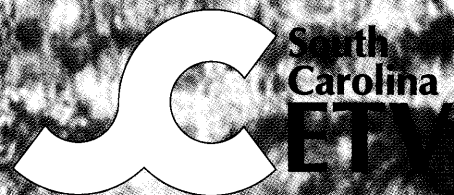
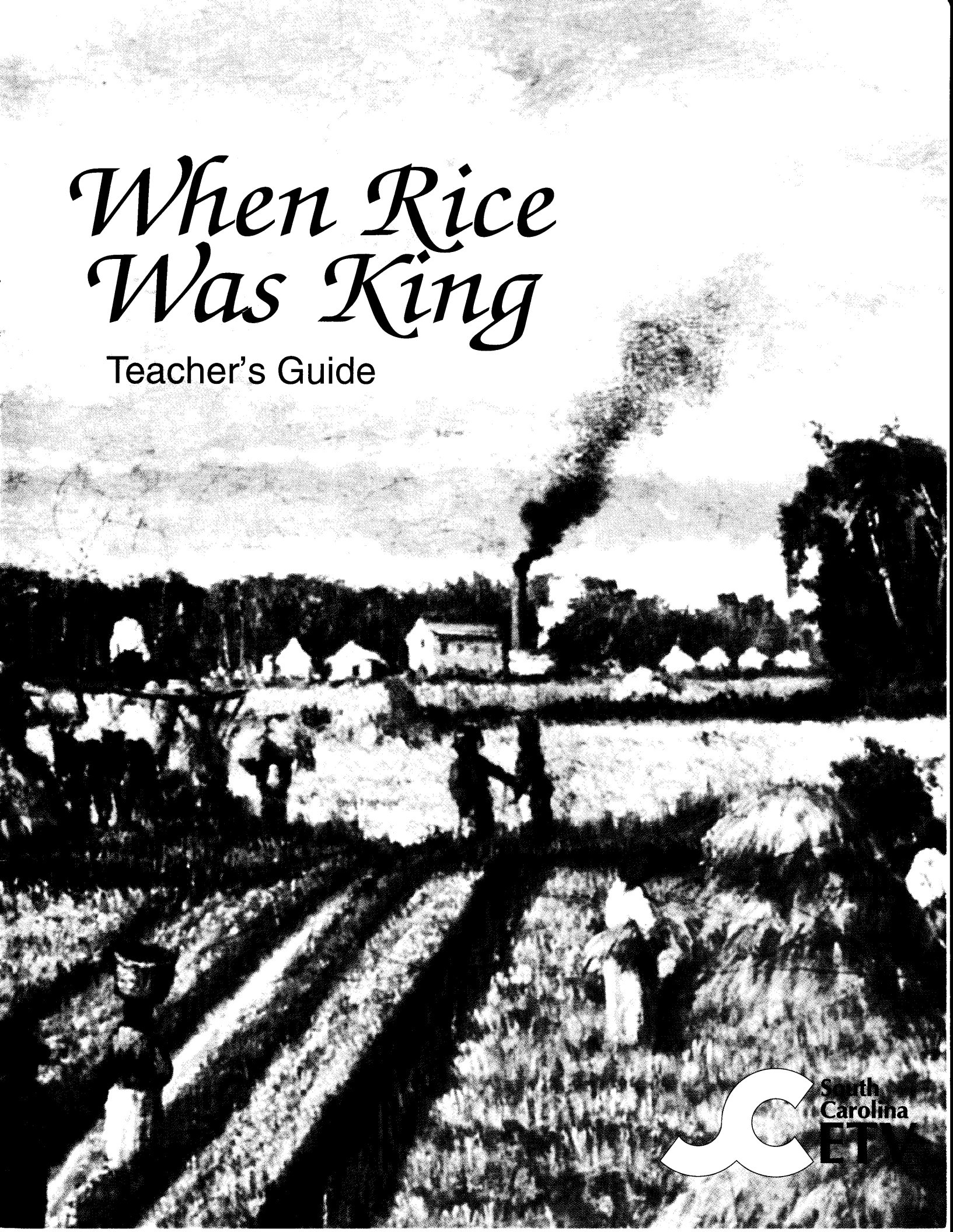


# *When Rice Was King*

Teacher's Guide



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## Teacher's Guide

Teacher's guide developed by  
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South Carolina has developed curriculum standards in language arts and mathematics. Standards in social studies and science are being finalized. This lesson guide for **When Rice Was King** can be used to address several standards in social studies, and, since social studies is an excellent vehicle for cross-curricular activities, there are connections to other subjects.

# South Carolina Curriculum Standards Lesson Objectives

## Social Studies—Grade 8

### II. *Time, Continuity, and Change: History*

8.1 The learner will demonstrate an understanding of the major developments in the history of South Carolina and the United States from the earliest settlements through Reconstruction. The student should be able to:

8.1.4 Explain the influence of geography on South Carolina history.

8.1.8 Discuss black societies in North America.

8.1.21 Compare and contrast the Northern and Southern economic systems.

### III. *People, Places, and Environments: Geography*

8.7 The learner will demonstrate an understanding of the role of physical systems on earth. The student should be able to:

8.7.5 Explain how physical processes and human activities produce changes in ecosystems.

8.7.6 Explain how physical processes influence the formation and distribution of resources.

8.8 The learner will demonstrate an understanding of the uses of geography. The student should be able to:

8.8.3 Describe how geographic conditions have influenced events and conditions in the past.

## Reading/English/Language Arts—Grade 8

### I. *Reading/Literature*

N. The student will place a variety of works into appropriate historical and cultural context and relate to other situations, content areas, and time periods.

### II. *Listening*

C. The student will expand a rich vocabulary through listening experiences with varied, meaningful texts.

### **III. Speaking**

- D. The student will examine and determine validity, bias, purpose, and audience, statements of opinion that are not clearly identified, and provision of support in spoken texts.

### **IV. Writing**

- B. The student will use the writing process fluently and expand the use of writing to learn across the curriculum.
- F. The student will publish in a variety of formats, such as stories, poems, logs, notes, pamphlets, booklets, plays, and reports and other technical writing, across the curriculum.

### **V. Research**

- A. The student will continue applying knowledge of resources and conducting research in preparing written and oral presentations.
  - ◆ Use note-taking, outlining, annotating, multiple drafts, and a list of sources for research projects.
  - ◆ Combine information from a variety of sources, text and electronic.
  - ◆ Select and evaluate a variety of perspectives.
  - ◆ Gather additional information as needed.

### **VI. Computer/Technology Standards**

- D. The student will process, store, retrieve, and transmit electronic information.
  - ◆ Use search strategies to retrieve electronic information.
  - ◆ Use electronic encyclopedias, almanacs, indexes, and catalogs to retrieve and select relevant information.

## **Mathematics—Grade 8**

### **II. Numerical and Algebraic Concepts and Operations**

- I. Analyze tables and graphs to identify properties and relationships.

### **III. Patterns, Relationships, and Functions**

- C. Use models and technology to analyze functional relationships to explain how a change in one quantity results in a change in another quantity.
  - ◆ The student will describe and represent relations using tables, graphs, and rules.
  - ◆ The student will construct tables.

## VI. Probability and Statistics

- D. Construct, read, and interpret tables, graphs, charts, and other forms of displayed data.
- ◆ The student will use information displayed in line, bar, circle, and picture graphs, scatter plots, and histograms to make comparisons, predictions, and inferences.
  - ◆ The student will use a matrix to organize and describe data.

## Science—Grade 8

### Process Skills

- B. Classify
- ◆ The student will arrange events and activities in sequential order.
  - ◆ The student will classify forces, objects, actions, and events of life, earth, and physical sciences.

### Area II. Earth and Space Systems

**Strand 1—Characteristics:** Components of earth and space systems demonstrate characteristic properties that are observable and measurable.

- B. Interpret features of the Earth in a variety of ways.
- ◆ The student will investigate and understand how to read and interpret maps, globes, models, charts, and imagery.

### Area IV. Applications

**Strand 3—Change:** Human activities can produce long-term effects and changes that impact our environment.

- A. Investigate and describe the types of limiting factors affecting the maintenance of populations and communities.
- ◆ The student will investigate and understand the relationships and impact between ecosystem dynamics and human activity. Key concepts include:
    - ◆ food production and harvest.

## Program Summary

This hour-long program recounts the fascinating story of the rise and fall of rice-growing in South Carolina and its profound impact on the state. **When Rice Was King** follows the evolution and decline of the plantation system, and the efforts today to preserve the natural wetlands that were once lush rice fields.

**When Rice Was King** can be subdivided into the following sections to fit class time constraints.

- ◆ Introduction
- ◆ Varieties of Rice
- ◆ Rice Economy
- ◆ Rice Cultivation and Processing
- ◆ The Slave Task System
- ◆ African Origins of Rice
- ◆ Tidal Irrigation
- ◆ Georgetown
- ◆ Plantations and Their Owners
- ◆ Seasonal Disease and Planters' Escape
- ◆ Slave Lifestyle
- ◆ Dangers to the Rice Crop
- ◆ Slave Treatment, Slave Resistance
- ◆ Decline of Rice Economy
- ◆ Preservation of the Homes and Wetlands



## Vocabulary

### Previewing Activities

1. Review these vocabulary words before watching **When Rice Was King**. This will aid students' understanding of the program.

effluvia	arduous
alluvial	paternalist
primordial	entourage
virulent	fete
immune	amphibious

2. Study these vocabulary words prior to viewing or let students ascertain their meanings as they watch **When Rice Was King**.

ballast stones	mortar and pestle	cholera
aristocracy	rice trunk	freshets
rice mill	task system	Ricebird (Bobolink)
rice factor	threshing	Cheval-de-Frese
blacksmith	salt point	Freedman's Bureau
cooper	Huguenot	wetland
Gullah culture	malaria	emancipation
flail stick	dysentery	

## Geography

1. **When Rice Was King** explains that a 300-mile coastline—between Cape Fear in North Carolina and Saint Mary's River, which forms the boundary between Georgia and Florida—contained 16 rivers that "had ocean tides of at least four feet." On a map showing the eastern United States, have students locate Cape Fear and Saint Mary's River and shade in the coastline between the two.
2. Using a map showing the river systems of South Carolina, ask students to locate and shade the following rivers.

Pee Dee	New	Combahee
Waccamaw	Ashley	Edisto
Sampit	Cooper	Savannah
Santee	Black	
Coosawhatchie	Ashepoo	

## Suggested Activities





3. Also locate the following (the numbers represent the order of their mention in the program).

Georgetown (2)	John's Island (7)
Winyah Bay (3)	Legreeville (on John's Island) (6)
Santee Delta (4)	Walterboro (8)
ACE Basin (11)	Plantersville (9)
Charleston (1)	Pawleys Island (10)
Savannah, Georgia (5)	

4. As locations are mentioned in **When Rice Was King**, have students place the numbers (1–11) on the correct location on the map.


## Growing Rice

### Previewing and Viewing Activities

1. Give students "Handout 1: The Cultivation of Rice" (see page 10), and ask them to number the sections in the order they believe the process occurs. The correct order is listed below. Save Section II for after viewing.
  1. Land is cleared.
  2. Dikes and ditches, which regulate water levels in the rice fields, are constructed.
  3. Soil is plowed and harrowed.
  4. Rice seed is planted in a hole dug by the planter's toes, or "clayed," coated with mud, and dropped onto the soil.
  5. The planter uses his/her heel to pack the seed.
  6. The rice field is flooded three times during the growing process.
  7. The field is drained and dried.
  8. Rice is harvested with a small sickle, or rice hook.
  9. Rice is laid to dry on its own stubble.
  10. Rice grain is gathered and plant stubble is burned.
  11. Rice is loaded onto a barge and carried to the processing area.
  12. Flail sticks or a threshing mill remove the grain from the stalk.
  13. Winnowing, with a fanner basket or from a winnowing house on stilts, separates the grain from the chaff.
  14. Rice is milled, using a mortar and pestle or a pounding mill, to remove the husk.

## After-Viewing Activities

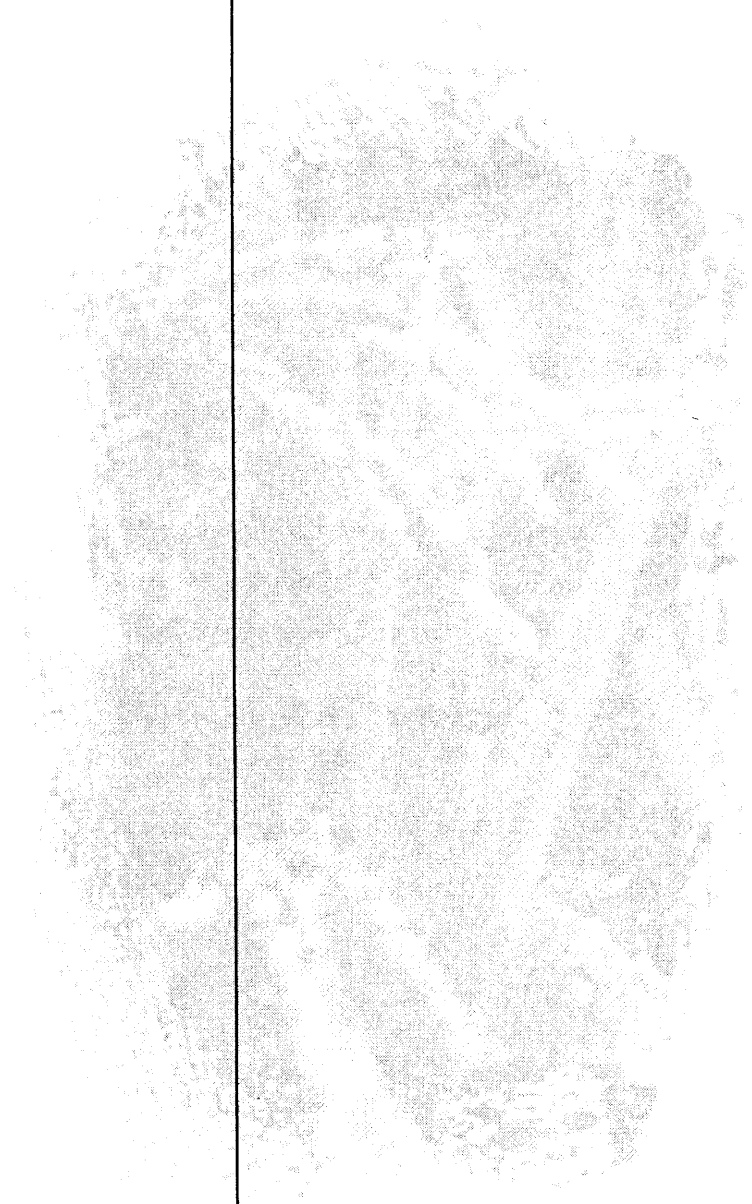
1. Have students review and revise the order of the rice-growing process after watching **When Rice Was King**. In addition, ask students to discuss how growing rice differs from growing other edible crops.
2. Have students complete Section II of “Handout 1: The Cultivation of Rice.”
3. Ask students: If Europe so desired Carolina Gold, why do you think rice was not grown in greater abundance? Why do you think Elizabeth Allston Pringle described the period of the flooding of the rice fields as, “the whole atmosphere was polluted by the dreadful smell”? Why did the wealthy rice planters and their families flee to beach resorts in the summer? After students cite reasons and information learned from **When Rice Was King**, share or read “Handout 2: 19th-Century Medical Geographers—Were They Correct?” (from [www.riceweb.org](http://www.riceweb.org)). How do medicine and geography relate in today’s events? (For example, disease control, location of landfills, and fertilization and pest control in crops.)
4. The Ashepoo, Combahee, and Edisto rivers form the ACE Basin, an area of intense natural resources and historical conservation. The ACE Basin is home to a vast area of wetlands habitat. Have students research these efforts of conservation, including the types of ecosystems found in wetlands. Information on these topics can be found on the Internet at *ACE Basin News* ([www.netside.com/~scdu/ace.htm](http://www.netside.com/~scdu/ace.htm)).
5. There are several places to get copies of George Washington’s diary concerning his Southern Goodwill Tour in 1791. The South Carolina Archives has published a pamphlet that includes much of the diary; many South Carolina history books cite sections of the diary; and in 1993 Terry W. Lipscomb wrote *South Carolina—in 1791—George Washington’s Southern Tour*. On-line at <http://www.users.sccoast.net/sherry>, you can find information about *George Washington’s Guide to the Waccamaw Neck and Georgetown*, written by Sharon Carlisle, and *eGO Travel South Carolina* ([www.ego.net/us/sc.htm](http://www.ego.net/us/sc.htm)) has a map and brief description of the tour. Allow students to read Washington’s descriptions of the Lowcountry. Have them paraphrase what he said. Ask: What do you think George Washington thought of the Lowcountry of South Carolina? Trace his route on a map. How do his descriptions fit **When Rice Was King**?
6. Ask students to describe the task system and how it freed the rice planters to live a leisurely lifestyle.
7. Have students use the following information from *Middleton Place—Rice Culture* ([www.middletonplace.org/html/rice.html](http://www.middletonplace.org/html/rice.html)) to create a chart and a graph.



During the 17th century, enslaved males made up the majority of the skilled slave class in the Lowcountry. According to colonial records in the 1740s, 13 percent of enslaved males were considered to be skilled. During the same period, only 4 percent of female slaves were considered skilled. In this early period, the vast majority of men were woodworkers, while females were domestics. By the 1790s, 26 percent of males and 13 percent of females were considered to be skilled.

8. Place students into groups. Have each group complete one of the following exercises. If time permits, have them actually complete the projects.
  - a. Create a prototype of a mural of life in the South Carolina rice country during the time of **When Rice Was King**.
    - (1) Decide on the section of the 200 years the group wants to depict.
    - (2) Decide on the general design and order of the panels.
    - (3) Divide the work on the mural.
    - (4) Assist one another as you use what you have learned to roughly sketch the panels.
    - (5) When everyone has finished, put the panels together and decide as a group if you need additional scenes or changes.
    - (6) Exhibit the mural prototype.
  - b. Plan a multimedia presentation depicting life in the South Carolina rice country during the time of **When Rice Was King**.
    - (1) Decide on the section of the 200 years the group wants to depict.
    - (2) Decide on four or five ideas you want to present.
    - (3) Create a "storyboard" to lay out the presentation.
    - (4) Divide the work on the presentation.
    - (5) Describe the pictures, photographs, charts, video footage, etc. you will need for each topic presented.
    - (6) Sketch the wording or graphics you would use. (Some students could use PowerPoint or other presentation software.)
    - (7) Choose sounds or recordings to go with your selections.
    - (8) Present the multimedia plan.
9. Ask students to create a "thinking web" (a central hub with circles of facts or ideas surrounding it and branches coming from these outer circles) describing and contrasting the life of the planter aristocracy and slaves.

10. Have students write a poem or a diary entry as if they were slaves on a rice plantation.
11. Direct students to create a timeline showing major historical, scientific, and economic events and the effects on the rise and decline of the rice culture in South Carolina.



## Handout 1

### The Cultivation of Rice

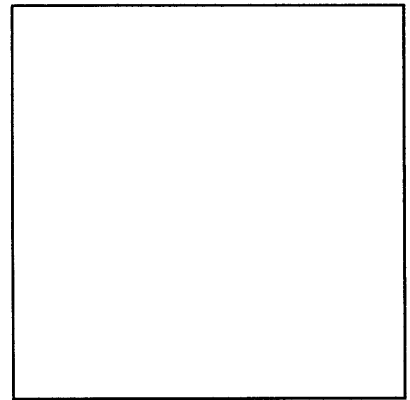
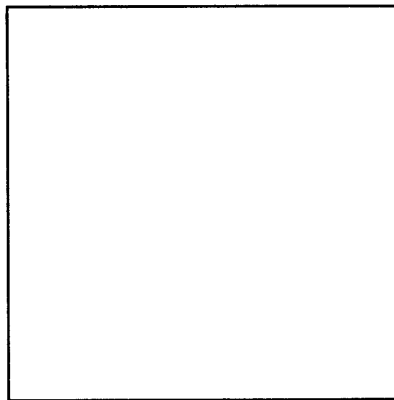
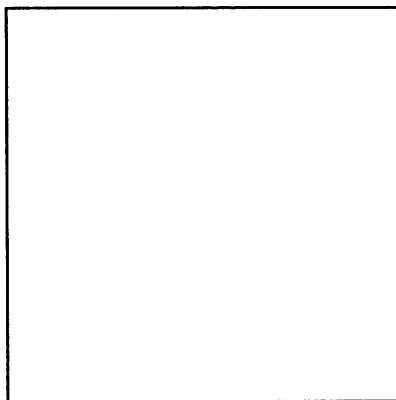
The cultivation of rice was labor intensive. For the most part, animals could not be used in the swampy Low-country fields. The tasks to be performed and the growing cycle of rice are listed in this handout.

I. Arrange in the correct order the tasks of growing rice. Number them from 1 to 14.

- \_\_\_\_\_ The rice field is flooded three times during the growing process.
- \_\_\_\_\_ Rice is loaded onto a barge and carried to the processing area.
- \_\_\_\_\_ Rice is harvested with a small sickle, or rice hook.
- \_\_\_\_\_ Rice seed is planted in a hole dug by the planter's toes, or "clayed," coated with mud, and dropped onto the soil.
- \_\_\_\_\_ Dikes and ditches, which regulate water levels in the rice fields, are constructed.
- \_\_\_\_\_ Winnowing, with a fanner basket or from a winnowing house on stilts, separates the grain from the chaff.
- \_\_\_\_\_ Flail sticks or a threshing mill remove the grain from the stalk.
- \_\_\_\_\_ Soil is plowed and harrowed.
- \_\_\_\_\_ Rice grain is gathered and plant stubble is burned.
- \_\_\_\_\_ Land is cleared.
- \_\_\_\_\_ The planter uses his/her heel to pack the seed.
- \_\_\_\_\_ Rice is milled, using a mortar and pestle or a pounding mill, to remove the husk.
- \_\_\_\_\_ The field is drained and dried.
- \_\_\_\_\_ Rice is laid to dry on its own stubble.

II. In each box, illustrate the growth cycle of the rice and label it in the proper order.

- ◆ The Sprout Flow allowed the seed to germinate.
- ◆ The Point or Stretch Flow killed grass and weeds in the fields and protected the plants from birds and insects.
- ◆ The Harvest or Layby Flow supported the stalks of rice as they lengthened and the heads of grain ripened.



## Handout 2

### 19th-Century Medical Geographers—Were They Correct?

The following information is taken from the RiceWeb ([www.riceweb.org/](http://www.riceweb.org/)).

Interestingly enough, medical geographers in the 16th century played an important role in limiting the adoption of rice as a major crop in the Mediterranean area. During the 16th and early 17th centuries, malaria was a major disease in southern Europe, and it was believed to be spread by the bad air (or “mal air,” hence the origin of the name “malaria”) of swampy areas. Major drainage projects were undertaken in southern Italy, and wetland rice cultivation was discouraged in some regions. In fact, it was actually forbidden on the outskirts of a number of large towns. Such measures were a significant barrier to the diffusion of rice in Europe.

The suspicion that rice fields caused “mal-air” did not entirely disappear with the end of the Renaissance. In late 1988, the United States Environmental Protection Agency and the National Science Foundation both issued reports on the “greenhouse effect.” They agreed that there has already been some warming of the earth; that irrespective of whatever action governments may take, the world is destined for a further temperature increase of at least 2 degrees Centigrade, and that without strong human intervention, the increase may be much greater. The greenhouse effect is caused in large part by the release, through human activity, of certain gases that dirty the atmospheric window and prevent the escape of the earth’s heat to outer space.

Carbon dioxide has long been the prime suspect, but it is now known that, molecule for molecule, methane traps 20 times more energy. Both reports also agree that methane concentrations are increasing at the rate of approximately one percent per year. A major methane source, perhaps even the largest of all, is flooded riceland. Not only do methane-producing bacteria thrive in such an environment, but rice plants themselves act as gas vents, putting greater-than-expected concentrations into the atmosphere. The problem is, of course, magnified by the extension of rice area, by the expansion of irrigation facilities, and especially by the enlargement of double-cropped rice areas. Rice fields are suspected of putting 115 million metric tonnes of methane into the atmosphere each year. This is at least equal to the total production from all of the world’s natural swamps and wetlands. Is it possible that agricultural intensification is hastening environmental degradation? Were the 16th-century geographers on the right track after all?

## Suggested Resources

## Recommended World Wide Web Sites

ACE Basin News

[www.netside.com/~scdu/ace.htm](http://www.netside.com/~scdu/ace.htm)

Africans in America

[www.pbs.org/wgbh/aia/part1/index.html](http://www.pbs.org/wgbh/aia/part1/index.html)

Carolina USA City and History Page

[www.carolinausa.com/carolina/caroscfr.htm](http://www.carolinausa.com/carolina/caroscfr.htm)

eGO Travel South Carolina

[www.ego.net/us/sc.htm](http://www.ego.net/us/sc.htm)

Geobop's Prehistoric South Carolina

[www.geobop.com/paleobop/Atlas/us/SC.htm](http://www.geobop.com/paleobop/Atlas/us/SC.htm)

Georgetown's Rice Museum

[www.the-strand.com/rice/index.htm](http://www.the-strand.com/rice/index.htm)

International Rice Research Institute

[www.cgiar.org/irri/](http://www.cgiar.org/irri/)

Mallard Tracker 98

[www.ducks.ca/tracker98/](http://www.ducks.ca/tracker98/)

Middleton Place—Rice Culture

[www.middletonplace.org/html/rice.html](http://www.middletonplace.org/html/rice.html)

Rice Farming, Growing, Producing, Milling, Manufacturing

[www.ricejournal.com/](http://www.ricejournal.com/)

Rice: Library, Almanac, History

[www.riceweb.org/termsindex.htm](http://www.riceweb.org/termsindex.htm)

Rice Production Handbook

[www.agnic.org/agdb/riceph.html](http://www.agnic.org/agdb/riceph.html)

Rice Web Sites

[www.fhsu.edu/agriculture/ricewebsites.htm](http://www.fhsu.edu/agriculture/ricewebsites.htm)

Rivers and Rice Trail

[www.sc-heritagecorridor.org/html/rivers.html](http://www.sc-heritagecorridor.org/html/rivers.html)

South Carolina

[www.sccsi.com/sc/home.html](http://www.sccsi.com/sc/home.html)

South Carolina Freedman's Bureau

[www.freedmensbureau.com/southcarolina/index.htm](http://www.freedmensbureau.com/southcarolina/index.htm)

South Carolina Institute of Archaeology and Anthropology

[www.cla.sc.edu/sciaa/sciaa.html](http://www.cla.sc.edu/sciaa/sciaa.html)

Uncle Ben's Kitchen Health and Nutrition

[www.unclebens.com/ca/health/history.html](http://www.unclebens.com/ca/health/history.html)



## Recommended Books

The following bibliography is composed of recommended books from The Rice Museum in Georgetown, South Carolina. You may find the complete annotated listing at *Georgetown's Rice Museum* ([www.the-strand.com/rice/index.htm](http://www.the-strand.com/rice/index.htm)).

Blair, John. *Tales of the South Carolina Low Country*.

Boyle, Christopher C. *Ten Interviews with Ex-slaves from the Rice Planting Section of Georgetown*. Edited by James A. Fitch

Carlisle, Sharon. *George Washington's Guide to the Waccamaw Neck: Rice Told Tales*

Doyle, Patricia D. *A View of Our Past: Georgetown, South Carolina c. 1890-1915*.

Fitch, James A., ed. *Rice Recipes*.

Gaillard, Samuel. *Plantations of the Carolina Low Country*.

Georgetown Historical Society. *Georgetown County, South Carolina, Tombstone Inscriptions*.

Hurmence, Belinda, ed. *Before Freedom: Narratives by Former South Carolina Slaves*.

Jones-Jackson, Patricia. *When Roots Die: Endangered Traditions on the Sea Islands*.

Joyner, Charles W. *Down by the Riverside*.

Koger, Harry. *African-American Studies Black Slave Owners: Free Black Slave Masters in South Carolina*.

Lachicotte, Alberta Morel. *Georgetown Rice Plantations*.

Lawson, Dennis. *No Heir to Take Its Place*.

Littlefield, Daniel C. *Rice and Slaves*.

Messmer, Catherine Compani. *South Carolina Low Country: A Past Preserved*. Photography by C. Andrew Halcomb.

Miller, Muriel. *The Water Brought Us: The Story of the Gullah Speaking People*.

Pringle, Elizabeth Allston (Patience Pennington). *A Woman Rice Planter*.

Rogers, Dr. George C., Jr. *The History of Georgetown County, South Carolina*.

Rutledge, Archibald. *Home by the River*.

Vaughn, Celina McGregor. *Pawleys Island As It Was*.

Vlack, John Michael. *Back of the Big House: The Architecture of Plantation Slavery*.

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*COVER ARTWORK: "**The Rice Harvest**" (1885) by William Aiken Walker, from The Ogden Collection, New Orleans, Louisiana.*



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