach



# Chaperone Letter

COPY  
ME!

Dear Chaperone,

You will be accompanying students to Myrtle Beach State Park for our Discover Carolina program called Day in the Life of a Sea Turtle Biologist.

During this program, students will learn what activities and skills are involved while working with the South Carolina state reptile, the loggerhead sea turtle. The students and the park staff will need your active participation during this program.

While at the beach, we will be discussing what happens during a sea turtle nest inventory. Using ping pong balls that substitute for turtle eggs, students will determine how many “eggs” hatched. This will involve accurately counting the number of “eggs” they find in their nest. Students will also use their observation and measuring skills as they obtain information from plastic turtles that are substitutes for stranded turtles. Students will be broken up into small working groups prior to their arrival at the park.

You may be assigned to a certain group, please:

- Be sure that all the students in your group are involved.
- Keep your students focused and on task.
- Help them with the Data Sheets, but do not do the sheets for the students.
- Remind the students to keep the ping pong balls (sea turtle eggs) on the colored towels.
- This helps prevent the balls from getting lost in the sand.
- Keep track of the tape measure so it does not get lost in the sand!

During past field experiences, the students who had the most active and helpful chaperones learned the most. Please do not distract from the learning process by talking with other adults. As an additional courtesy, please turn off cell phones. Help make this a positive and engaging learning environment for all involved! You never know what you may learn!

Keep in mind, we will be conducting all activities at the beach. Please dress accordingly! You will get a little sandy!

Thanks, and we can't wait for you to discover the wonders of Myrtle Beach State Park!

Myrtle Beach



# Myrtle Beach State Park: *Pre-Site*

*Content Area:*

Science

*Grade Level:*

5

*Time to Complete:*

1 class period

*Title of Program:*

Day in the Life of a Sea Turtle Biologist

turtles through education, management, and habitat conservation. Students, through simulated hands on activities, will learn: what habitat needs are for sea turtles, how trained and permitted personnel protect and relocate sea turtle nests (if in inappropriate habitat), how and why nest inventories collect data, and what information can be gained from the South Carolina Sea Turtle Stranding Network.

Through a video, students will have an opportunity to watch a loggerhead sea turtle go through its life cycle as it digs a nest, lay eggs and its hatchlings crawl out of its nest.

## South Carolina State Standards Addressed

Standard 5-2:

- The student will demonstrate an understanding of relationships among biotic and abiotic factors within terrestrial and aquatic ecosystems. (Life Science)

Indicator:

- Explain how limiting factors (including food, water, space and shelter) affect populations in ecosystems.

Standard 5-3:

- The student will demonstrate an understanding of features, processes and changes in Earth's land and oceans.

Indicator:

- 5-3.6 Explain how human activity (including conservation efforts and pollution) has affected the land and the oceans of Earth.
  - Ecosystems: Terrestrial and Aquatic

## Program Description

Students will learn how South Carolina State Parks have a positive impact on sea

## Focus Questions For Students

1. Identify some limiting factors that can cause a decline in sea turtle populations.
2. List some actions (both positive and negative) that humans can have on sea turtle populations.

## Culminating Assessment

1. Identify five limiting factors that can cause a decline in sea turtle populations.
2. List 3 positive actions that humans can have on sea turtle populations.
3. List 3 negative actions that humans can have on sea turtle populations.

## Materials and Resources

- Video - *The Struggle for Survival - Georgia's Giant Sea Turtles*

## Procedures

Watch the 12-minute sea turtle video. It was filmed for the state of Georgia in 1992, but most everything still applies to loggerhead sea turtles here in South



Carolina and at Myrtle Beach State Park.

As you watch the video, you may want to reinforce certain facts and ideas that will help the students be better prepared for their field experience at Myrtle Beach State Park.

The first part of the video will discuss the natural history of the sea turtle as a female turtle comes up on the beach to lay eggs, and then as the eggs hatch. In order to work with sea turtles, biologists must first study and learn the basic facts about sea turtles. Also, one **MUST** be trained and permitted by the proper authorities. The narrator compares the sea turtles eggs to ping-pong balls. During the field experience, students will be performing mock sea turtle nest inventories using ping-pong balls.

The video shows two women tagging a sea turtle with an internal tagging system, and measuring a nesting sea turtle. During the field experience, we will learn about a different type of tagging and also how to measure a sea turtle.

Many turtle biologists work at night since they directly work with the sea turtles themselves, as seen in the video. Others work in the day, after the sea turtle has laid eggs. Myrtle Beach State Park staff and volunteers do not work directly with the nesting turtles at night. We patrol the beach each morning for nesting activity. Unlike the video, this park does not have a problem with raccoons digging up the nests.

The video shows a biologist in a fenced off area that has relocated sea turtle nests. There are only a few beaches in South Carolina that are permitted to have a "sea turtle nest hatchery." Most beaches, including Myrtle Beach State Park, leave the nest where it was laid, or just relocate the nest to a safer area on the nearest

sand dune. The nests are screened and an orange sign (similar to the one in the video) is posted at each nest site. Also, notice how the biologist with the white ball cap is digging up hatched eggs. This is called a nest inventory and the students will perform mock ones during their field experience. Inventories are done after the nest hatches.

Optional Activity- That's a lot of eggs!!

Estimate the total number of eggs laid by one female loggerhead sea turtle during her life.

As the video states, it is estimated that out of 1,000 to 10,000 eggs laid, only one hatchling will grow up to be a mature adult sea turtle. Most hatchlings probably die during the first year due to both natural and unnatural causes. With statistics like this, it is imperative that females lay a large number of eggs throughout their lives. Once a hatchling beats those odds, it is also crucial that immature sea turtles survive to maturity and that reproductively active adult sea turtles nest their whole lives. Unfortunately, many are not and all species of sea turtles are either threatened or endangered today.

Numbers to take into account:

- The average life span of a sea turtle is 50 to 70 years (according to some sources). Females probably nest into her mid-fifties, possibly longer. For this activity, we'll say that the last nest is laid at age 54.
- It may take 25 to 30 years before the turtle is mature enough to reproduce. The video states that it takes 20 to 25 years. For this activity, we'll say they lay their first nest at age 30.
- In South Carolina, the average number of eggs per nest is 120.
- A female may lay eggs up to 4 times in one nesting season in South Carolina. In Georgia, they may nest up to 6 times. For this activity, we'll say they nest 2

times a year.

- A female probably nests every 2 to 3 years. For this activity, we will say every 3 years.
- This egg-laying scenario totals 1,920 eggs.
- If they begin laying eggs at age 30, they will nest every 3 years, which equals 8 times. They lay up to two nests, or clutches, per year, or 16 times. Multiply 16 by 120 eggs and the total is 1,920 eggs.

Feel free to manipulate numbers to give the students more opportunities to calculate egg-laying numbers. Numbers that could be manipulated are: have a female nest every 2 years (instead of 3), have females continue laying eggs past age 54, have a female nest once, three or four times during a season, or increase or decrease the average number of eggs per nest (in 2005, the average was 118).

### Before the Field Experience

Students should be evenly divided into 5 groups that will work well together while at the beach. Put them into groups Blue, Green, Red, Purple and Yellow. If students wear name tags, put their color on each name tag. This will help us in the course of the program. Make sure students know which group they are in before they come to Myrtle Beach State Park. This will save us valuable teaching time if they are already divided into groups!

There should be a chaperone for each group. These chaperones will be extremely important to ensure that each group is following the correct procedures and staying on task while on the beach. We have enclosed an informative letter to send home to your chaperones.

### Day of the Field Experience

Please bring back the video (please rewind it!) in the mailing envelope the day of the

field experience. If this is not returned we will not give you the post activity that is included in the price of this program.

Students should be evenly divided into 5 groups that will work well together while at the beach. Put them into groups Blue, Green, Red, Purple and Yellow. Students should know their groups.

Have students wear name tags - this helps to make our teaching more effective.

Students should dress for the day's weather. We will be outside on the beach the entire time - it may be chilly, windy or hot. They should wear sunscreen.

Have students wear clothes that will get sandy while on the beach.

You may want to bring soap so the students can wash their hands after the program.

Bring a garbage bag to help clean up after lunch.

# Myrtle Beach State Park: *On-Site*

*Content Area:*  
Science

*Grade Level:*  
5

*Time to Complete:*  
1.5 hours

*Title of Program:*  
Day in the Life of a Sea Turtle Biologist

## South Carolina State Standards Addressed

### Standard 5-1:

- The student will demonstrate an understanding of scientific inquiry, including the foundations of technological design and the processes, skills, and mathematical thinking necessary to conduct a controlled scientific investigation.

### Indicator:

- 5-1.6 Evaluate results of an investigation to formulate a valid conclusion based on evidence and communicate the findings of the evaluation in oral or written form.

### Standard 5-2:

- The student will demonstrate an understanding of relationships among biotic and abiotic factors within terrestrial and aquatic ecosystems. (Life Science)

### Indicator:

- 5-2.5 Explain how limiting factors (including food, water, space and shelter) affect populations in ecosystems.

### Standard 5-3:

- The student will demonstrate an understanding of features, processes and changes in Earth's land and oceans.

### Indicator:

- 5-3.6 Explain how human activity (including conservation efforts and pollution) has affected the land and the oceans of Earth.

## Program Description

Students will learn how South Carolina State Parks have a positive impact on sea turtles through education, management, and habitat conservation. Students, through simulated hands on activities, will learn: what habitat needs are for sea turtles, how trained and permitted personnel protect and relocate sea turtle nests (if in inappropriate habitat), how and why nest inventories collect data, and what information can be gained from the South Carolina Sea Turtle Stranding Network.

## Focus Questions For Students

1. Identify some limiting factors that can cause a decline in sea turtle populations.
2. List some actions (both positive and negative) that humans can have on sea turtle populations.

## Culminating Assessment

1. Identify five limiting factors that can cause a decline in sea turtle populations.
2. List 3 positive actions that humans can have on sea turtle populations.
3. List 3 negative actions that humans can have on sea turtle populations.

## Materials and Resources

Materials used on site at Myrtle Beach State

Park - All materials will be provided by the state park.

- 5 Large Plastic Sea Turtles
- 5 Nests of Ping-pong Balls
- 5 Towels
- 20 PVC Stakes
- 5 Nest Screens
- Photos
- Mock Stranding and Nest Data Sheets
- Nest Marker Sign
- Clipboards with Pencils
- Measuring Tapes

type of turtle species, and location of strandings. (35 minutes)

### Teacher Preparation

Read the lesson and activities completely and contact Myrtle Beach State Park with any concerns or modifications. Implement pre-site activities before the scheduled program. Please plan adequate classroom time for post-site activities in order to help reinforce the topics discussed during the field experience. Please call ahead if there are any special needs.

### On-Site Procedures

- Sea Turtle Nest Inventory (Beach)  
Students will be divided into 5 pre-determined groups and will learn how trained and permitted personnel protect sea turtle nests and how to do a nest inventory. Students will learn habitat needs of both adult and hatchling sea turtles and how humans can have either a negative or positive impact on sea turtle populations. Using ping-pong ball eggs that represent turtle eggs and sea turtle hatchling replicas, students will learn how nest inventories are used to determine the hatch success of sea turtle nests. (55 minutes)
- Sea Turtle Stranding Exercise (Beach)  
Still divided into the five pre-determined groups, students will learn how to fill out a stranding sheet for sea turtles and how to take accurate data. This data helps to determine the number of sea turtle deaths each year, reasons of death (natural or human related),

# Myrtle Beach State Park: *Post-Site*

*Content Area:*  
Science

*Grade Level:*  
5

*Time to Complete:*  
1 class period

*Title of Program:*  
Day in the Life of a Sea Turtle Biologist -  
Calculations Back in the Classroom

## South Carolina State Standards Addressed

Standard 5-2:

- The student will demonstrate an understanding of relationships among biotic and abiotic factors within terrestrial and aquatic ecosystems. (Life Science)

Indicator:

- Explain how limiting factors (including food, water, space and shelter) affect populations in ecosystems.

Standard 5-3:

- The student will demonstrate an understanding of features, processes and changes in Earth's land and oceans.

Indicator:

- 5-3.6 Explain how human activity (including conservation efforts and pollution) has affected the land and the oceans of Earth.

## Program Description

Students (just like biologists!) must finish up their Sea Turtle Nest Calculations from

the Sea Turtle Nest Inventory that they did during the field experience at Myrtle Beach State Park. This sheet is included in the stapled data sheets the students filled out during their field experience.

## Focus Questions For Students

1. Identify some limiting factors that can cause a decline in sea turtle nests.

## Culminating Assessment

1. Identify five limiting factors that can cause a decline in sea turtle nests.

## Background

In South Carolina, biologists perform nest inventories on most sea turtle nests and then the numbers are calculated for the entire state. An example is the provided Summary of Nest Activity for the year 2005.

## Procedure

- Have each group do the calculations for the Hatch Success. Do the calculations either by hand or calculator. Multiply that number by 100 to get the percentage number.
- Keep the numbers for Relocated Nests and In Situ Nests (Nests not Relocated) separate.
- Does each group think their Hatch Success Number was high or low? Any nest above 70% is very successful. Some reasons for a low success number may be a number of different factors including:
  - Nest left below the tide line (eggs were overwashed)
  - Carelessly relocated
  - Nest was early or late in the season when the temperatures are lower
  - Sometimes there is no apparent reason!
  - For all the nests done during the

field experience, what is the average percentage of hatch success?

- Have the students compute the average number of eggs for the nests. In 2005, the average clutch size in South Carolina was 118 eggs.
- For all the nests, what was the total number of eggs that were laid? How many survived? Compare these numbers to some of the actual numbers from the Summary of Nest Activity Sheet from the 2005 Loggerhead Nesting Season in South Carolina.
- Have the students compute the average duration of incubation. This information is taken from the Mock Nest Inventory Sheets done during the field experience at Myrtle Beach State Park.
- Ask the students what are some factors that may have affected the number of nests and their success rate. Many of these factors were discussed during the field experience at Myrtle Beach State Park.

# Myrtle Beach State Park: *Post-Site*

*Content Area:*  
Science

*Grade Level:*  
5

*Time to Complete:*  
1 class period

*Title of Program:*  
Day in the Life of a Sea Turtle Biologist -  
The Debate Between Human Related  
Activities and Sea Turtles

## South Carolina State Standards Addressed

Standard 5-2:

- The student will demonstrate an understanding of relationships among biotic and abiotic factors within terrestrial and aquatic ecosystems. (Life Science)

Indicator:

- Explain how limiting factors (including food, water, space and shelter) affect populations in ecosystems.

Standard 5-3:

- The student will demonstrate an understanding of features, processes and changes in Earth's land and oceans.

Indicator:

- 5-3.6 Explain how human activity (including conservation efforts and pollution) has affected the land and the oceans of Earth.

## Program Description

The students will participate in a debate

to decide what to do with a pristine, one-mile stretch of undeveloped beach where sea turtles nest each summer. Students will learn first hand how different people, with different types of careers, interests and goals, can have varying opinions. They will also learn how people can positively or negatively impact sea turtles and their habitat.

## Focus Questions For Students

Identify some limiting factors that can cause a decline in sea turtle populations. List some actions (both positive and negative) that humans can have on sea turtle populations.

## Culminating Assessment

Identify five limiting factors that can cause a decline in sea turtle populations. List 3 positive actions that humans can have on sea turtle populations. List 3 negative actions that humans can have on sea turtle populations.

## Teacher Preparation

In order for the debate to end in one class and to go smoothly, teachers **MUST** read over the directions **PRIOR** to doing the activity with students. Read over the enclosed scenarios for the debate. Cut out the different scenarios in order to pass them out to 13 groups.

## Procedure

A pristine, one-mile stretch of beach has an average of fifty sea turtle nests each summer. The tract of land is only  $\frac{1}{4}$  mile wide. This beach, located in an undisclosed town, has not yet been developed. Recently, the issue of possible ownership of this beach has been brought to the attention of the public. A town

meeting will be held to determine the fate of this beach.

Students are going to come up with various plans for this one-mile stretch of beach and reasons to support or deny these plans. Groups must be able to inform the other groups what they plan to do with the land, defend their decisions and respond to questions from other groups. Teachers should be ready to mediate in case things become too heated or too quiet! Remember, there are usually no right answers, just opinions.

There will be a town council consisting of 2 to 5 students who will make the final decision after everyone has stated their opinions and ideas for the development of this property. They can sit at the front of the classroom. If the teacher wishes, a tabletop card labeled Town Council can be placed on the table so that everyone knows who they are. The amount of students on the town council will depend upon the number of students in the class.

There will be a chairperson (usually a teacher) who will control the meeting. They will keep the meeting going and under control.

There are going to be special interest groups (each represented by 1 to 2 students) coming to the meeting to propose why they want this stretch of beach and what they are going to do with it. There can be up to thirteen groups who receive a sheet of paper with a description that states why their special interest group is interested in the piece of property. All 13 groups will come up with an appropriate development plan that relates to their card for this one-mile stretch of beach and reasons to support this proposal. Each special interest group must be able to inform the town council and town members what they plan to do with the land, defend their decisions and respond to questions.

If a student comes up with additional and relevant ideas that are not on the paper, great! It is the student's job to act the part that they are given. Even if they personally feel the beach should not be developed and they are appointed to be a golf course owner, they must play the part. The class size will help determine how many students become special interest groups. If teachers wish, two students can represent the special interest groups, if they share speaking duties. Give the groups plenty of time to come up with their ideas.

The other students will become town members coming to the meeting to voice their opinion. On a piece of paper, these town members should write their name and occupation (their occupation may or may not provide a clue on how they may want the property to be developed). Here are some examples: a local naturalist may want to see the education center built in hopes of getting a job, a construction worker wants to get a job building the condominiums, a landscaper wants the golf course to hire him or her, a businessman wants to see the golf course built so he can meet with his clients, a teenager wants the mall so she can go shopping, a doctor wants to move into a neighborhood by the beach, etc. The possibilities are endless. Keep in mind, the occupation does NOT have to have anything directly to do with the property; it can still be just an opinion. Let the students come up with their occupation on their own. A fun extension is asking parents to come in and participate as town members. They will have different opinions and perspectives than the students!

Every student in the class should have a role to play. The teacher needs to determine the exact number of the special interest groups, town council and town members. This depends on the number of students in the class.

In the meeting, each special interest group (which consists of one to two students) will have one to three minutes to give their proposal. They have to state who they are and the way that they want to develop this stretch of beach. As each group comes up, the chairperson will write the name of the group on the board and the main development idea.

Town members and town council will have the chance to ask each special interest group any questions they may have. The chairperson will call on the various people who raise their hands to ask their question. After each special interest group has had their turn to speak, all the town members (this does not include town council) will come up one at a time and state which group they support and why.

Then there will be a pre-vote to narrow down the groups to later be voted on by the council. Going through each name on the board, the students (town members and special groups) vote by raising their hands for the group that they support. Keep a tally by each name when the students vote. Each student may only vote once.

The top three groups will be presented to the town council for a final vote. The top three special interest groups now have another chance to come up and restate how they want this section of beach to be developed. Each group will be given up to five minutes to convince the council. At this point in time, if other town members want to join in and help support or speak up for one of the three remaining special interest groups, they can. The three groups may want to take a few minutes to plan how they are going to present their final proposal. Then the town council votes between these three groups. There needs to be a majority to make a final decision. If a majority is reached, then that is how the beach will be developed. If a majority is not reached, the issue will be pushed back and another meeting will be held at a later date

to discuss the issue further. (Just like what happens in real life!)

If no decision is reached, it is up to the teacher if he or she wants to do another debate at a later date.

After the debate, ask the students what influenced some of their decisions and votes. Did any of the information they learned at Myrtle Beach State Park help with any of their decisions? How will the final decision have a positive or negative on sea turtles?

Optional Extension:

Students can write different perspectives on the pros and cons of developing or not developing the stretch of beach. Or, they can give their opinion on what to do with the property, but back it up with facts.

# Special Interest Groups

(cut these out and give them to students so they know their role)

## Coastal landowners/ homeowners

- » Want to build two story houses (each with 6 bedrooms and 4 bathrooms) near the beach for a gorgeous view - each house can get to the beach anyway they want.
- » The beach will provide a nice place for people to live.
- » Building these houses will be good for the economy (selling land to people, building houses, more jobs).
- » To insure safety, security lights will be installed along the beach.
- » To make the neighborhood more beautiful, people can plant any type of flowers or trees, even if they do not normally grow in the area.
- » During the summer months, they want to rake the beach to make it look "prettier".
- » It doesn't matter if the raker disturbs sea turtle nests- the beach needs to look clean.

## Coastal landowners/homeowners

- » Build all houses at least 150 yards behind the sand dunes.
- » Provide a pleasant, peaceful community near the beach.
- » Put up boardwalks to get to the beach instead of walking on the dunes.
- » Will keep lights off during sea turtle nesting/hatching season (May-September).
- » Will not plant any non-native plants, only plants that are common to the area and good for wildlife. Native plants are better since they require less watering and no fertilizer.
- » Will start a volunteer group to patrol for nesting sea turtles during the summer months. and work with Department of Natural Resources to ensure following all laws concerning sea turtles.

## Uniformed vacationer who stays in condominiums (could have any occupation)

- » Enjoys going to the beach for their vacation and staying in any hotel that is right on the beach.
- » Likes to get to the beach the fastest way possible (don't always use the boardwalks - may walk over the sand dunes).
- » Brings a loud, portable stereo to the beach.
- » Brings toys to beach and leaves toys behind when done.
- » After they are done fishing, they leave behind the discarded fishing line on the beach.
- » When they see a sea turtle, they get close to it in order to take a picture with a flash. The picture will make a great vacation memory!
- » Want to touch the sea turtle to see what it feels like.
- » Builds huge sand castles and moats and leaves it behind when leaving the beach because they want everyone to see their beautiful creation!

## Special Interest Groups

(cut these out and give them to students so they know their role)

### Eco-friendly vacationer (could have any occupation)

- » Wants the hotel to be near the beach, but wants it to be environmentally friendly.
- » Uses boardwalks to get to the beach.
- » Picks up trash they see on the beach to help the environment.
- » Take what they brought to the beach back with them when they leave (towel, food, toys, etc.).
- » If they see a sea turtle, they keep their distance and notify the proper authorities.
- » Enjoys building sand castles and moats, but destroys them when done so sea turtles don't get trapped.

### Person who is representing sea oats and sand dunes (happens to be a lifeguard)

- » Wants the land to remain in its natural state.
- » Sea oats hold the sand dunes together with lots of roots.
- » Sea oats are illegal to pick in South Carolina.
- » If people trample all over the sea oats, they may die.
- » Sand dunes help protect the land from winds and waves.
- » Sand dunes provide habitat for animals and plants including sea oats.
- » Sand dunes help provide protection during hurricanes.
- » Sand dunes provide a place for sea turtles to nest.
- » Sand dunes can be destroyed when people walk on them.

### Everyday person who is representing the threatened loggerhead sea turtle

- » Wants the land to remain in its natural state.
- » Needs a dark, quiet place on the beach to lay eggs.
- » The sand dunes provide a place to make nests.
- » Loggerhead sea turtles are threatened and need places to nest.
- » Bright lights may scare sea turtles away from the beach.
- » Bright street or house lights may lead the hatchlings away from the ocean.

### Condominium developers

- » Want to build condominiums at least 5 stories high.
- » Provide a pleasant community on the beach.
- » Provide a safe environment at night with security lights for the swimming pool and tennis courts that are located near the beach.
- » Build a club house so people can have parties on the beach - night or day.
- » Provide places for tourists to rent.



# Special Interest Groups

(cut these out and give them to students so they know their role)

## Golf course owners who enjoy the coastal environment

- » Build a beautiful golf course overlooking the beach.
- » Instead of developing the entire property for condominiums or houses, only part of the land would be developed as a golf course.
- » A golf course would provide a dark beach at night which is good for nesting sea turtles.
- » Put up bird houses to provide better habitat for native birds.
- » Plant all native plants and trees so that it takes less water and fertilizer to grow.
- » This business will be good for South Carolina's economy by adding jobs.

## Golf course owners who want to capitalize on the golf status in Myrtle Beach

- » Build a beautiful golf course overlooking the beach.
- » Bring in tropical, non-native plants to make the course more beautiful.
- » In order to keep the greens in good shape, lots of fertilizer will be used.
- » A driving range for golfers to practice at night will be built near the beach.
- » This business will be good for South Carolina's economy by adding jobs.

## Naturalist who wants to build an environmental education center

- » Build a small education center 150 yards behind the sand dunes.
- » Put up boardwalks to the beach.
- » Only open during the daytime hours.
- » Environmental programs for schools and visitors.
- » Conduct guided sea turtle walks to observe nesting and hatching.

## Developer who wants a beachfront mall

- » Build a mall overlooking the beach.
- » The mall will be developed in a way that all stores have an oceanfront view.
- » There will be restaurants with a deck overlooking the beach – so people can eat outside.
- » The mall will be built directly behind the sand dunes.
- » There will be plenty of paved parking lots with lots of lights in order to make it more safe for the public.

## Sea turtle conservation group

- » Protect the beach from development.
- » Protect and monitor the sea turtle nests on the beach.
- » Have beach walks to pick up any trash that may kill sea turtles.

## Marine biologist

- » Thinks the property should be left as is since so many sea turtles nest on the beach.
- » Would like to continue doing research on the sea turtles that nest on the beach.
- » Is concerned that development on the beach would disrupt nesting sea turtles.

