

**Theme:** Agriculture

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**Subject Areas**

Art, Language Art, Science, History  
and Social Studies

**Duration**

One or two class periods

**Setting**

Classroom

**Skills**

Comparing, interpreting, designing,  
summarizing

**Charting the Course**

The historical harvest and uses for salt hay have had a significant impact and influence on the Delaware Bayshore region. Many of the salt-marshes were diked and transformed. This practice caused alterations in the natural flow of tidal water, as well as the dominant plant and animal communities that resulted. Salt hay harvesting was an integral part of the past of the Down Jersey region.

**Vocabulary**

Salt hay, advertisement, fodder,  
insulation, harvest, haycock

**Correlation to NJ Core Curriculum  
Content Standards**

Art	Social Studies
<b>1.3</b> (1)	<b>6.4</b> (1)
<b>1.4</b> (1)	<b>6.5</b> (4)
Science	<b>6.6</b> (5)
<b>5.12</b> (2,4,5)	<b>6.9</b> (1,2,3)



# Salt Hay—Advertising an Extraordinary Product

## ■ Objectives

Students will be able to:

1. Describe the variety of uses for salt hay, both historically and at present
2. Identify and describe the characteristics of the spartina grasses
3. Describe the method utilized for salt hay harvesting, both historically and at present

## ■ Materials

A variety of magazines for investigation into advertising technique and examples

Copy of Salt Hay Fact Sheet (one per group of four students) (**with graphics**)

Photographs/sketches of salt hay harvesting (NEED)

A variety of art supplies for designing and creating advertisements

## ■ Making Connections

Perhaps the most common natural landscape and habitat associated with the Southern Bayshore of New Jersey, and indeed the entire Mid-Atlantic estuarine environment, is the salt marsh. The salt marshes of southern New Jersey are vast meadows that stretch across the entire Bayshore region. These wetlands fringe the brackish influx of water as it meanders and moves with the tides up the adjacent shoreline. As you move up the rivers and tributaries, the salt marshes gradually give way to fresh water marshes as the salinity decreases. Salt marshes are a significant natural feature of the landscape of Southern New Jersey, and

play a significant role in the development of the region. Both directly and indirectly, the salt-marsh is responsible for most everything presented in the film *Down Jersey*.

## ■ Background

In addition, *Historic Themes and Resources*, page 65.

Reprinted from Barnegat Bay Decoy and Baymen's Museum Fact Sheet, Salt Hay Harvesting, by Terry O'Leary, Program Director

Gathering salt hay has been a traditional resource-based occupation along the Jersey Coast since colonial times. The arduous task of cutting, raking, baling and transporting salt hay from the wet, muddy and insect infested salt marshes of South Jersey was offset by the fact that literally tons of salt hay could be harvested annually without cultivation. In addition, the wide variety of uses for salt hay made it a valuable crop for the early settlers and the salt hay industry continued to thrive until just a few years ago.

Salt hay is virtually impervious to rot and it contains no weed seeds like other types of hay. The fine wiry salt hay has been used as insulation material in preventing frost damage for tender agricultural crops such as strawberries, and for insulating freshly poured concrete. Salt marshes have also been used in the past as pasture land. Many of the barrier islands, once virtually uninhabited, were used as pasture by free ranging cattle. The best producing salt meadows yielded up to three tons of

salt hay per acre and could be harvested twice during the growing season.

Four types of salt hay generally harvested from the salt meadows are:

1. Salt Hay Grass (*Spartina patens*), which is a perennial spreading grass. It often forms cow-licked mats in the high salt marsh.
2. Salt Marsh Cordgrass (*Spartina alterniflora*), which grows in the regularly tidal flooded low salt marsh. This grass was utilized to some extent, but was difficult to harvest.
3. Black grass (*Juncus gerardii*), which is found at the upper edges of salt marshes, was favored as silage to feed cattle during the winter.
4. Three Square Grass (*Scirpus olneyi*), which has a vigorous root system. As it grows, it slowly adds to the elevation of the salt marsh and actually helps to provide conditions favorable for the growth of the more useful Salt Hay Grass.

Salt hay was used to prevent erosion on construction sites. Builders have used salt hay over concrete work and masonry to prevent freezing. It is used for drainage in dry-well construction and around septic tanks. Bulkheaders have used salt hay around docks and behind bulkheads. It was used as bedding in stables. After being used and mixed with manure, although it was slow to decompose, it did ultimately produce an excellent compost. Nurseries and farmers



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used salt hay as a mulch in gardening, seeding lawns, and landscaping. It was a packing material for bricks, glassware and pottery, and was the chief insulation material for old time icehouses. Salt hay was placed on sugar sand roads to provide traction.

It was also the chief raw material in the once prosperous industry at Harrisville to make brown butcher paper and heavy grade wrapping paper, with one mill there turning out nearly a ton of paper a day. Years ago, market gunners packed barrels of ducks and geese with layers of salt hay and shipped the waterfowl by train to fine restaurants in New York and Philadelphia.

The harvesting of salt hay was a specialized business — a tribute to the resourcefulness of the baymen. After the salt hay was cut either by hand with a scythe, or with a horse-powered mowing machine, it was raked into windrows and then pitch forked into haystacks and left to dry for about one week. The salt hay was then hand loaded onto a shallow draft hay scow, heaped into an enormous stack and towed by one or more pole boats or sailing garveys to be shipped to market.

### Uses of Salt Hay Fact Sheet

Reprinted from:

*From Marsh to Farm:  
The Landscape Transformation  
of Coastal New Jersey,*  
U.S. Department of the Interior,  
National Park Service, New  
Jersey Coastal Heritage Trail,  
1992, by Kimberly R. Sebold,  
pages 54–56.

### Procedure

#### Warm Up

In order for students to be able to create an effective advertisement for salt hay, they need to investigate and determine what characteristics and qualities are required and/or necessary.

Accordingly, the warm up for this activity could be a simple 15 minute group activity, or a full class period accompanied by a homework assignment. The duration is totally dependent on the teacher's preference and the applicability of this activity to their curriculum, needs, and available time.

Begin the discussion by having students flip through and skim magazines for advertisements. This may be done individually and/or in small groups, or even as a preparatory homework assignment. Advertisements that are eye-catching, persuasive, and well laid out, or could generally be considered a success or effective, should be cut out and glued/taped to a piece of paper. Each student could be responsible for one or two of the best advertisements they can find. For each advertisement, students should determine the qualities and criteria that make it a successful advertisement. This, again, could be done as a small group or individually.

### The Activity

1. Reference the film **Down Jersey** and the significance of salt hay farming to the agricultural development of the region. Briefly describe the processes involved in the harvest of salt hay.
2. Brainstorm with the class and list on the chalk board the possible uses for salt hay. See if they can guess what some of the uses for salt hay may have been or still are. The teacher can coax and give hints if needed (from background information, personal knowledge, etc.)
3. Distribute to the class the **Uses of Salt Hay** information sheet. Review the many uses that salt hay both is and was harvested for.
4. Give the following assignment: Using the criteria for an effective advertisement (as determined by Warm-Up activity), design an advertisement for salt hay. Be sure to allow students to be as creative, innovative, and elaborate as possible and/or time will allow. They can choose one specific use to highlight, or attempt to include all the functions and uses for salt hay.

### Wrap Up

Students share/explain/describe their advertisements to the class. The students can be given the criteria (as determined from the warm up) and asked to critique or vote on the best advertisements. Students' advertisements could be displayed as a bulletin board in the classroom and/or school building foyer/main entrance area.



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## Action

Students can investigate the region and/or community to look for people or areas that were once part of this significant development in agriculture and the economy.

Identifying traditional families that were involved and applying the activity *Saving Local History* in the Cultural and Historical section could be an appropriate way to tie together a sequence of events, topics, and issues regarding the region we call “Down Jersey.”

## Assessment

As per behavioral objectives identified in the beginning of activity.

The actual completion of assignment and creation of an advertisement, as well as overall participation in the activity’s components.

## Extensions

Questions to consider and for further discussions and development of activity:

There was a higher demand in the past and more people involved/employed in salt hay farming along the Delaware Bay shore and the entire Mid-Atlantic Coast. Why? What items and products have replaced the functions and uses of salt hay? Are they more readily available and economically feasible alternatives? i.e., Styrofoam peanuts for packing, bubble wrap, “bagged” mulch, fodder (cultivated, high yielding, grain crops) etc. What are some of the environmental impacts of the alternative products? What were some of the impacts of salt hay farming? Compare them.

Invite a salt hay farmer to present to class: conduct oral histories: share students’ advertisements with the community and farmers.

## Resources

**PSE&G Estuary Enhancement fact sheets.**  
Contact Marcia Walton, Education Coordinator, at (609) 339-7915

**From Marsh to Farm: The Landscape Transformation of Coastal New Jersey**, by Kimberly Sebold, National Park Service, available from the NJ Coastal Heritage Trail Office at (609) 447-0103 for \$7 per copy.



## **Uses of Salt Hay Fact Sheet**

Salt hay harvested from the salt marshes along the Delaware Bayshore was truly an “extraordinary” product based on the ingenuity of the people who realized its value and abundance. It was extremely versatile and had a wide array of uses which include:

- insulation for sensitive crops (e.g., strawberries)
- fodder (feed) for cattle and other livestock  
(as pasture land for grazing)
- compost
- mulch (seeds cannot adapt to upland conditions, so it is virtually weedless)
- packing material — glassware, pottery, etc.
- raw material for paper
- thatch for barn roofs
- stable bedding for horses and cattle
- traction on roads
- protection on newly poured concrete
- rope (of particular significance to the region/Owen Carney, Port Norris) (used to help form cast-iron pipe)
- stuffing for coffin mattresses