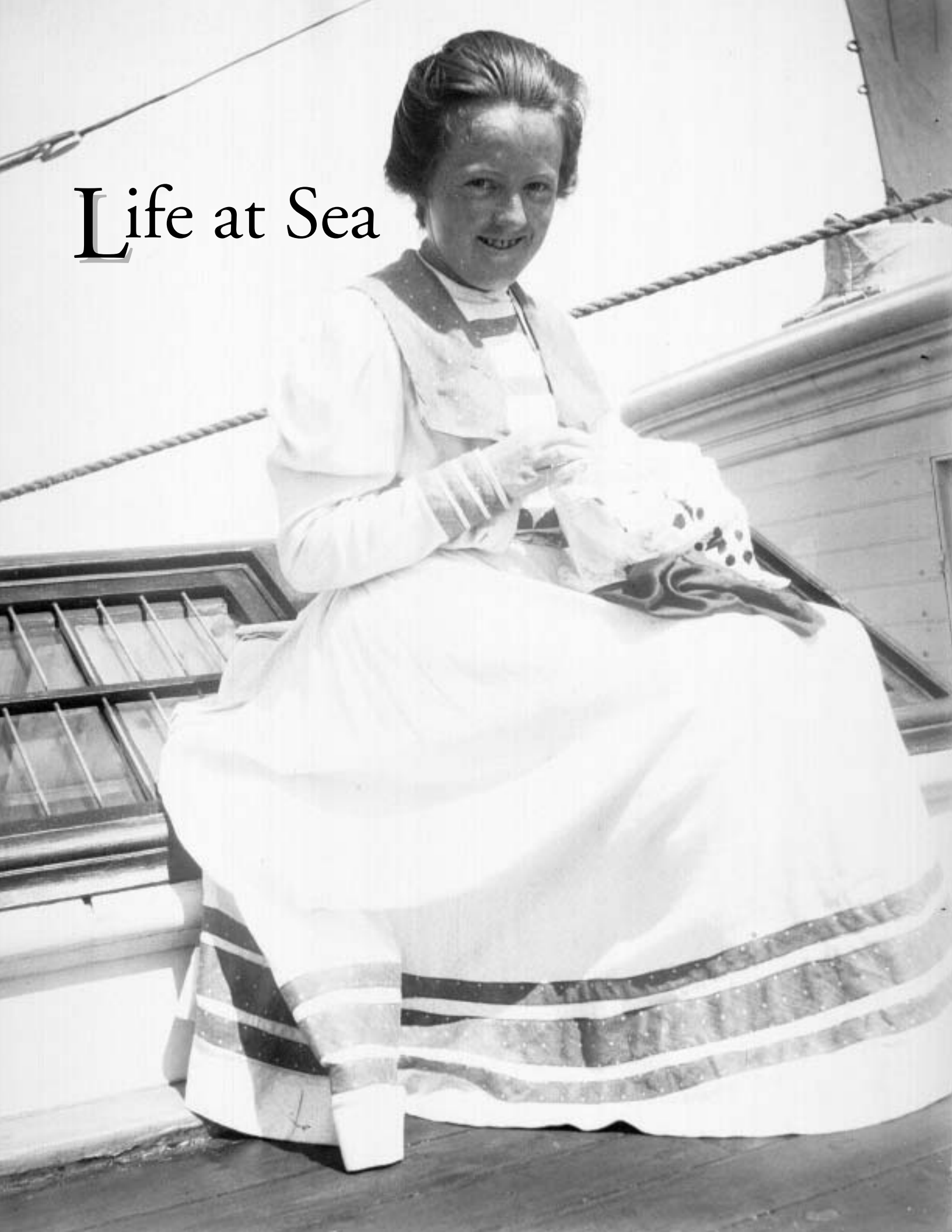


Life at Sea





Introduction

From Maine's earliest days through much of the nineteenth century, many Mainers went to sea to earn a living. Even today, between Maine's important fisheries, its major shipping ports, its maritime academy at Castine, and its need to serve island communities, life and work at sea remain important to Maine's economy. This module explores the lives of people who went to sea in different capacities, including the experiences of wives and children who accompanied captains on voyages to foreign ports.

First, we will learn about the Maine sailing vessels that carried cargoes all over the world, understanding the differences between square-rigged and fore-and-aft-rigged vessels in their design, their operation, and their trades.

We also learn about duties and conditions for the crew. From captain to cabin boy, the ship's crew had specific responsibilities. The captain had complete authority—he was leader, navigator, chief justice, chief of police, treasurer, businessman, doctor, and chaplain. The mates, carpenter, steward, cook, sailmaker, boatswain, and seamen all had their special duties under the captain's direction. Simple machines and combinations of simple machines were critical in the workings of the ship. Sea shanties were songs that accompanied work on board ship. In their leisure time, sailors often pursued special crafts, such as carving, ropework, "fancy work," and sewing.

Life at sea varied considerably from one trade to another, especially between coastwise schooner voyages of less than a month and long voyages to the Far East and then to Europe. We will look at the different voyages and ports visited, both near home and around the world.

The captain's wife who accompanied her husband on long voyages had a considerably different life from that of a typical Victorian lady on land. Children born at sea or accompanying their parents later had many unique experiences and were, as Joanna Colcord wrote, "children of the world," at home in a variety of foreign cultures. With the advent of steam, the tradition of families going to sea died out, as steamships did not allow captains to bring their wives and children.

General learning goals are:

- To learn about sailing vessels, the most important means of cargo carriage before the twentieth century;
- To learn about the rigging of ships and the many simple machines used on board to make work easier;
- To understand the daily work and lives of those who went to sea, including thousands of Mainers;
- To compare life at sea and life on land for men, women, and children.





Outline



I. Introduction to Life at Sea in the Age of Sail: The Purpose of the Voyage and the Business of Shipping

II. The Sailing Ship

- A. Sailing Rigs for Different Voyages: Ship, Bark, Barkentine, Brig, Brigantine, Schooner
- B. Square Sails and Fore-and-Aft Sails
- C. Sailing Ship Terminology
- D. Maine's Down Easters

III. The Captain

- A. Work of the Captain: Leader, Navigator, Businessman, Administrator, Disciplinarian, Doctor
- B. Becoming a Captain
- C. The Captain's Quarters

IV. The Crew

- A. Job Descriptions: First Mate, Second Mate, Cook, Steward, Carpenter, Boatswain, Able Seaman, Seaman, Boy
- B. Getting a Crew and "Signing on" to the "Articles of Agreement"
- C. The Crew's Quarters

V. Work at Sea

- A. Watches: Keeping the Ship Going Around the Clock
- B. Ship Operations: Raising Anchor, Setting and Furling Sail, Trimming Sails, Steering the Ship, Trimming Cargo, Pumping Ship, Washing Down the Ship

- C. Ship Repair and Maintenance: Sailmaking, Painting, Rigging, Repairing Storm Damage
- D. Music of Work: Sea Shanties
- E. Clothing for Various Weather at Sea

VI. Food and Leisure at Sea

- A. Meals at Sea: Requirements for Feeding Crew, Preservation of Food at Sea
- B. Leisure at Sea: Dogwatch, Music, Personal Affairs, Crafts
- C. Communication at Sea: Signal Flags, Sending Mail

VII. The Voyages and the Ports

- A. Coastwise
- B. South American
- C. California
- D. Trans-Atlantic, Mediterranean
- E. Far East, India, Australia
- F. Work and Leisure in Port for Captain and Crew

VIII. Families at Sea

- A. Captains' Wives: Domestic Life Aboard and the Seagoing Community
- B. Children at Sea

IX. Stories and Original Source Materials on Life at Sea



Learning Results, Grades K-2

Career Preparation

C-2: Demonstrate the effects of technology on where people choose to live, how they communicate, how they travel, and how they acquire goods and services.

English Language Arts

C-3: Make valid observations about the use of words and visual symbols.

Health and Physical Education

HEALTH EDUCATION

A-2: Describe the transmission and prevention of communicable diseases.

C-3: Choose healthful foods.

PHYSICAL EDUCATION

B-5: Adapt and adjust movement skills to uncomplicated, changing, environmental conditions and expectations (e.g., tossing a ball to a moving partner).

Mathematics

A-2: Understand the many uses of numbers (e.g., prices, recipes, measurement, directions in play).

C-1: Formulate and solve problems by collecting, arranging, and interpreting data.

E-3: Use positional words to describe the relationship of two or more objects (e.g., over, under, beside, to the left).

F-1: Estimate and measure length, time, temperature, weight, and capacity.

G-1: Recognize, describe, extend, copy, and create a wide variety of patterns.

Science and Technology

C-4: Provide examples of causes of diseases.

E-2: Describe some physical properties of objects.

F-1: Describe the way weather changes.

F-3: Observe changes that are caused by water, snow, wind, and ice.

I-1: Develop a variety of ways to describe the motion of an object.

I-2: Demonstrate that the motion of an object can be changed.

L-2: Read and write instructions to be followed or instructions which explain procedures.

L-5: Make and read simple graphs.

M-2: Describe at least two inventions, what they do, how they work, and how they have made life easier.

M-5: Explain how their lives would be different without specific inventions or scientific knowledge.

Social Studies

CIVICS AND GOVERNMENT

B-1: Understand that all nations have governments.

D-1: Recognize that there are other nations with different traditions and practices.

HISTORY

A-1: Place individual and family experiences in historical time and place.

B-1: Demonstrate an understanding of the similarities between families now and in the past, including daily life today and in other times.

B-2: Demonstrate an understanding of cultural origins of customs and beliefs in several places around the world.

C-1: Use artifacts and documents to gather information about the past.

GEOGRAPHY

A-1: Use and construct maps and other visuals to describe geographic location, direction, size and shape.

B-1: Describe the human and physical characteristics of the immediate environment.

ECONOMICS

A-1: Identify goods and services, giving examples.

B-1: Explain the terms consumer and product.

C-1: Explain how selected cultures or countries meet basic human needs.

D-1: Explain where products come from and how we use them.

Visual and Performing Arts

A-6: Perform and/or listen to a number of pieces on a given theme and create a variation.

A-9: Identify the use of the arts in daily experiences.

B-2: Recognize common subjects and central ideas in works from different cultures.

B-5: Create original works that integrate one or more of the characteristics and purposes of artworks from different cultures (include own community and culture).

C-2: Describe the qualities of works of art, music, dance, and drama in relation to the senses of sight, hearing, movement, and feeling.



Activities, Grades K-2



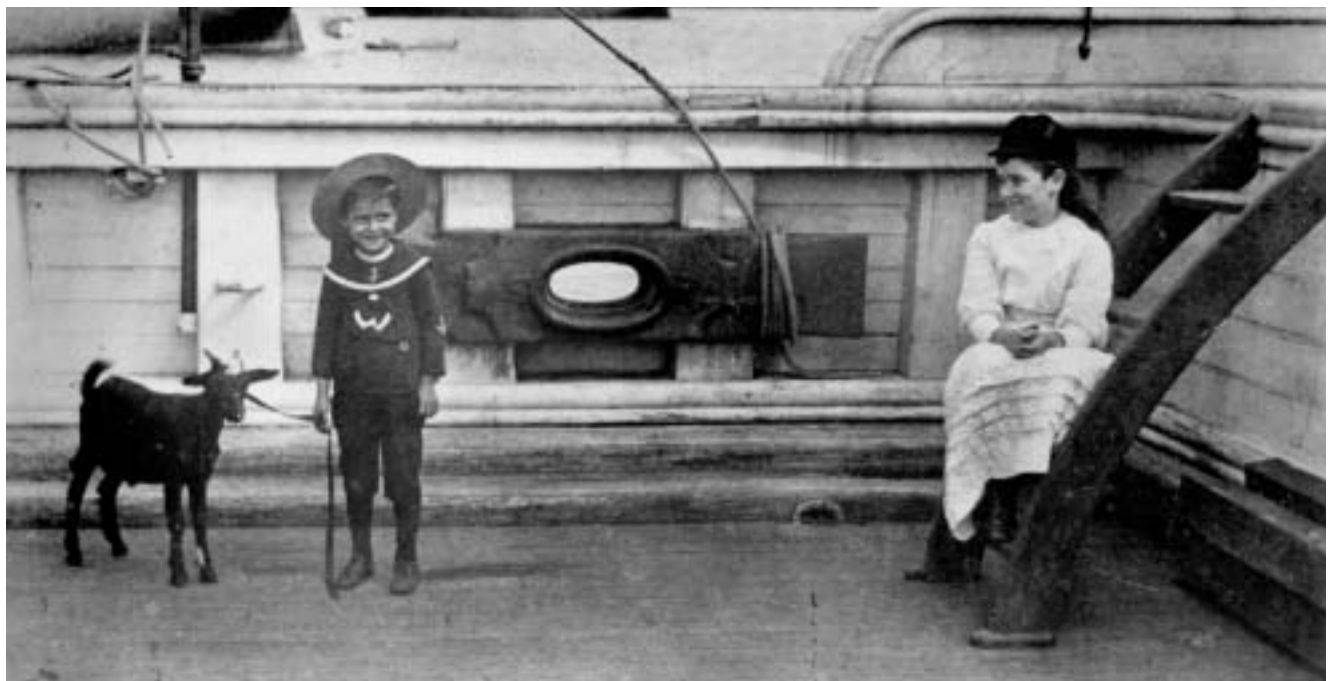
- **This unit provides many opportunities for comparisons.** For example, how did people communicate on board ship in the nineteenth century compared to how people communicate today? Signal flag activities emphasize speed and efficiency of communication methods today. Flags relate to letters; they may help children understand the arbitrariness of letter-sound relationships and provide an entertaining way to practice sequencing. Children could spell their names using cut-outs of signal flags.
 - **We know that the merchant sailing ships carried goods to and from countries.** How did the people living on board acquire their own goods and services? How did they provide for food? What roles did maritime towns play in getting ships ready to sail?
 - **Writing activities:** children may write (or dictate) simple journal entries based on an imaginary day at sea, choosing a role and a location. They could pretend to write a letter home, to a friend or neighbor, describing an event they imagine, or writing a list of what they would pack to go to sea. They could describe their “ship,” creating a name, home port, destination, cargo, and crew; and draw a picture.
 - **Food is always interesting.** Have children examine the diets of crew and captains’ families at sea. Prepare a meal in class using only things that sailors would have eaten.
- Write recipes or give directions orally. Where do some shipboard foods come from? (e.g., ingredients in hard-tack, etc.) How was food different on board ship from food eaten in towns around the Bay in the same era?
- **What would it be like to walk on the deck of a ship, compared to walking on the ground?** Try to play a game while pretending to be on a slanting deck or rolling ship. Simulate the deck with a board propped up on one side to create a slant, or by using a balance board while playing ball. Why did children sometimes have to learn to walk all over again after living on a ship for a long time? Discuss balance and the inner ear.
 - **Do math problems using cargo—loading and unloading items.** Use positional words to describe the layout of the ship, both the areas occupied by people and the cargo area. Patterns were apparent in designs in some sailors’ art work—knot work, shell art. Design projects on paper using patterns that can be executed in shells or other media. Find patterns in signal flag sequences—same flag means same letter. Create flag patterns.
 - **Compare temperatures in different seasons in Maine and China, South America, England, Australia, etc.** What would you pack for a trip, considering you had only one small trunk?



- **How do sailing ships move?** Describe their motion in relation to the wind and waves. What is different about steamships? Talk about different kinds of storms. What other dangers did weather pose for sailing ships?
- **What diseases, including those related to diet, were a threat** aboard ship and why? What was medical care like?
- **How did the lives of boys and girls differ in the nineteenth century?** Was it any different aboard ship from life on shore? Compare education and play. As adults, how did the roles of men and women differ? What was expected of wives and mothers who went to sea?
- **Think of an activity that took place aboard ship,** such as coiling up a rope, tying a knot, and steering the ship. Give directions, oral or written, for a partner to follow.
- **Learn more about countries and cities that were visited by Maine families at sea.** Pretend you arrive in Hong Kong or another port. What would you find there? How would you communicate?
- **Compare your own family's day to a day on board a Down Easter.** Many things are different—what things are the same? Look at old photographs—What can you learn just by observing a picture?



- **Look at the map—place pictures of products on the map** according to their place of origin or their destination in the world of trade. Why do some countries need certain things?
- **Learn a sea shanty.** Write an original work song to accompany a task children do now (walking the dog, making a bed, setting the table, etc.).
- **Try some shell art or needlework.**





Learning Results, Grades 3-4

Career Preparation

- A-3:** Demonstrate an understanding of the connections between locally generated products and services and the efforts required to create those products and services.
- A-4:** Explain the value of work to the individual and to society in general.
- C-1:** Illustrate how products evolve as a result of technological systems.
- C-2:** Identify major components of a technological system (input, process, output, feedback) and cite examples in school or community.
- C-3:** Identify academic knowledge and skills required in specific careers.

English Language Arts

- B-1:** Demonstrate awareness of the culture and geography pertinent to the texts they read.
- C-4:** Make observations about the use of language and graphic symbols encountered in various real-life situations.
- E-5:** Give accurate directions.
- H-3:** Present information obtained from research in a way that combines various forms of information (e.g., maps, charts, photos).

Health and Physical Education

HEALTH EDUCATION

- D-1:** Evaluate the influences of culture on health.

PHYSICAL EDUCATION

- B-4:** Adapt a skill to the demands of the environment.
- C-4:** Participate cooperatively with partners to improve skill performance during practice.

Mathematics

- F-1:** Solve and justify solutions to real-life problems involving the measurement of time, length, area, perimeter, weight, temperature, mass, capacity, and volume.
- F-2:** Select measuring tools and units of measurement that are appropriate for what is being measured.
- K-1:** Use simple tables and graphs to communicate ideas and information in presentations in a concise and clear manner.

Science and Technology

- M-1:** Explore how cultures have found different technological solutions to deal with similar needs or problems (e.g., construction, clothing, agricultural tools and methods).

Social Studies

CIVICS AND GOVERNMENT

- D-1:** Identify examples of how the United States interacts with other countries (e.g., trade, treaties).
- D-2:** Compare a foreign culture to that of the United States. Include an analysis of how decisions are made.

HISTORY

- C-1:** Identify changes currently occurring in their daily lives and compare these to changes in daily life during a specific historic era.

GEOGRAPHY

- A-1:** Construct and compare maps of Maine, the United States, and regions of the world to interpret geographical features and draw conclusions about physical patterns.
- B-2:** Explain ways in which communities reflect the backgrounds of their inhabitants.
- B-3:** Use a variety of materials and geographic tools to explain how the physical environment supports and constrains human activities.

ECONOMICS

- A-1:** Describe barter and money and how each is used in the exchange of resources, goods, and services.
- C-1:** Explain how selected cultures or countries meet basic human needs.
- D-1:** Describe, with examples, how the exchange of goods and services helps to create economic interdependence between people in different places and countries.

Visual and Performing Arts

- B-2:** Explain how cultural values are shown through the arts.
- B-3:** Demonstrate an understanding of the roles of visual and performing artists in various settings and cultures.
- B-4:** Compare the characteristics of works in two or more visual and performing art forms that share a similar subject matter, historical period, or cultural context.
- C-4:** Explore and analyze content and styles in various art forms.





Activities, Grades 3-4



- **Children at sea visited many foreign countries and saw cargoes being loaded and unloaded.** Choose a product of either Maine or a foreign port and investigate how it was produced.
- **Signal flags were symbols for letters.** Encode spelling words, etc. using self-constructed worksheets with colored flags. What other symbols help us communicate in special situations?
- **Reading and writing activities could incorporate some letters and diaries from families at sea;** for example, see the collection of Colcord family letters in the book *Letters from Sea*. Original source materials such as this one offer opportunities for students to distinguish between fact and interpretation, as well as opportunities to talk about prior knowledge—are there parts of these diaries and letters that assume prior knowledge on the part of the reader? How is this issue dealt with by the compiler, in the case of *Letters from Sea*? How can the reader deal with it when reading an original letter or diary?
- **Writing assignments can include creating diaries,** letters from sea or elsewhere, and descriptions of the culture and geography of ports visited. In giving presentations, students may use a map and/or photo to supplement their report on a foreign port, or a specific vessel or family.
- **Give directions to a partner to craft a shellwork box or tie a knot.** Make it a barrier game—see how hard it is to use language to describe a process without visuals.
- **What are some words that have become standard in English** that originated in the age of sail?
- **Describe the governing system used on board ships.** Why is it not a democracy?
- **Health: some traded items were health products.** Compare medicine and ideas of health in the nineteenth century to present-day medical treatments, both in the U.S. and other parts of the world.
- **What would it have been like to walk on the deck of a ship, compared to walking on land?** Try to play a game while pretending to be on a slanting deck or rolling ship. Simulate the deck with a board propped up on one side to create a slant, or by using a balance board while playing ball. Why did children sometimes have to learn to walk all over again after living on a ship for a long time? Discuss balance and the inner ear.
- **Math problems may involve calculating how long a ship would take to travel** a certain distance at a certain speed; capacity of the ship and size of cargo; weight of cargoes; etc.
- **The United States has always traded with other countries.** Choose one and learn about its trade history with our country. Relate trade history to maps, the physical features of a country, money and barter, and cities and settlement patterns. If you were a Maine sea captain arriving in a foreign port, what would you need to know about right away?
- **Learn a sea shanty.** Write an original shanty or another work song to accompany a modern-day task.
- **Art projects may include carving, shell art, sewing, knots, needlework, painting.** Create and execute original maritime designs in several different media. How did decorative arts help carry a sense of community aboard Maine vessels as they traveled around the world?
- **Compare the necessities of daily life—food, shelter, and clothing—on board ship and ashore, and in the past and in present day Maine.**



Learning Results, Grades 5-8



Career Preparation

- B-2:** Compare workplace environments and the education required for different occupations.
- D-1:** Identify how critical factors such as history, the environment, the economy, or personal characteristics may affect individual and family choices.

English Language Arts

- G-5:** Write for both public and private audiences.
- H-8:** Make limited but effective use of primary sources when researching topics.
- H-9:** Explain the importance of primary sources in evaluating the validity and reliability of collected information.

Health and Physical Education

HEALTH EDUCATION

- A-1:** Explain the relationship between healthy behaviors and the prevention of injury, illness, and disease.
- D-1:** Investigate the influence of cultural beliefs on health behaviors and the use of health services.
- D-3:** Analyze the effect of technology on personal and family health.

PHYSICAL EDUCATION

- B-1:** Demonstrate the correct use of skills in simplified versions of a variety of physical activities.

Mathematics

- B-2:** Create, solve, and justify the solution for multi-step, real-life problems including those with ratio and proportion.
- E-3:** Use a coordinate system to define and locate position.

- F-1:** Demonstrate the structure and use of systems of measurement.
- F-2:** Develop and use concepts that can be measured directly or indirectly (e.g., the concept of rate).
- F-3:** Demonstrate an understanding of length, area, volume, and the corresponding units, square units, and cubic units of measure.
- G-1:** Describe and represent relationships with tables, graphs, and equations.
- H-3:** Analyze tables and graphs to identify properties and relationships in a practical context.

Science and Technology

- C-4:** Identify the causes and effects of diseases, explain their transmission, and identify prevention strategies.
- I-1:** Describe the motion of objects using knowledge of Newton's Laws.
- I-3:** Describe and quantify the ways machines can provide mechanical advantages in producing motion.
- L-4:** Make and use scale drawings, maps, and three-dimensional models to represent real objects, find locations, and describe relationships.
- M-1:** Research and evaluate the social and environmental impacts of scientific and technological developments.
- M-2:** Describe the historical and cultural conditions at the time of an invention or discovery, and analyze the societal impacts of that invention.
- M-7:** Explain the connections between industry, natural resources, population, and economic development.



Social Studies

HISTORY

- A-1:** Describe the effects of historical changes on daily life.
- A-3:** Trace simultaneous events in various parts of the world during a specific era.
- B-1:** Demonstrate an understanding of the causes and effects of major events in United States history and the connections to Maine history with an emphasis on events up to 1877, including ... Civil War, Industrialization.
- C-4:** Identify ethnic and cultural perspectives missing from an historical account and describe these points of view.
- C-5:** Formulate historical questions based on examination of primary and secondary sources including documents, eyewitness accounts, letters and diaries, artifacts, etc.

GEOGRAPHY

- A-1:** Visualize the globe and construct maps of the world and its sub-regions to identify patterns of human settlement, major physical features, and political divisions.
- B-3:** Explain how cultures differ in their use of similar environments and resources.

ECONOMICS

- B-1:** Demonstrate knowledge of economic concepts of supply, demand, price, the role of money, and profit and loss.
- B-4:** Explain the impact that major events and technological advancements have had on the Maine economy and predict future economic trends and career opportunities.
- C-2:** Compare how different economies meet basic wants and needs over time.
- D-1:** Describe how changes in transportation and communication technologies have affected trade over time.
- D-2:** Evaluate how world trade issues can affect a nation's economy and how trade can influence and transform societies.

Visual and Performing Arts

- A-1:** Explain how the arts originate from human experience, are a communal experience, and encourage kinship with others.
- B-2:** Compare and contrast the characteristics and purposes of the arts from various cultures, historical periods, and social groups.
- B-3:** Compare and contrast cultural values as expressed in works and explain how these values may differ from those of their own daily experience.
- B-4:** Compare the characteristics and purposes of works, in two or more arts forms, that share similar subject matter, historical periods, ethics, or cultural context.

- B-5:** Identify how the factors of time and place (such as climate, resources, ideas, and technology) are reflected in visual and performing arts.
- B-6:** Demonstrate an understanding of the ways various arts activities enrich people's artistic, intellectual, social, and emotional responses.





Activities, Grades 5–8

- **Look into possible maritime careers today.** What education do you need? What did seamen need to learn in the nineteenth century, and how did they learn it? How did captains attain their positions? Many were from families in which several generations went to sea. Look at the *Searsport Sea Captains* book—investigate a local family that produced sea captains.
- **Select an occupation involved with the past or present merchant shipping trade.** Research that occupation and prepare an oral presentation, describing clearly what a day in your life might be like. Include details of your education, your work environment, how you came to hold the position and how it affects you and your family. Prepare an outline to speak from and share your sources.
- **If you were a young woman in 1875, would you accompany your husband on board ship?** Why or why not? Would you want to be a mother at sea? If you were a sea captain, would you take your family along?
- **Read some original source material, such as excerpts from *Letters from Sea*** or other letters or diaries available at the museum or on-line. Can students find evidence of personal slant in the information read? Write their own letter and diary entry, trying to demonstrate different styles in public vs. personal writings. Include description of an imaginary event, such as a storm, a meeting of ships at sea, a rescue, etc. What kind of descriptive language can students use? Write letters from the other perspective as well—family members staying behind on shore.
- **Assume the role of a crew member or family member on board ship** and write an article for the newspaper back home, describing in detail your experiences in visiting a foreign culture. Describe how that culture contrasts with your home town.
- **Health and disease were viewed differently in the nineteenth century.** What were causes and treatments available then? What risks were involved in working on a ship? What role did diet play in health? Construct a visual aid to demonstrate the similarities and differences between today's occupational hazards and those of the age of sail. What did doctors learn in that time and how were they trained, in comparison to the present day?
- **How was speed measured at sea?** Distance? Course? Measurement was important in managing cargo—size of hold, shape, types of cargo, determining capacity. Work with maps or grids to locate ships and plot their progress across the ocean from logbooks at the museum. Create some problems that might have been faced by those who lived aboard ship. Demonstrate the solution using mathematical principles and formulas appropriate to the task. For example, time and distance, and conservation of food stores over a long voyage.
- **Create a pictorial map of the world to display ports that families might visit,** what they might purchase there, and how they might spend their time in port. Many Maine captains' homes featured items from around the world.
- **Compare motion and energy of sailing vessels and steam-powered vessels.** What consequences did these differences produce? What were the impacts on people, use of resources, and trade? How did economic development change from the nineteenth to twentieth century? In an essay, describe the effects of the changes in life at sea that occurred with steam.
- **Look at the U.S. vs. a trading partner country in the days of the Down Easters.** Learn more about what life was like in that country—China, Peru, India, etc. Compare domestic life there to domestic life in a Maine town.
- **Most of the accounts we read of life at sea were written by captains and their families.** Write a similar account from the perspective of a common sailor, cabin boy, cook, or from the perspective of a merchant from another country.
- **Compare and contrast sea shanties with music of other cultures or times.** Write your own work song.
- **Try some crafts done by sailors:** knots, other ropework, carving, needlework, shell work, and models.



Learning Results, Grades 9-12

Career Preparation

- A-2:** Analyze skills and abilities required in a variety of career options and relate them to their own skills and abilities.
- A-3:** Demonstrate an understanding of the relationship between the changing nature of work and educational requirements.

English Language Arts

- G-8:** Write pieces and deliver oral presentations in a personal style, with a discernable voice and effective wording.
- H-9:** Make extensive use of primary sources when researching a topic and carefully evaluate the motives and perspectives of the authors.

Health and Physical Education

HEALTH EDUCATION

- A-9:** Describe how disease-causing microorganisms, family history, nutrition, and other factors relate to the cause or prevention of disease and other health problems.
- D-1:** Analyze how different cultures affect health beliefs and practices (gender equity).

Mathematics

- C-2:** Make tallies and graphs of information gathered from immediate surroundings.
- F-1:** Use measurement tools and units appropriately and recognize limitations in the precision of the measurement.



Science and Technology

- H-5:** Use mathematics to describe the work and power in a system.
- I-4:** Describe how forces affect fluids (e.g., air and water).
- L-3:** Make and use appropriate symbols, pictures, diagrams, scale drawings, and models to represent and simplify real life situations and to solve problems.
- M-4:** Analyze the impacts of various scientific and technological developments.
- M-5:** Examine the historical relationship between prevailing cultural beliefs and breakthroughs in science and technology.
- M-7:** Explain the connections between industry, natural resources, population, and economic development.

Social Studies

CIVICS AND GOVERNMENT

- B-1:** Compare and contrast the purpose and the structure of the United States government with other governments (parliamentary, dictatorship, monarchy) with respect to ideology, values, and histories.

HISTORY

- A-1:** Identify and analyze major events and people that characterize each of the significant eras in the United States and world history: Expanding Nation, Civil War and Reconstruction, Industrial U.S., World in the Nineteenth Century.
- B-1:** Demonstrate an understanding of the causes and effects of major events in United States history and their connection to both Maine and world history with emphasis on events after 1877, including but not limited to ... Industrialization.
- B-7:** Explain the benefits and conflicts resulting from encounters among cultures.
- C-2:** Examine and analyze primary and secondary sources in order to differentiate between historical facts and historical interpretations, and to support or reject historical hypotheses.

GEOGRAPHY

- A-3:** Understand how cultural and technological features can link or divide regions.
- B-1:** Explain factors which shape places and regions over time (e.g., physical and cultural factors).
- B-2:** Analyze the cultural characteristics that make specific regions of the world distinctive.
- B-3:** Analyze how technologies contribute to cultural sharing and separation, and identify examples of the spread of cultural traits.



ECONOMICS

- B-1:** Describe the factors (i.e. physical, capital, technology, and monetary resources) that impact the development and the distribution of a product.
- C-1:** Explain the impact of cultural values on economic decisions, using at least two examples.
- D-2:** Evaluate the effect on international trade of domestic policies which either encourage or discourage exchange of goods and services (e.g., quotas, tariffs, skilled labor, and stable government).

Visual and Performing Arts

- A-6:** Demonstrate an understanding that the arts are a means of renewal and recreation, as well as an occupational opportunity.
- B-1:** Compare two or more visual and/or performing arts by identifying the genre, style, historical period and conditions, probable artist, and cultural source.
- B-2:** Compare and contrast characteristics of visual and/or performing arts within a particular historical period or style with concepts about the period or style from other content areas.
- B-3:** Analyze common characteristics and purposes of various visual and/or performing art works across time and among cultural and social groups, and explain how these characteristics and purposes fulfill social, religious, or ceremonial functions in a particular cultural and historical context.
- B-4:** Create works that reflect concepts, theories, approaches, and styles from their own and other cultures.
- B-5:** Develop visual and/or performing artwork in response to a historical, social, or cultural condition using a variety of forms.





Activities, Grades 9-12



- **Write a letter applying for a job on board a ship—in the age of sail and today.** State your qualifications, skills, how you learned your job, what salary you expect, what benefits, etc.
- **Read some contemporary fiction or nonfiction works from other cultures**—Chinese, Indian, South American. How is their culture reflected in their work? How has their culture changed from what you have learned about those ports in the days of sail?
- **Some primary source materials—letters, diaries, log-books**—are available at Penobscot Marine Museum and elsewhere. Analyze one of these works, seeing what you can deduce and interpret from it. Write pieces in the style and voice of a nineteenth century character of your choice. (See *The Journal of Edwin Mitchell* on our website: www.penobscotbayhistory.org; also *Letters From Sea*, Resource List.)
- **What kinds of health problems were common aboard ship?** How did captains and owners try to avoid or treat them? Some cargoes were influenced by the health beliefs and practices of other cultures; for example, ginseng. Research this topic in more depth. The subject of medical care and developments in health concepts and attitudes may make an interesting research project, as we are undergoing many changes today.
- **Measurement is critical to merchant vessels carrying large cargoes.** How were different cargoes packaged, measured, and stowed? Given the capacity of a ship's hold, calculate what could be stored. Create diagrams and schematics to demonstrate.
- **Study the governments in foreign ports in the nineteenth century.** How did they influence the foreign policy of the United States? Is there a relationship to today's foreign policy?
- **What influences did Americans have on the places they visited?** What influences did Americans take back with them?
- **Learn more about the arts of the sailor, including music.** Compose a sea shanty or a modern version of a work song. Compare the visual arts of nineteenth century American maritime culture with those of other cultures of the same period. Analyze a group of maritime paintings, comparing and contrasting artists.
- **Study the forces involved in making a sailing vessel move.** What are the wind and water forces? What are different ways that wind helps propel a sailing vessel? What are advantages of square-rigged vs. fore-and-aft rigged vessels, with respect to effective conversion of wind energy into vessel propulsion?
- **Read fiction or nonfiction works about life at sea.** Do the authors think life at sea is good, bad, or indifferent? How is life at sea different from life ashore in these works, and how do the authors express the differences?



Resources

CHILDREN'S BOOKS

- Adkins, Jan. *The Craft of Sail*. New York: Walker and Company, 1973. Explains how sailing vessels work, with nice illustrations, along with seamanship information.
- Avi. *The True Confessions of Charlotte Doyle*. New York: Orchard Books, 1990. As the lone young lady on a transatlantic voyage in 1832, Charlotte learns that the captain is murderous and the crew rebellious.
- Cassidy, John. *The Klutz Book of Knots*. Palo Alto, California: Klutz, a subsidiary of Scholastic, Inc., 1985. Provides directions and actual practice space for 24 knots. Elementary through adult.
- Crampton, William G. *Flag*. New York: Knopf, Distributed by Random House, 1989. Signal flags included.
- Duncan, Fred B. *Deepwater Family*. New York: Random House, 1969. Born on the *Florence* (Bath, 1877) the author recalls his childhood on his father's Down Easter.
- Helldorfa, Mary. *Sailing to the Sea*. New York: Viking, 1991. A young boy's first sailing experience.
- Jefferis, David. *Flags*. London and New York: F. Watts, 1985. History and use of flags, including signal flags.
- Kirkpatrick, Katherine. *The Voyage of the Continental*. New York: Holiday House, 2002. This historical novel, written in the form of a diary, is a mystery story taking place during a young girl's voyage around Cape Horn. Upper elementary level.
- McCurdy, Michael. *The Sailor's Alphabet*. Boston: Houghton Mifflin, 1998. A traditional alphabet sea shanty. Illustrated with scratch-board drawings.
- McKay, Amy. *Sailing Days: Stories and Poems about Sailors and the Sea*. Woodbridge, Suffolk, England,: ACC Children's Classics, 1998. Ages 9-12.
- Perrow, Angeli. *Sirius, The Dog Star*. Camden ME: Down East Books, 2002. Set in 1897 on the East Coast, this is the story of Nathan and a dog, Sirius, on board the *Goldhunter*. Based on a true story. Older elementary level.

HIGH SCHOOL/ADULT LEVEL

VOYAGES: PERSONAL ACCOUNTS

- Albee, Parker Bishop. *Letters from Sea, 1882-1901: Joanna and Lincoln Colcord's Seafaring Childhood*. Gardiner, ME: Tilbury House, 1999. The story of two Searsport children who were born at sea and spent a great deal of their childhood on their father's vessel.
- Balano, James W. *The Log of the Skipper's Wife*. Camden, ME: Down East Books, 1979. Excerpts from the unabashed diaries kept from 1910-1913 by Dorothea Moulton Balano, a literate and liberated ship captain's wife from Port Clyde, Maine. Many parts fictionalized from the original diaries.
- Black, Col. Frederick Frasier. *Searsport Sea Captains*. Searsport, ME: Penobscot Marine Museum, 1989. Biographical information on the many sea captains who came from Searsport, their vessels, and their families.
- Briggs, L. Vernon. *Around Cape Horn to Honolulu on the Bark Amy Turner, 1880*. Boston: C.E. Lauriat, 1926.
- Candage, Captain R.F.G. *At Home Around The World*. Blue Hill, ME: Blue Hill Historical Society, 2000. A sailing master's autobiographical journal.
- Chapman, Angie. *Windjammer Bride: The Journal of Angie H. Chapman's Voyages on the Maine-Built Sailing Ship Leading Wind*. Rockland, ME: Courier-Gazette, 1979.
- Coffin, Robert P. Tristram. *Captain Abby and Captain John*. New York: Macmillan Co., 1939. Logs and accounts of John D. Pennell, master of the *Benjamin Sewall* (Brunswick, 1874) and the journals and letters of Abby Reed, his wife.
- Cogill, Burgess. *When God Was an Atheist Sailor: Memoirs of a Childhood at Sea, 1902-1910*. New York: W.W. Norton & Co., 1990. Reminiscences of a woman born at sea, on the five-masted schooner *Snow & Burgess*, about the first eight years of her life. Fascinating perspective of life on the Pacific and in San Francisco after the great fire.
- Cordingly, David. *Women Sailors and Sailor's Women*. New York: Random House, 2001. Different views of women at sea.
- Dana, Richard Henry. *The Seaman's Friend: A Treatise on Practical Seamanship*. Reprinted from 1879 edition. Delmar, New York: Scholar's Facsimiles and Reprints, 1979.
- Dana, Richard Henry. *Two Years before the Mast*. Boston: Houghton Mifflin Co., 1895. A story about life at sea in the early nineteenth century. A young man's adventure sailing from Boston, around Cape Horn to the California coast.
- Dempsey, Deborah Doane and Joanne Reckler Foster. *The Captain's a Woman: Tales of a Merchant Mariner*. Annapolis, MD: Naval Institute Press, 1998. A contemporary account of a woman captain in the Merchant Marine.
- De Pauw, Linda Grant. *Seafaring Women*. Boston: Houghton Mifflin, 1982. A depiction of women at sea throughout history in the roles of pirate, warrior, whaler, and trader.
- Druett, Joan. *Hen Frigates: Wives of Merchant Captains Under Sail*. Thorndike, ME: G.K. Hall, 1999.
- Druett, Joan. *Petticoat Whalers: Whaling Wives at Sea, 1820-1920*. Auckland: Collins, 1991.



- Druett, Joan. *Rough Medicine: Surgeons at Sea in the Age of Sail*. New York: Routledge, 2000.
- Dunton, Dorothy Magune. *All This Day Fine: Mellie's Life at Sea with Cap'n Frank*. Penobscot Press, 1998. An easy-to-read book about a Rockport captain and his wife, drawn from diaries.
- FreeHand, Julianna. *The Only Woman on Board: The Photographs, Diaries, Letters, And Memorabilia of a Maine Sea Captain and His Wife: 1859-1908*. Camden, ME: Picton Press, 1994. Previously published in 1981 under the title *A Seafaring Legacy*. Excerpts from the papers, etc. of Alice and Sumner Drinkwater of Yarmouth, Maine, during their life together at sea and apart. Many photographs of and by Alice of home, vessels, and foreign places.
- Goodell, W.H. *Captain Daniel Smith Goodell, 1853-1912*. Searsport, ME: W.H. Goodell, Jr. with Penobscot Marine Museum, 1994. A biography of a Maine sea captain.
- Gould, Annah Maud. *A Tempestuous Voyage: The Diary of Annah Maud Gould's Trip Aboard the Ship Berlin*. Bowie, MD: Heritage Books, 1987. Account of a journey from Maine to San Francisco in 1887 on the *Berlin* (Phippsburg, 1882).
- Griffin, Ralph H. Jr. (ed.). *Letters of a New England Coaster, 1868-1872*. [No publisher], 1968. The correspondence of Captain Joseph Griffin of Stockton, Maine, much of it between himself and his wife. There is a very interesting segment from a period when he was in a Cuban jail and she was alone on board his schooner.
- Harland, John H. *Seamanship in the Age of Sail: An Account of the Shiphandling of the Sailing Man-of-War, 1600-1860*. Annapolis, MD: Naval Institute Press, c1984. Though it addresses the sailing man-of-war, much is applicable to sailing merchant ships.
- Harlow, Frederick Pease. *The Making of a Sailor; or, Sea Life Aboard a Yankee Square-Rigger*. Salem, MA.: Marine Research Society, 1928. Includes traditions of sea life.
- Hibberd, Isaac Norris. *Sixteen Times Round Cape Horn: The Reminiscences of Captain Isaac Norris Hibberd*. Mystic, CT: Mystic Seaport Museum, 1980. Account of voyages made in the late nineteenth century by Captain Hibberd, many in vessels built by Samuel Watts of Thomaston, Maine.
- Humiston, Fred. *Blue Water Men and Women*. Portland: Gannett Co., 1965. Tales of the men and women who sailed the world during the nineteenth century.
- Johnson, Irving. *The Peking Battles Cape Horn*. Peekskill, New York: Sea History Press, 1995. True account of a voyage around Cape Horn in the bark *Peking* in 1929-30. Good photos. See also the movie by the same author, *Around Cape Horn*.
- Lamson, Joseph. *Round Cape Horn: Voyage of the Passenger-Ship James W. Paige, from Maine to California in the Year 1852*. Bangor, ME: Press of O.F. & W.H. Knowles, 1878.
- Nash, Ruth S. *High Seas to High Stakes, or, Around Cape Horn to the Gold Rush*. Bloomington, IN: 1stBooks, 2000. The letters and diaries of Jared Coffin Nash, who spent 6 months on a 104 foot bark in 1848, traveling from Maine to California.
- Nichols, Edward P. *The Ocean Chronicle: Published by Captain E.P. Nichols on Board the Bark Clara and the Ship Frank Pendleton, 1878-91*. Searsport, ME: Published for Penobscot Marine Museum; New York: Richard R. Smith, 1941. Captain Nichols wrote and printed on his own press at sea this small paper, which he then distributed to his friends, on each of his voyages.
- Oliver, Sandra L. *Saltwater Foodways: New Englanders and their Food, at Sea and Ashore, in the Nineteenth Century*. Mystic, CT: Mystic Seaport Museum, 1995. A history of food in coastal New England, including acquisition, preservation and preparation traditions, and recipes.
- Perry, Frederick. *Fair Winds and Foul: A Narrative of Daily Life Aboard an American Clipper Ship, by Frederick Perry who Made the Voyage*. Boston: Charles E. Lauriat Co., 1925. New York to San Francisco aboard the *Continental* (Bath, 1875).
- Petroski, Catherine. *A Bride's Passage: Susan Hathorn's Year under Sail*. Boston: Northeastern University Press, 1997.
- Riesenberg, Felix. *Under Sail: A Boy's Voyage around Cape Horn*. New York: Harcourt, Brace & Co, 1924. The author served aboard the *A.J. Fuller* (Bath, 1881) on a voyage from New York to Honolulu. The *A.J. Fuller* was commanded over time by four different Searsport captains.
- Snow, Edward Rowe. *Women of the Sea*. New York: Dodd, Mead, 1962. The wide range of experiences of women who went to sea between the late eighteenth and early twentieth centuries. The recollections of Joanna Colcord are especially noteworthy.
- Stevenson, Paul Eve. *By Way of Cape Horn: Four Months in a Yankee Clipper*. Philadelphia: JB Lippincott Co., 1899. An account of the author's 1897 voyage with his wife aboard the *Cyrus Wakefield* (Thomaston, 1882) from New York to San Francisco.
- Villiers, Alan. *The Way of a Ship: Being Some Account of the Ultimate Development of the Ocean-Going Square-Rigged Sailing Vessel, and the Manner of her Handling, her Voyage-Making, her Personnel, her Economics, her Performance, and her End*. New York: Scribner, 1953. A good guide to sailing the large steel ships of the Leitz Line of Germany, including the *Peking*, *Passat*, and *Pommern*.



VESSEL HISTORIES

- Bowker, Captain Francis E. *Atlantic Four-Master: The Story of the Schooner Herbert L. Rawding*. Mystic, CT: Mystic Seaport Museum, 1986. One of the last schooners to carry cargo on the Atlantic, the *Rawding* was built in Stockton Springs, Maine.
- Bragdon, R.W. *The Henry B. Hyde, Down Easter*. Bath, ME: DB Publishers, 1998. The story of a well-known Down Easter, that was at various times commanded by five captains from Searsport.
- Bunting, William H. *Sea Struck*. Edgartown, MA: Martha's Vineyard Historical Society; Gardiner, ME: Tilbury House, 2004. Photographs and stories of square riggers in the nineteenth century.
- Dean, Nicholas. *Snow Squall: The Last American Clipper Ship*. Gardiner, ME: Tilbury House, 2001. The story of the Maine-built clipper ship *Snow Squall*, built in South Portland in 1851. She sailed until 1864 when she went aground near Cape Horn. Eventually, *Snow Squall* was brought home to Maine. Includes contemporary photographs, illustrations, and charts.
- Lubbock, Basil. *The Down Easters*. Glasgow: Brown, Son, & Ferguson, 1929. Stories, anecdotes, records and photographs.
- Matthews, Frederick C. *American Merchant Ships, 1850-1900*. Salem, MA: Marine Research Society, 1930-31. Two volumes giving the histories of 120 sailing vessels.

HISTORY

- Bunting, William H. *A Day's Work*. Gardiner, ME: Tilbury House; Portland, ME: Maine Preservation, 1997, 2000. History of life in Maine, with historic photographs.
- Colcord, Joanna C. *Sea Language Comes Ashore*. New York: Cornell Maritime Press, 1945. A dictionary of sea terms that are used on shore. Includes the origins of some words and expressions.
- Isil, Olivia A. *When a Loose Cannon Flogs a Dead Horse There's the Devil to Pay: Seafaring Words in Everyday Speech*. Camden, ME: International Marine, 1996.
- Leavitt, John F. *Wake of the Coasters*. Middletown, CT: Published for the Marine Historical Association by Wesleyan University Press, 1970. A history of coastwise shipping in New England.

MARITIME ARTS

- Colcord, Joanna C. *Songs of the American Sailor*. New York: W.W. Norton & Company, Inc., 1938.
- Harlow, Frederick Pease. *Chanteying Aboard American Ships*. Barre, MA: Barre Gazette, 1962. A first-hand description of maritime music, including its African and Caribbean roots.

Hubbard, Donald. *Ships-in-Bottles*. New York: McGraw-Hill Co., 1971. Step-by-step instructions for the hobbyist interested in building a ship in a bottle. Good photographs and drawings.

FICTION

- Carter, Isabel Hopestill. *Shipmates: A Tale of the Seafaring Women of New England*. New York: W. Scott Company, 1934. A novel by a Maine author about a young school teacher who marries a sea captain, raises her children aboard ship, and has many adventures in strange ports.
- McLane, Charles B. *Red, Right, Returning*. Gardiner, ME: Tilbury House; Rockland, ME: Island Institute, 2004. A novel set on a Penobscot Bay Island after World War II.

VIDEOS

- Johnson, Irving. *Around Cape Horn*. Mystic, CT: Mystic Seaport Museum Film-Video Service, 1984, c1980. B&W/37 min. Not Rated. In 1929 Irving Johnson filmed his journey, including a trip around Cape Horn during a storm on the bark *Peking*. He narrates the film, speaking of the workings of the ship and what life at sea was like.
- Johnson, Irving. *High Sea Adventurer*. Color/43 min. Not Rated. This film documents Capt. Irving Johnson's life, beginning with the voyage of the *Peking* in 1929, going on to the years he spent circumnavigating the globe and visiting various ports in the *Yankee*, with student crews, and lastly exploring the inland waterways of Europe.
- The Great Ships: Schooners*. Perpetual Motion Films, 44 min.
- Maine Windjammers: A Page from the Past*. Maine's windjammer fleet.

WEB PAGES

- Animated illustrations for tying all kinds of knots
www.sailorsknotboard.com.
- Journal of Edwin Mitchell*. A 16-year-old boy from Belfast goes to California and back aboard the ship *Ivanhoe*, which was built in Belfast. See the journal and other maritime documents on the museum's education website:
www.penobscotbayhistory.org.
- Mystic Seaport Museum's digital library items, including ship registers, published maritime books, and manuscript logs, journals, and documents
www.mysticseaport.org/library/initiative/MsList.cfm.