



National Park Service
with **Teaching MUSEUM Collections**
Management Program
<http://www.cr.nps.gov/museum>

Teaching with Museum Collections
Cowboy Doctor: Doctor to Both Man and Beast
March 2003/April 2004

□ **Overview of the *Teaching with Museum Collections* initiative**

The National Park Service [NPS] *Teaching with Museum Collections [TMC]* introduces lesson plans for teachers to use NPS museum collections in student-centered activities. NPS museum collections tell the story of America, its peoples, cultures, varied habitats, significant events, and ideas that continue to inspire the world. Collections are located in the very places where people and events shaped the nation's history and environment. *TMC* emphasizes the links between the 'real things;' the collections, and the sites where those collections were found, collected, or used. NPS collections include cultural objects, natural history specimens and archival documents and photographs. *TMC* lesson plans contribute student-centered learning while increasing understanding of park themes and resources. *TMC* has the potential to be incorporated into over 320 NPS sites. Lesson plans will be developed for history, social studies, math, and language and visual arts. They will be linked to national education standards.

Lesson Plan Elements

- **Title: Cowboy Doctor: Doctor to Both Man and Beast**
○ Christine Gunvaldson, Alan Waltz, Michele Grotbo

- **Grade Level:** 6-8 (Middle School)

- **Length of Lesson:** 1-5 days

□ **Overview of Object-based Lesson Plan**

- *Topic:* The purpose of this lesson is to give students an awareness of the similarities and differences of medical care of humans and animals on a ranch in the past and the present.
- *Park.* Based on Grant Kohrs Ranch National Historic Site Collections.
- *Park Collections:* For a listing of park museum objects, see last page of this lesson plan.
- *Background:* Before the mid-twentieth century in the United States most medical treatments consisted of purging, bleeding, herbal remedies, or the administration of tonics with ingredients consisting of alcohol, morphine derivatives or cocaine. During the time of Conrad Kohrs up through the time of Conrad Warren, ranchers and cowboys needed to know how to treat illnesses in their animals or themselves often without the benefit of a doctor or a veterinarian. If illnesses could not be treated, or the patient did not respond, it might be days before a doctor or veterinarian could render treatment.
- *Goals:*
 1. Students will gain an appreciation of the medical duties of the rancher during time of Conrad Kohrs through Conrad Warren.
 2. Students will compare/contrast medical treatments of the past to those of today.
 3. Students will learn the usual treatments for common medical problems in animals and humans from 1862 through 1950.



4. Students will learn how historians look at objects.
5. Students will learn the definition of a primary vs. secondary source.
6. Students will learn the analytical or “detective process” that historians use to interpret the past including. They will also learn how to draw conclusions and form interpretations from historical objects, documents, photographs, oral histories and recording.

❑ **National Educational Standards**

Disciplinary Standards

- Social Studies
- U.S. History
- Montana History
- Science
- Art
- Communication Arts
- Health
- Technical Education

Montana Standards

- Social Studies Content Standard 1: Students access, synthesize and evaluate information to communicate and apply social studies knowledge to real world situations.

Benchmark 1: Apply the steps of an inquiry process (i.e. identify question or problem, locate and evaluate potential resources, gather and synthesize information, create a new product, and evaluate product and process).

Benchmark 2: Assess the quality of information (e.g. primary or secondary sources, point of view and embedded values of the author).

Benchmark 3: Interpret and apply information to support conclusions and use group decision making strategies to solve problems in real world situations (e.g. school elections, community projects, conflict resolution, role playing scenarios).

- Social Studies Content Standard 4: Students demonstrate an understanding of the effects of time, continuity, and change on historical and future perspectives and relationships.

Benchmark 1: Interpret the past using a variety of sources (e.g. biographies, documents, diaries, eyewitnesses, interviews, internet, and primary source material) and evaluate the credibility of sources used.

Benchmark 3: Use historical facts and concepts and apply methods of inquiry (e.g. primary documents, interviews, comparative accounts, and research) to make informed decisions as responsible citizens.

Benchmark 5: Identify major scientific discoveries and technological innovations and describe their social and economic effects on society.

❑ **Student Learning Objectives:**

- Location, recognizing, identifying and categorizing



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- Responding, reporting, explaining, displaying, presenting, summarizing, critiquing
- Experimenting, deducing, comparing, concluding, evaluating
- Relating structure to function, classifying, cataloging
- Recording through writing, drawing, labeling, photographing, taping

□ **Park Museum Collections**

Links to images of these objects and a thematic exhibit on Grant-Kohrs Ranch National Historic Site will be provided. First Aid Kit, Saddlebags, Cayenne, Peppermint, Ginger, Cloves, Iodine, Hydrogen peroxide, Black pepper, Castor oil, Sarsaparilla tea, Turpentine, Mustard, Vick's Vapor Rub, Camphophenique, Boric acid, Alum, Empty Bottles of aspirin, Tylenol, Pepto Bismal, Tums, Plastic syringe, Index cards, Colored markers/pencils, Empty glass bottles, Echinachia, Flannel fabric, Slippery elm bark, Willow or white oak bark, Chamomile, Wild indigo root, Bicarbonate of soda, dandelions, Sage tea

□ **Materials**

- Chart: "How to Read an Object" (Adapted from Museum Magnet Schools Education Resources; English Heritage, A Teacher's Guide to Learning from Objects, and the Victoria and Albert Museum materials.) [To be provided]
- Books: *Montana Outback* by Bonnie Yeo (Order from Ed or Bonnie Yeo, 100 Sweet Meadows Road, Butte, MT 59701)
- Copies of the following web pages:
<http://www.archives.gov/digital-classroom/lessons/analysis/worksheets/artifact.html>
<http://www.archives.gov/digital-classroom/lessons/analysis/worksheets/document.html>
<http://www.archives.gov/digital-classroom/lessons/analysis/worksheets/photo.html>
<http://www.archives.gov/digital-classroom/lessons/analysis/worksheets/poster.html>

○ **Museum Collections: Grant Kohrs Ranch NHS medicines**

N/A Squibb granular Boric Acid
N/A Lysol antiseptic
GRKO 138 Phillips Carona Ointment
GRKO 141 Puretest Boric Acid
GRKO 163 Trisulphanol
GRKO 174 Alum
GRKO 224 Campho Phenique
GRKO 265 Dr. Korinek's Physic Capsules
GRKO 278 Dr. Korinek's Cowbloat capsules
GRKO 1447 Absorbine Vet Liniment
GRKO 2941 Glycerine Keystone Drug - Deer Lodge, MT
GRKO 2941 Glycerine
GRKO 3378 Calcium Boro-Hibate
GRKO 3380 Caustic Potash (poison)
GRKO 3383 Liquid Glass - Silicate of Soda



GRKO 3385 Spirit Amonia
GRKO 3384 Castor Oil
GRKO 3387 Sulfidene Cap - Tabs
GRKO 3388 Sterile Saline Solution
GRKO 3430 Episcorbe Keystone Drug - Deer Lodge, MT
GRKO 3931 Sulfa Guanine
GRKO 3935 Scarlet Oil made in Fort Dodge
GRKO 3939 Keystone Drug (sulfathiazole and glycerin
GRKO 3940 Iodine
GRKO 3948 Histaplex caplets
GRKO 3950 Kemtox
GRKO 3956 Farnam Methanox Flyspray concentrate
GRKO 3956 methanox Residual
GRKO 3966 Penivet (penicillin)
GRKO 3967 Carbolic Acid
GRKO 3973 Duracillin
GRKO 3990 Uterine Capsules
GRKO 3994 Campho-Phenique
GRKO 3997 Sulmet (sodium sulfamethazine) - injectable
GRKO 4165 Sloans Liniment
GRKO 4221 Holoway Blister
GRKO 4269 Absorbine Jr.
GRKO 7584 Hexylresorcinol
GRKO 7912 Dr. Naylor Medicated teat dilators
GRKO 13453 Salt Peter
GRKO 14157 Vicks Vapor Rub

❑ **Vocabulary**

Create a word/concept list with students as lesson unfolds. Post the list on large chart in the classroom. Write definitions with student input as words come into use during the lesson.

❑ **Lesson Implementation/Procedure:**

Day One

- Discuss with students what they do if they become sick or injured at home, at school, or on a camping trip, take over-the-counter medication, visit the school nurse, go to the doctor, go to the hospital, etc.
2. Divide class into groups of 3 or 4 students.
 3. Have each group look at the items on the table and have them select items to group together. Students will complete the chart: “How to Read an Object” (Adapted from Museum Magnet Schools Education Resources; English Heritage, A Teacher’s Guide to Learning from Objects, and the Victoria and Albert Museum materials [to be provided].)



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- a. What other sources of information would have been helpful in completing your investigation about the object(s)?
- b. Would you say that your source was a primary or secondary one?
4. Each group will need to list the items they selected and tell why they placed those items together in a group.
5. Each group will then share with the class which items they selected and how those items were related.
6. Next, the teacher will tell the class that all of the items were related because all were used to treat medical conditions in humans and/or animals today or in the past.
7. Have the students' list names and uses of the common medications that they have at home in their medicine cabinet or in their vehicle first aid kit.
8. Develop a list of items that a cowboy would need to pack in his saddlebag if he were going on a week long trail drive.
9. Have students develop a list of items that they would place in a first aid kit if they were going on a week long camping trip.
10. Culminating activity: Frank Abbot, the ramrod at XIT ranch, visits the classroom and gives a talk on his experiences as a cowboy doctor on the prairie while he worked at Grant Kohr's Ranch or another ranch.

Assessment: Group participation, completed charts and lists.

Day Two

1. Vocabulary: Break students into groups of 4 and provide them with 6 of the following vocabulary words to define. Each group writes their vocabulary words on separate index cards with the dictionary definition on the back. Below the dictionary definition, the students will paraphrase the definition in their own words. Finally, the students will simplify the definition to a first grade reading level. Students will share their definitions with the rest of the class. As a whole class activity, students will brainstorm and defend their choice of placing vocabulary words into a specific category. (Suggested categories: medication, diseases, procedure). These include:
Poultice, plaster, decoction, fomentation, laxative, emetic, expectorant, antihistamine, tincture, intravenous, laceration, enteric, toxemia, arthritis, apoplexy, laminitis colic conjunctivitis, purgative (purge), cathartic, antiseptic, liniment, abrasion, caustic

Day Three, Four, Five

Extension Activities: (plus essential questions)

Students will choose one of the following activities to present to the class by any method available. Students will conference with teacher prior to presentation to provide: Acceptance of topic, method of presentation, and grading rubric.

1. *Social Studies, Science, Technology Education* Using the website www.bottlebooks.com/pontil-medicine.htm students will learn information about medicine bottles made between 1830-1860. Why are medicine bottles so widely sought after by antique collectors?
2. *Health Research* herbal medicines (simples) used by Native Americans. How many of these remedies were used by people during the 1800's to the 1900's? Which medicines used today contain similar herbs?



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3. *English, Social Studies* Read the journals of Lewis and Clark to research the medical treatments used by the Corps of Discovery. How are they similar to those used at Grant-Kohrs ranch?
4. *Social Studies, Physical science, Health* Research to find out when certain drugs as mercury, became controlled substances to place in medications, tonics or other substances meant for human consumption.
5. *Communication Arts, Tech. Ed., Art, English* After reviewing actual newspaper advertisements of the 1890's, students can make up labels for their own medication bottles listing name, ingredients, dosage, and symptoms treated: How much of the advertisement is fact or fiction? How does the language of the 1800's differ from current newspaper ads? How are they similar?
6. *Communication Arts, Art, English, Social Studies* Students can create their own newspaper or magazine advertisement for their medication. Why should a person buy your medication?
7. *Science, Social Studies* Depending upon their object, students will complete the "Learning From Museum Objects and Other Sources of Information" worksheet. (Adapted by Hands on History, National Museum of American History, Smithsonian Institution, from an original activity by C. Stapp, GWU, Museum Education Program for NPS, Grant Kohrs Ranch BNHS 2003 [to be provided].) OR use analysis forms from:
<http://www.archives.gov/digital-classroom/lessons/analysis/worksheets/artifact.html>
<http://www.archives.gov/digital-classroom/lessons/analysis/worksheets/document.html>
<http://www.archives.gov/digital-classroom/lessons/analysis/worksheets/photo.html>
<http://www.archives.gov/digital-classroom/lessons/analysis/worksheets/poster.html>
8. *Health* Using the internet, compare medical care during the time of the Civil War to that available during Con Warren's time. (See also attached list of archived items and Grant Kohrs Ranch website: <http://www.nps.gov/grko>) What are the differences and similarities?
9. *Art, Social Studies, Health* Make an illustrated booklet of "old time" herbal remedies showing the parts of the plant used and listing the ailments or symptoms the remedy cures.
10. *Art, Social Studies, Health* Make a map of the Western United States that shows the locations of various plants or herbs needed for traditional medicines.
11. *Social Studies, English* Find patents for common over the counter medications such as Bayer Aspirin, Phillips Milk of Magnesia, etc. Use the list of archived medicines as your research base. How does the patent relate to the use and discovery of the medicine?
12. *Social Studies* Interview a grandparent, great-grandparent or a senior volunteer about the types of medical treatments used when they were a child. Record the information in writing, on tape, video or CD.
13. *Art, Science, Social Studies* Make an illustrated poster detailing the evolution of a medication from the raw materials to the finished product. What influences the patenting of a medication or distribution?
14. *Social Studies, English, Communication Arts* Using the internet and other sources, search timelines of medicine from 1798 to 1998. Include dates that cures were found and / or eradicated for several diseases such as: cholera, rabies, diphtheria, tetanus, yellow fever, influenza, etc. Compare and contrast the events leading up to the cures. What events were necessary for the scientific breakthroughs?



Resources

- Bettmann, Otto L. The Good Old Days - They Were Terrible! Pg 140 - 141.
- Chuinard M.D., Elodn G. Only One Man Died: The Medical Aspects of the Lewis & Clark Expedition, Ye Galleon Press, Fairfield, WA, 1999.
- Gilmore, Melvin R. Uses of Plants by the Indians of the Missouri River Region, University of Nebraska Press, Lincoln, NE, 1977
- Gunther, Erna. Ethnobotany of Western Washington: The Knowledge and Use of Indigenous Plants by Native Americans, University of Washington, 1973.
- Gustafson, R. W., DVM, Under the Chinook Arch: Tales of a MT Veterinarian, Falcon Publishing, Helena, MT, 1993 Woodard, Clark and Company, Portland, Oregon, 5th edition Grant Kohrs Ranch Library. Veterinary Instruments
- Hughes, Stella, Chuck Wagon Cookin'. 1974. The Arizona Board of Regents. University of Arizona Press. Lists home remedies and what they were used for.
- Moseman, C.M., Moseman's Illustrated Catalog of House Furnishing Goods; an unabridged republication of the fifth edition, 1987 (SI285.4.C23 Grant Kohr's Ranch) General Publishing Co. Ltd. Toronto, Ontario. 19th century catalogue of horse related supplies.
- Moulton, Gary E., ed. The Journals of the Lewis & Clark Expeditions, Vol. 12: Herbarium of Lewis & Clark, University of Nebraska Press, Lincoln, NE, 1987.
- Myres, Sandra L., Western Women and the Frontier Experience 1800-1915. University of Texas at Arlington, University of New Mexico Press, Albuquerque pg 157.
- Schlissel, Lillian, Women's Diaries of the Westward Journey, New York: Schocken, 1982. Page 49-51.
- See also: <http://oregontrail.blm.gov/OTHHistory/Pioneer%20Personal%20Possessions.htm>
- The Silver State Vol. 5, No. 4, Deer Lodge, MT, June 14, 1893, p. 4
- Snapp, Roscoe R. Ph.D., Beef Cattle: Their Feeding and Management in the Corn Belt States, 1939, John Wiley and Sons, Inc, Third Edition. Pp 520 - 542.
- Stone, Ted (1997). The Complete Cowboy Reader. Renton, WA. Lone Pine
- Udall, D.H. B.S., D.V.M., D. Sc. (Hon). The Practice of Veterinary Medicine, Fifth Revised Edition, Published by the Author, Ithaca, New York, 1947. pp 36 - 74.
- Yeo, Bonnie, Montana Outback, Another Collection of Recipes Old Time Remedies and Montana Bonnie Yeo. Cartoons. 1995. 100 Sweet Meadows Road, Butte, Montana 59701. Publishing.

❑ Internet Resources

Horse First Aid:

- www.equusite.com/articles/safety/images/safetyFirstAidKit2.gif
- www.pressbox.co.uk/Detailed.9970.html
- www.horsetalk.co.nz/reviews.health-rm-nefirstaidkit.html
- www.equisearch.com/care/firstaid



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Other

www.efpia.org/MedicinesforMankind.pdf/vaccination.pdf

www.hanford.com/Handford.Div/overview/ginfo.html

Balsam of Myrrh as an external antiseptic.

www.mc.vanderbilt.edu/biolib/hc/nostrums/nostrums.html

Patent medicines. Vanderbilt University Medical Center.

The Great American Fraud. . . . "There were very few effective medications. . . ."

www.bookfinder.com/dir/i/American_Self-Dosage_Meicines-An_HistoricalPerspective

American Self-Dosage Medicines: An Historical Perspective by James H. Young.

<http://ag.smu.edu/footm4.htm>

Foot and Mouth Disease: Historic Treatment, Prevention, and Eradication.

<http://oregontrail.blm.gov/OTHHistory/Pioneer%20Personal%20Possessions.htm>

Women's diary during Oregon Trail.

<http://www.bottlebooks.com/pontil-medicines.htm>

Pontil Medicines. Medicine bottles made primarily between the years 1830-1860.