



A Look at History Through the Eyes of Science

by Sabrina Carlson

On October 12, 2016 the 40 students of Ms. Chapman and Mr. Ross's 5th grade class from Flagstaff Junior Academy made a visit to the unique cliff dwellings of Walnut Canyon National Monument.

We began our visit with a talk from a ranger who told us some history of the area, its inhabitants, and why the creek no longer flows through the bottom of the canyon. This last fact was new information for me! Lake Mary, the manmade reservoir for the City of Flagstaff, dams upstream of Walnut Canyon. The water that once would have flowed through the canyon is now a major source of reliable water for city residents. Interesting to consider how the same creek that nurtured the people of these pueblos is still a crucial resource for the people of the area today.

After a peek at the demonstration garden on the Rim Trail, and a pit house that fell out of use before the construction of the cliff dwellings, we all relaxed to enjoy an early lunch. With bellies full, we divided into three groups. Each group would make a loop around the Island Trail looking for things that are slightly different each time. Our overarching goal was to observe ways that the Ancestral Puebloans adapted to their environment, and ways that they adapted the environment to them.



Using dichotomous keys to identify a plant.

My focus was noticing the impact that aspect has on plant species and temperature. Walnut Canyon is an ideal place to observe this. Even from the rim, you can look out and see thick, dark green Douglas fir, ponderosa pine, and vibrant moss on one side of the canyon, and dry sparse yucca, piñon, and fern bush on the other. We learned to use a dichotomous key to identify many of the plants in the monument, and noticed the striking difference in plant life as we encircled the island.



Inspecting a ruin up close.

We supposed that all this diversity of plant life would have been an advantage to the residents of the canyon. More food variety and materials for making everyday tools and supplies.

Mr. Ross's group took their turn around the Island Trail looking at the physical artifacts left behind by the Puebloan people. They took note of the use of existing walls for structure, thought about the natural materials used in construction, and considered how aspect might have played a role in the choice of different rooms for different purposes. One issue they discussed was how much more challenging it would have been to get water

than it is for us today. Though the stream was just below them, they would have had to climb down from the cliffs daily to collect this precious resource and haul it back up to their precariously perched homes.

Mrs. Chapman taught the students how to look for birds. They learned about important identifying features of bird bodies and bird calls. They learned about the incredible diversity of bird species at Walnut Canyon and how they too are drawn by the large variety of plants to use for food and shelter.

Before we left, we spent a few minutes exploring the exhibits inside and looking for answers to a scavenger hunt we had designed beforehand. Looking over the notes the students took, they all seemed to get a better understanding of the area and how attractive this place would have been to the Ancestral Puebloan people so long ago.



Reading about the snowberry, and its traditional use as an emetic.



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