

ROSE ISLAND LIGHTHOUSE SCHOOL PROGRAMS



CLASSROOM VISIT TEACHER GUIDE 2005-2006

*If you are thinking a year ahead, sow seeds;
If you are thinking ten years ahead, plant a tree;
If you are thinking one hundred years ahead, educate the public.*
Kuan Tzu, 500 BC

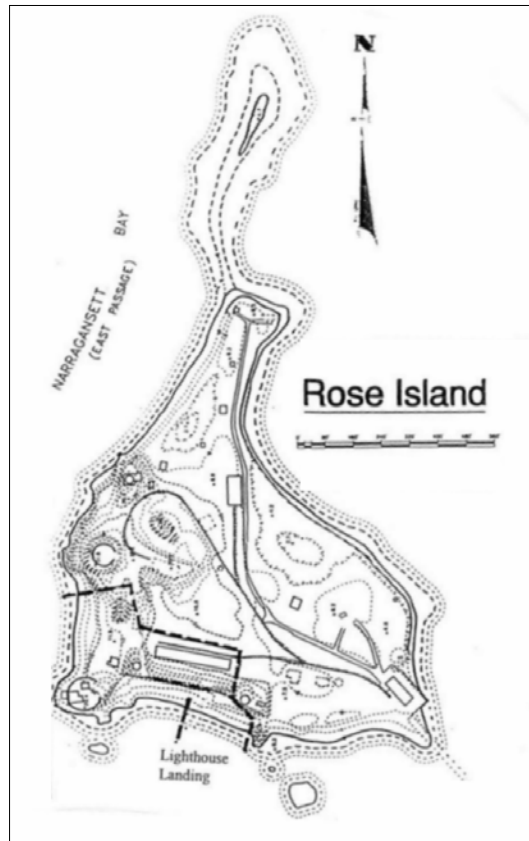
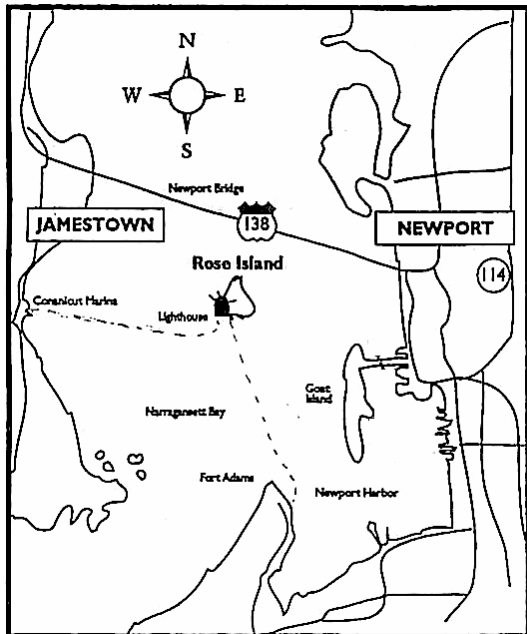
TABLE OF CONTENTS

Basic Lighthouse Information	2
General Information for our Visit	3
Letter to Parents	4
V. Pre-Trip Activities	7- 8
VI. Pre and Post Trip Activity	9
VII. Post-Trip Activity	10 -11
VIII. Lighthouse Vocabulary	12



WHERE IS ROSE ISLAND

Rose Island is located in Narragansett Bay. It is situated just south of the Newport Bridge, a mile from both the shores of Newport and Jamestown. The Lighthouse occupies 1.5 acres, while the remaining 15-or-so acres are a Wildlife Refuge and are uninhabited, except for the teeming bird life. Rose Island Lighthouse is surrounded by the Bay, with no water or electrical connections to the city.



Brief Island History

Built on a still-surviving bastion of an 18th century fort, the Rose Island Lighthouse was lit in 1870 as a link in a chain of aids to navigation along the New England coast. For a century, generations of keepers and their families kept the light burning. In 1971 the building was abandoned and the beacon extinguished after the Newport Bridge was built. The

non-profit Rose Island Lighthouse Foundation was founded in 1984 and its dedicated members set about saving and restoring the lighthouse to its original beauty. The beacon was relit in 1993 and is today listed on nautical charts as an active, privately-maintained aid to navigation. The Rose Island Lighthouse is now used as a historic and environmental educational site to benefit the general public.

The rest of Rose Island has been abandoned since World War II. Once used as an ammunitions storage depot, it has since become naturalized. Today a wide variety of shore birds call Rose Island home, particularly between April 1 to August 15 when they nest and raise their young.

Rose Island Lighthouse Foundation Mission

To preserve the historic and environmental integrity of Rose Island, to maintain and operate its Lighthouse and to provide education and public access for all people.

GENERAL INFORMATION FOR TEACHERS

The Rose Island model program can provide your class with an environmental education experience that a text book just cannot do! We hope the conscientious, resourceful way of life practiced on Rose Island becomes a reality for your students as they receive a hands-on experience.

TOPICS COVERED

There are a variety of topics we can cover during our visit. Our tours generally touch upon a little of everything including our standard tours include:

- Island And Lighthouse History
- How Things Work – Water And Electricity
- Weather
- Reduce, Reuse, Recycle – Conservation Methods Used On The Island And How To Use Them At Home

We'd like to work with you! Depending on your classroom study we are happy to tailor the content of the program to meet your needs. Just let us know what you would like to focus on so we can begin working on plans together as soon as possible.

PROGRAM POLICIES AND INFORMATION

- 1) Rose Island Lighthouse classroom visits are geared for about 15-25 people and are generally 45 minutes to 1 hour in length. To accommodate more or fewer people and depending on your class' areas of study, arrangements can be made in advance.
- 2) Programs will be held rain or shine
- 3) On occasion, Rose Island Lighthouse staff may photograph groups for use in promotional material. If for any reason a child may not be photographed, please let us know.
- 4) If you have ANY questions, please call:
Office – (401) 847-4242 or Reada Evans, Education Director – (401) 862-0479

PREPARING FOR OUR VISIT

- 1) For the most rewarding and fulfilling experience, have the students complete the pre-visit activities provided in this guide. Follow up with the post-visit activities provided and let your students tell us what they thought of the visit.
- 2) A letter to parents and guardians from the Rose Island Lighthouse Staff is provided. Please send a copy home with your students after our visit. This Letter lets parents and guardians know more about us and their children's experience.
- 3) The Rose Island Lighthouse Foundation is a non-profit organization. We raise money in a number of different ways.-through grants, fundraisers, business sponsors and personal contributions. The Rose Island Lighthouse has been restored to benefit the public. Because of the generosity we have received, we feel it is our responsibility to do our very best for our community as well as our environment. This sense of "stewardship" is something that can be shared with your students.

There are many contests and fund-raisers that your class could learn from while having fun! Today, many companies and foundations support environmental education activities through grants and scholarships. Try contacting public services, banks and other businesses in your town. You could be surprised who is willing to help!



IV. Rose Island Pre-Visit Activities

Grade Level: K-5

Lesson Topic: Island Life

Length: A) 30 minutes; B) 2-3 50 minute sessions C) 50 minutes

RI Standard of Learning: Social Science (History), **Family Life, English** (Composition), **Art** (Visual Art), **Science and Technology**

Learning Objective: Students will be introduced to life as it was in the late 1800s and early 1900s and will learn by relating to it. They will explore the challenges and difficulties of lighthouse living.

Materials: Copy of Rose Island Beacon: Boyhood Life at Rose Island, Copy of Keep the Lights Burning, Abby, pencils, crayons, paper.

Vocabulary: Lighthouse keeper, Log book, interview.

Procedure:

In the Classroom:

Introduction: Some lighthouse keepers and their families lived on islands far from shore. They tended lighthouses long before there were power boats, helicopters, refrigerators, TVs or other modern conveniences. How do you think they managed to live so far from land?

A) Think About It (read these questions and lead a class brainstorming session):

1. How did the lightkeepers get their food and store it?
2. What happened if someone became very ill?
3. Where did the keepers get fresh water?
4. What did they do if a bad storm blew up?
5. What did they do for hobbies and entertainment?
6. How did they heat the lighthouse in winter?
7. How did lighthouse children go to school?
8. How did Lightkeepers get their mail?

Some helpful facts:

Fishing was a way for many lighthouse keepers to have fresh food. Some offshore lighthouses also had places where keepers could grow gardens. The Lighthouse Tender, a supply ship, visited faraway lighthouses several times a year. It brought food, medicine, a doctor, tools, oil for the lamps, and all sorts of supplies needed by lightkeepers. It could also bring a minister, visitors, and even a traveling teacher who stayed with lighthouse families to educate their children. Large storage tanks for fresh water were also filled by the Lighthouse Tender.

Fresh water was sometimes supplied by the sky! When rain fell, gutters would carry it by pipe into a cistern, which is a large tank for holding water. Keepers were always very careful with water – they never wasted it.

Some lighthouse keepers got their mail from the Lighthouse Tender or from ships that passed by their lighthouse. Letters were sometimes very “dated” (overdue) by the time they reached their destinations. Letter-writing was a popular hobby with lightkeepers, as were whittling, making ship models, painting, bird watching, writing and beach combing. All lighthouse keepers kept journals telling about their daily activities at the lighthouse. They also kept records of the weather and the kind of ships that passed by. Some wrote poetry and a few wrote books about their lives as lighthouse keepers.

B) Read or have the students read the stories of Wanton Chase and Abby Burgess.

Ask the students what things in the stories are different from their lives today. What things are the same?

1. Develop a "Classroom Keepers' Log": Create a classroom chore list of things that everyone can help to take care of. Students can be "Classroom keepers." In the log, keep daily track of weather observations, activities and chores completed.
2. Interview an older person in your community. Some suggestions for questions about what life was like when they were young might include: What did they do for fun? What was their favorite food? What do we have today that they didn't have growing up and what did they have that we don't? Write a report (for older kids) or draw pictures (for younger kids).

C) On Rose Island: The students will spend time exploring Rose Island during their field trip. During the tour, the students will be learning about life as a lighthouse keeper during the early 1900s. While in the lighthouse they will be allowed to explore items that would have been common-place during that time.

Also during that time the students will be combing the beach for smooth glass, shells and any other interesting items they may come across. Students are allowed to keep a few items that have already been processed by the waves. For example: beach glass with smooth edges, round pebbles, shells with holes or cracks in them.

In The Classroom: Have students describe what they would do for fun if they were living on Rose Island. (Write or draw pictures)

Evaluation: This activity is designed to help children understand what it was like to live in the past and to be a lighthouse keeper.

References & Suggested Readings:

Chase, Wanton. Rose Island Beacon: Boyhood Life at Rose Island. No.1. Rose Island Lighthouse Foundation, Dec. 2001.

Roop, Peter and Connie. Keep the Lights Burning, Abbie. Progeny Press, 1993.



V. Rose Island Pre and Post-Trip Activity

Grade Level: K-5

Lesson Topic: Conservation Idea Web

Length of Activity: Two sessions - 10+ minutes each
(One pre-trip session, one post-trip session)

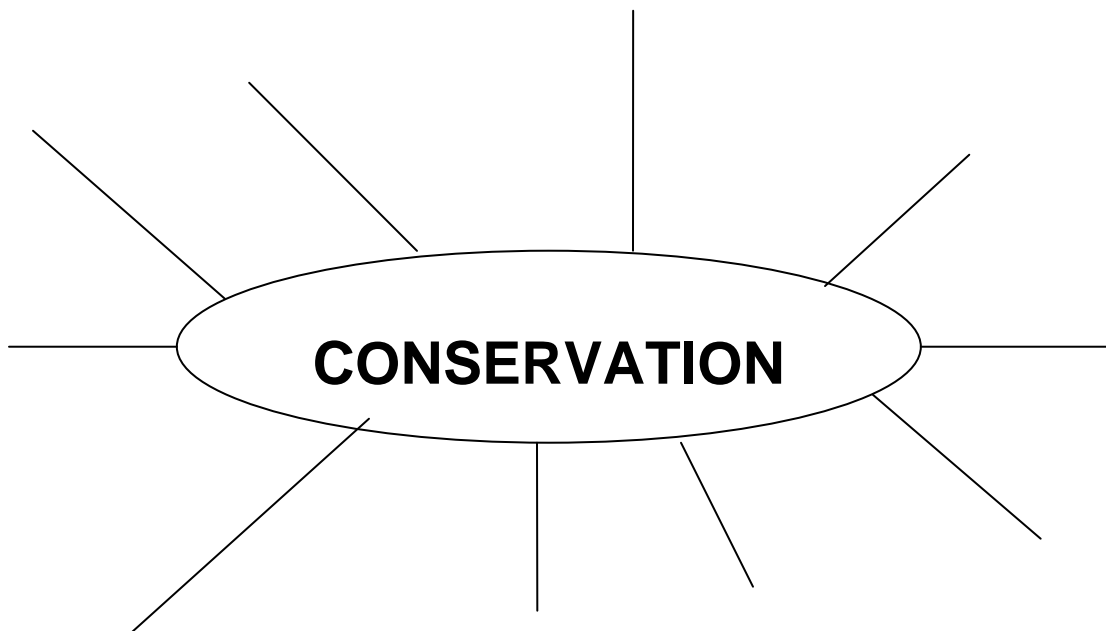
Overview: This is a great activity for exploring kids' ideas about the environment around them. It is also a great way to measure what concepts they learned while visiting Rose Island. Students will engage in an active discussion and exchange of ideas about what they know and feel about conservation and their roles in practicing it.

Materials: Chalkboard or White Board, or blank paper for each student and writing implements.

Activity: Start with *Conservation* and ask students to define conservation. Explore ideas branching off of this starting point. Questions you may wish to include: Who is responsible for conservation? What are students' perceptions of Legislation (Laws)? What are some ways people are affecting the environment, both good and bad? What are some ways each person can incorporate conservation into their lives?

Review: Upon completion, review web with kids.

Extension Activities: Have everyone come up with 3 things they are going to do at home to practice conservation. Make sure they tell their parents about their ideas! (The Letter to Parents provided in this packet is an excellent way to encourage this dialogue.)





VI. Rose Island Post-Trip Activity

Grade Level: K-3

Lesson Topic: Lighthouse Identification

Length: 30-50 minutes

RI Standard of Learning: Art (Visual)

Learning Objective: Students will be encouraged to be creative and original in designing their own lighthouse day marks. Students will also learn the function of daymarks as navigation aids.

Materials: Daymark worksheet, crayons, pencils, pictures of Lighthouses (optional)

Vocabulary: Daymark, lighthouse, characteristic, unique, navigation (words in bold are found on Lighthouse Vocabulary List)

Procedure:

On Rose Island: The students will explore the island and the lighthouse. Students will learn about the function of lighthouses and why lighthouses have different **characteristics** and **daymarks**.

In the Classroom:

- **Introduction:** Have the students recall what colors they saw on Rose Island Lighthouse. Ask the students if they have ever seen any other lighthouses and what colors those lighthouses were. Explain to the students that all lighthouses look different to help the boats know where they are. Ask the students if they have ever seen any other lighthouses and what colors those lighthouses were. Explain to the students that all lighthouses look different to help the boats know where they are. (West Quoddy Lighthouse in Maine has red and white stripes. Cape Hatteras Lighthouse in North Carolina looks like a black and white barber pole. Cape Lookout Lighthouse is painted in a black and white checkerboard pattern.)
- **Development:** Distribute the handouts. Ask the students to color the lighthouses in a way that will make them noticeable and unique. Encourage students to work on their own so there are a variety of designs.
- **Closure:** When students are finished drawing, you can hang the colorings around the room and have them act out their lighthouses' characteristics with a flashlight. You could also let the students see pictures of real lighthouses around the country. Find the lighthouses they really like on a globe or a map.

Evaluation: This is a great activity to stimulate children's imagination. They can experiment with any combination of light colors and patterns. Encourage them to be as different as possible.

References:

De Wire, Elinor. The Lighthouse Activity Book. Sentinel Publications, 1995. – Great book with a ton of activities.

Suggested Readings:

McGough, Roger. The Lighthouse That Ran Away. Rosemary Wood. The Bodley Head, 1991. – Beautiful charcoal drawings of a lighthouse that runs away to the carnival.

Vocabulary Words:

CHARACTERISTIC - An individual flashing pattern of each light.

DAYMARK – A unique color scheme and/or pattern that identifies a specific lighthouse during daylight hours

LIGHTHOUSE - A lighted beacon of major importance in navigation.

NAVIGATION - travel over water



Name: _____

Rose Island Lighthouse Identification

The primary function of a lighthouse is as an aide to **navigation**. Everything about a lighthouse helps sailors to identify it. At night sailors know a particular light by its **characteristic**. Does it flash? Or does it beam without blinking? What color is the light – red, green, white?

During the day when the light is off, sailors know a particular lighthouse by its **daymark**. Is it tall or short? Is it round or square? What color is it? A single color? Striped? Checkered?

1) Create unique daymarks for these lighthouses using different colors and patterns.



2) Now that you have given your lighthouses daymarks, imagine what they would do at night. What sound would they make? What would their characteristics be? Act them out with a flashlight!

VIII. Lighthouse Vocabulary

(Adapted from US Coast Guard's Lighthouse Curriculum)

- ASTRAGAL** - A metal bar (running vertically or diagonally) dividing the lantern room glass into sections.
- BULLSEYE** - A convex lens used to concentrate (refract) light.
- CHARACTERISTIC** - An individual flashing pattern of each light.
- DAYMARK** – A unique color scheme and/or pattern that identifies a specific lighthouse during daylight hours
- FIXED LIGHT** - A steady non-flashing beam
- FOG SIGNAL** - A device (such as a whistle, bell, canon, horn, siren, etc.) which provides a specific loud noise as an aid to navigation in dense fog
- FRESNEL LENS** - A type of optic consisting of a convex lens and many prisms of glass which focus and intensify the light through reflection and refraction.
- FUEL** - A material that is burned to produce light (fuels used for lighthouses included wood, lard, whale oil, tallow, kerosene.) Today, besides electricity and acetylene gas, solar power is also used.
- GALLERY** - on a lighthouse tower, a platform or walkway or **BALCONY** located outside the watch room (main gallery) and/or lantern room (lantern gallery.)
- KEEPER** - the person who takes care of the light in the lighthouse. (The Head Keeper is responsible for the operation of a light station.)
- LAMP** - the lighting apparatus inside a lens.
- LANTERN ROOM** - glassed-in housing at the top of a lighthouse tower containing the lamp and lens
- LENS** – A curved piece of glass for bringing together or spreading rays of light passing through it.
- LIGHTHOUSE** - A lighted beacon of major importance in navigation.
- LIGHT STATION** - A complex containing the lighthouse tower and all of the outbuildings, i.e. the keeper's living quarters, fuel house, boathouse, fog-signaling building, etc.
- LOG** - A book for maintaining records, similar to a diary.
- NAVIGATION** - travel over water
- ORDER** - size of the Fresnel lens which determines the brightness and distance the light will travel.
- PARABOLIC** - a bowl-like metal device, silver plated, **REFLECTOR** with a small oil lamp in the center.
- PHAROLOGIST** - one who studies or is interested in lighthouses.
- PRISM** - a transparent piece of glass that refracts or disperses light.
- REFLECT** - throw back light.
- REFRACT** - bend or slant rays of light.
- REVOLVING LIGHT** - one that produces a flash or characteristic.
- STAG LIGHT** - a lighthouse with no family living in it, i.e. inhabited by men only.
- TOWER** - structure supporting the lantern room of the lighthouse.
- WATCH ROOM** - A room immediately below the lantern room or **SERVICE ROOM** where fuel and other supplies were kept where the keeper prepared the lanterns for the night and often stood watch. The clockworks (for rotating lenses) were also located there.