

**Brother Jonathan Artifact Conservation Project**  
**A Del Norte Service-Learning Project**

**Grade Level:** Seventh and eighth

**Service Areas:** Education and Public Works and Safety

**Academic Area:** English/Language Arts, History/Social Science, Science

**Duration of Service:** Ongoing (all the time)

**Degree of complexity:** medium

**Contact Information**

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**Introduction and Description of the Lesson**

Crescent Elk Middle School is located in the semirural community of Crescent City; a town situated twenty miles south of the Oregon border in the coastal redwoods.

Crescent Elk, the only middle school in the county, has 685 students with a minority population of 27 percent (of which one-third are Native American).

In the summer of 1865, the *S.S. Brother Jonathan* struck a rock in a gale off the coast of Crescent City, leading to one of California's worst maritime disasters. Many lives, including several notable passengers, and millions in California gold were lost in the wreck. The ship's resting place was located in the early 1990's and salvage operations have worked through the last decade, bringing hundreds of artifacts to the surface to be conserved, interpreted, and displayed in the Del Norte County Historical Society. In this multiyear project an average of twenty youths a year assist the Flynn Maritime Conservation Lab with the restoration and conservation of glass artifacts from the shipwreck of the *S.S. Brother Jonathan*. Through the conservation process students address the language arts, science, and history content standards. This restoration process involves biweekly water testing, cleaning of artifacts, setting up for desalinization, and recording of all processes conducted on each artifact. Students also research the proprietary of the medicine bottles undergoing conservation to prepare and present reports to the Del Norte County Historical Society on the history of specific bottles in the collection.

**Instructional Process**

Each year the Historical Society Board of Directors generates a list of needs that would benefit the Society and might meet the interest of the students. The list is then

presented to the students who then discuss and choose the activities they are most interested in pursuing.

### **Preparation**

To prepare for the lab work, students first tour the lab and museum, learning about maritime artifact conservation and the history of the *Brother Jonathan*. Next, students return to the lab and are trained specifically in the conservation skills and safety regimens of the lab.

**Subject Areas:** English-Language Arts, History-Social Science, Science

### **California State Academic Content Standards**

Seventh Grade Language Arts: Writing 2.2a-d, Listening and Speaking 1.4-1.6, 2.3a-d

Seventh Grade Science: Investigation and Experimentation 7a-e

Eighth Grade Science: Physical Science 3c-e, 5a, 9a-c, 9e

Eighth Grade History/Social Science: United States History and Geography: Growth and Conflict 8.10.4-7, 8.12.4

### **Action**

Rotating weekly in small groups, students walk to the lab with their teacher during a combined elective and lunch period. Students then work on assigned artifacts for about 90 minutes, which involves water testing, cleaning of artifacts, and set-up for continued desalinization. The students record their actions during the restoration process and complete reflective journal writing.

### **Reflection**

Students used reflective journals before, during, and after the service-learning activity. Before the activity students reflected on the influence their ancestors had on the community and the importance of preserving their ancestors stories to help better understand our own lives. During the project, students and teachers reflected often on content standards as they applied to the activity. Following the activity, the students returned to their first writings and discussions. The students reflected on the personal contributions they made toward preserving our community's heritage and the content standards that they met.

### **Student Assessment**

The teacher through direct observation assessed the students' performance on all the steps of the restoration process. Assessment of the academic content standards was completed through the evaluation of written lab reports, oral presentations, and reflective journal writing.

### **Project Evaluation and Expansion**

The teacher, the service-learning site advocate, and a collaborative partner representative looked at the lab reports, reflective journals, and other tools and evaluated the success of the project at meeting its goals.

### **Celebration and Public Recognition**

At the quarterly meeting of the Historical Society, students presented their work to the membership through a multimedia presentation. Students were also publicly recognized at the Del Norte Schools in Service Achievements Forum in May. In addition, the state supports an online exhibit of the *Brother Jonathan* shipwreck with photographs of the preserved glass artifacts. The Web address is <http://shipwrecks.slc.ca.gov/>

### **Materials and Staff Development Needs**

The staff of the Del Norte County Historical Society provided all the materials and training required for this activity.

### **Funding, Resource Support, and Sustainability**

The Del Norte County Historical Society funded the lab materials for this project. The project will continue until the final artifacts are recovered and the restoration and conservation project is completed.

Collaborative Partner Contact:  
Del Norte County Historical Society  
577 H Street  
Crescent City, CA 95531

### Additional resource:

California Historical Society, <http://www.californiahistoricalsociety.org/about/index.html>