



Yosemite Valley: A Cultural, Historical, and Botanical Experience

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Abstract

During the fall of 2013, a group of UWEC students and professors conducted research in Yosemite National Park. We did a literary study on the Miwok Indians, the first inhabitants who settled in the valley and conducted interviews with Julia Parker, a reformed basket weaver and representative of her ancestors in the park. We also read information on John Muir and visited some of the major sites in the valley that he wrote about during his lifetime. John Muir is a well-known author, naturalist and advocate for the preservation of the park. In addition to our cultural research, we looked at the plant life on the El Capitan Moraine located in Yosemite Valley. We conducted a one meter by 100 meter transection, recording all types and maturity levels of trees. The majority of the trees that grew on the moraine were seedlings and categorized as either Incense Cedars or Ponderosa Pines. Both of these species are commonly found in the valley. We found that it was important to study the cultural history of the park in order to understand the significance of our scientific findings and to provide an overall backdrop for the trip.

Methodology

- Interview with Julia Parker
- Analysis of primary sources and relevant literature
- Field observations
- One meter by 100 meter transection



(Left to Right) Rachel Kisby, Alex Koch, and Brittany Charlton complete the transection
Photo courtesy of Deanna Kainz

Botany

- A group of three students, led by NatureBridge liaison and botany expert Jenna Beers, conducted a transection of the El Capitan Moraine to determine tree species type and distribution.
- Prior to conducting the research, the students were given a lecture on species identification, nomenclature, and topographical influences on distribution.
- The predominant species found on this moraine were the California Incense Cedar, the Douglas Fir, and the Ponderosa Pine.
- In order to obtain data, students conducted a one meter by 100-meter transection. Students measured 100 meters across the moraine and walked along the line, taking note of all species found, their ages, and proximity to each other within one meter across the initial section.



Jenna Beers holding Ponderosa Pine cone
Photo courtesy of Brittany Charlton

Types of Trees

California Incense Cedar

- *Calocedrus decurrens*, commonly known as the California Incense Cedar, is a species native to western North America, primarily found in the United States, specifically Oregon, California and Nevada. This species of conifer is also located in parts of Mexico. The California Incense Cedar can grow at altitudes of 50-2900 meters, and often reaches heights of 40-60 meters. It is the most commonly known species of the genus and the regional qualifier "California" is usually omitted (9).
- Physical Description: Strippy bark. Flat, splayed needles. No cones (9).



California Incense Cedar (9).

Douglas Fir

- The scientific name of the Douglas Fir is *Pseudotsuga menziesii*. It is also known as Oregon pine or Douglas spruce. The tree is an evergreen conifer species native to western North America. Although commonly referred to as a fir, it is actually not a member of the genus *Abies*, therefore it is not a true fir. The second tallest conifer in the world, the Douglas Fir commonly grows from 60-75 meters, but with some reaching heights of 100-120 meters (9).
- Physical Description: Grayish bark, furrows deepen as it matures. Small needles, tailed cones (9).



Douglas Fir (9).

Ponderosa Pine

- *Pinus ponderosa*, commonly known as the ponderosa pine, bull pine, blackjack pine, or western yellow pine, is a large coniferous tree whose height varies from 17-27 meters. It is Montana's official state tree. It is commonly found in the western United States, as with all the other trees in the research. The ponderosa pine is also known for its distinctive vanilla scent (9).
- Physical Description: Puzzle-piece bark. Plate and furrows in the bark. Three needle fascicles. Large Cones (9).



Ponderosa Pine (9).

The History of Yosemite and the Ahwahneechee Indians

- Yosemite Valley's first inhabitants were members of the Miwok Indian Tribe (4).
- They lived off the land 5,000 years ago when they first came to the valley from the West (4).
- The Ahwahneechee often traded with other Native Americans in the region ().
- Warfare and disease drove them out of the valley and towards their neighbors across the mountains (4).
- In the 1850's, newcomers flocked to California in search of gold. In 1851, the Mariposa Indian War broke out between native populations and the Europeans (7).
- These native people were forced out of Yosemite Valley and many were taken to "Indian Schools," places run by white settlers who taught the Native Americans European culture, punishing them if the tribe members attempted to engage in their own traditions (4).
- Most Indian history was lost because of these boarding schools (4).



Members of the Ahwahneechee Tribe (8).
<http://caligreen.com/blog/post/history-of-yosemite/787>



National Park Service emblem (10).
http://www.arkansasobesity.org/?attachment_id=280

- Now, in Yosemite National Park, officials are trying to preserve what was lost (6).
- Julia Parker, a Miwok Indian, moved to Yosemite in 1960 and continues to teach guests of the Park about her tribe's traditions and lifestyle (4).
- As more people entered the valley, the more conservationists became concerned about protecting the land (3).
- Yosemite Valley and Mariposa Grove were protected as a preserve under the state of California. Later, Abraham Lincoln signed The Yosemite Act in 1864 (10).

Julia Parker and John Muir



Julia Parker
Photo courtesy of Sandy Thao



John Muir and Theodore Roosevelt overlooking the valley (4).
<http://www.olmsted.org/the-olmsted-legacy/the-olmsted-firm/the-olmsted-and-the-development-of-the-national-park-system>

- Julia Parker is a significant and influential part of touring Yosemite Valley. Since she had been sent to "Indian School," she lost a lot of her knowledge about her people's history and Parker actually had to be taught about Miwok traditions in order to present the information to others (6).
- Known for her intricate basket weaving, Parker's creations are so unique and distinctive that many people have taken an interest in them, including Queen Elizabeth II of England who personally presented with several masterpieces (6).
- Julia has been featured in several gallery displays, books, films, and museum exhibits. Parker has also been involved in the protection of endangered plant species that are native to California (6).

- There is the common misconception that Muir discovered the land that would become one of the United States' most beloved preservation, but it was first protected under US law in 1864, the first instance of land being set aside by a government for its natural beauty (5).
- Muir and magazine editor Robert Underwood Johnson motivated the federal government to gain control of Yosemite and expand it into a 1,200 square-mile National Park, a proposal that Congress passed later that year (5).
- In 1906, Muir and then-President Theodore Roosevelt spent three days in the California wilderness. During this expedition, Muir convinced President Roosevelt to expand the national parks system and combine Yosemite with Mariposa Grove (5).

Discussion/Conclusion

- Over the course of the valley's history, many cultural factors have contributed to shaping the park we have today.
- In terms of preserving the cultural identity of the valley, Julia Parker continues to teach park visitors about the Yosemite Indians. The establishment of the Yosemite Museum has enriched the park by relating the expansive history of the native Miwok people.
- The significance of the park's rich history grants an appreciation that cannot be confined within the park's breathtaking beauty. It is incorporating both these facets that the park truly has an impact on individuals.
- After completing our transection of the moraine, we discovered that there were several different species of trees (mainly the California Incense Cedar, the Douglas Fir, and the Ponderosa Pine), but they were consistently dispersed and there was little variety beyond the three core species.

References

1. Diamant, R. 2008. The Olmsted and the Development of the National Park System: <http://www.olmsted.org/the-olmsted-legacy/the-olmsted-firm/the-olmsted-and-the-development-of-the-national-park-system> (accessed November 2013).
2. Diverse Sample Portraits, 2013. James McGrew Imaging. http://www.jamesmcgrewimaging.com/Portraits/Sample-Portraits/8975831_n9bmtv696549798_wRVPXCG#696549798&k=wRVPXCG (accessed November 2013).
3. Godfrey, E. 1977. Yosemite Indians: Mariposa, CA, National Park Service and the American Indian Council of Mariposa County, 36 p.
4. Kuykendall, R. S., 2011. Early history of Yosemite Valley: the masterpiece of nature's handiwork: http://www.nps.gov/history/history/online_books/yose/kuykendall/sec.htm (accessed November 2013).
5. Perrotet, T. 2008. John Muir's Yosemite: The father of the conservation movement found his calling on a visit to the California wilderness: Smithsonian Magazine, v. 39, i. 4 (in press).
6. Museum Exhibits, 2013. National Park Service: Yosemite National Park California: <http://www.nps.gov/yose/historyculture/museum-exhibit.htm> (accessed November 2013).
7. Smith, D. A., 1975. California and the Indian Wars: The Mariposa War: <http://www.militarymuseum.org/Mariposa1.html> (accessed November 2013).
8. Taylor, H. J., 1936. Yosemite Indians and Other Sketches: http://www.yosemite.ca.us/library/yosemite_indians_and_other_sketches/james_hutchings.html (accessed November 2013).
9. Tree Species Encyclopedia. (2014, January 1). Sierra Pacific Industries - Growing Forests for Our Future. Retrieved April 21, 2014, from http://www.spi-ind.com/forests_species.aspx
10. Yosemite Act, 1864. America's National Park System: http://www.cr.nps.gov/history/online_books/anps/anps_toc.htm (accessed November 2013).

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