

WATER

Mesa Verde National Park

Drinking Water

Staying hydrated is important to a healthy body and mind. Rules of thumb: drink your weight in ounces, and a gallon a day during hot months. Drinking water helps to flush toxins out of the body, it creates energy (remember H₂O, that O is oxygen and more oxygen gives you more energy), it helps regulate blood pressure, keeps regular BMs, treats and prevents headaches, and makes you feel better, improving your mood and so much more.

Eating Water Foods

Eating food with water helps keeping you hydrated longer:

Watermelon. **Water** content: 92% ... Strawberries. **Water** content: 91% ... Cantaloupe. **Water** content: 90% ... Peaches. **Water** content: 89% ... Oranges. **Water** content: 88% ... Cucumber. **Water** content: 95% ... Lettuce. **Water** content: 96%... Broths and Soups with clear broth and veggies will help you regenerate while you sleep!



Water is Life

A very spectacular thing happened just a few days ago while we were at Mug House, a storm moved over the dry desert as sheets of raindrops mixed with hail, water spirits moving down the canyon. We heard the thunder hiking to the reservoir nearby, and then once we arrived were pelted with rain and hail, but we were all smiles getting soaked! As we looked up at the drip edge of the cliff, where water had stained this very spot for thousands of years, the surface collected the rainfall and sent it over the edge at this drip spot, one drop that turned into a stream of water. As we watched its slow journey down the rock, there was a cheer when it arrived at the reservoir where we were standing. And for a moment, I think we were all taken back to the lives on the mesa





Platypedia spp.

Stopping to check out the trees south side of the Tunnel, I wanted to identify what I later found out was a Chokeberry. Serendipity, sitting on the limb was the cicada known as *Platypedia*. One of 20+ species, this one is often found at Mesa Verde. It is black, with orange/red eyes. The sound it makes are clicks instead of buzzing, but get enough together they will make quite a ruckus.

These cicada a periodic 2-5 years and are very different from the Broods emerging in the eastern United States. This year Brood X, part of the 13-17 year emergence are set on a time schedule that came from their ancestors during glacial cycles of 17 year intervals. Interesting how those cycles are still there.

The periodic cicadas depend on rainfall. And when there is significant enough rainfall, the cicadas emerge! When the rain sinks into the soil, the trees soak up the water in their xylem, and these underground nymphs get their trigger to emerge and climb up the tree. Amazing how rainfall, once again sends a signal to life to celebrate!

Let's Calculate that Water....

Thinking about reservoirs, cisterns, bowls, gourds, all ways to contain, collect and carry water all come from things that were made or grown at Mesa Verde. But first the rainfall landed on a surface, either rock or soil. For the plants and trees the soil soaks up the rainfall and stores the moisture within its xylem. Which is one of the reasons insects try to bore into the bark of trees, underlying that is the rich sap that they wish for! The rock surfaces are great collectors of water, to direct, divert, and manage the flow we can look upon the horizon and find these bits of architecture. As we were standing at the cliff edge with the water stream flowing downward to the collection basin, I mind measured the needs of this cliff dwelling. If 100 people were living in the community, they would all need 1 gallon of water a day at least, just to drink, not including cooking, cleaning, growing food etc. Therefore the community needed 100 gallons a day. The basin roughly 10 x 30 feet long and 6' deep would hold 12,600 gallons of water (sf x depth x 7gal/cf). That would be 126 days of water for that community. Of course rain comes in all forms, some of it never lands, some is hail, some snow, some

pours and runs away faster than it can be collected.



If an area above the cliff, let's say 100' squared collected the potential of 1.5 feet of rain a year, then that area could collect 105,000 gallons a year! Makes one think that the surface was actually more important than the slow seeping of water down below.

In June the rainfall charts say only 1/2 inch of rain, so the basins would be critical, in August there are more storms and it rains 2 inches. The planners and builders of Mesa Verde were great ecologists and every day we get to work in this place, every time we raise our bottle of water to take a drink, can we imagine that life still existing here, still seeping, still running, still nourishing the land all of this was built upon.

What a great event to be caught in a rain storm, would it not be a celebration?