

Keeping With Tradition

by Michael Kotutwa Johnson



Traditional Hopi home built by hand with some modern upgrades (Photograph by Michael Johnson).

My name is Michael Kotutwa Johnson from the Hopi Reservation in Northern Arizona. I am currently a PhD Candidate in University of Arizona's School of Natural Resources and the Environment. My dissertation focuses on a federal conservation

Department of Agriculture's (USDA) Natural Resource Conservation Service (NRCS) before I decided to return to school to work towards my doctorate. I hope to be done by the Spring of 2017. Although I am viewed as an academic because of my educational endeavors, I am also a Hopi dryland farmer who grows crops with no irrigation in an area that receives only 6-10 inches of precipitation per year. I have also built a house modeled after how my ancestors built homes using natural materials such as sandstone, clay, and whitewash. What I have learned while on my pursuits of Hopi agriculture and housebuilding is a deep respect for the land we Hopi are a part of. Some

and tended to our various plants (corn, melon, squash, and beans). In a lot of ways, my grandfather's field was like a classroom where I learned science but did not even know it till many years later. Western concepts or nomenclature dots



Corn field (Photograph by Michael Johnson).

program called the Environmental Quality Incentives Program (EQIP) on the Hopi Reservation. I used to be the Hopi District Conservationist for United States

people call this "stewardship" I just call it a "way of life." As a young boy, my father would drop me off at my grandfather's house during the summer where I was taken to the field. I basically hoed weeds



A variety of dried Hopi corn (Photograph by Michael Johnson).

the scientific vocabulary we learn in grade school onward.

Today, I find that I have learned science based on my own practices in my field and during the construction of my house. Some may call this “primitive science” but I call it “navoti” the Hopi word for knowledge. I have and continue to give lectures at school to the various departments around campus just to show them a different perspective on how we look at conservation and sustainability. While doing my research I found this quote from a fellow Hopi farmer, “We look at conservation from the point of view of caring for a relative and not from a scientific point of view of conserving a natural resource.” If you were to really think deeply about that you may or may not come to understand the deep reverence and respect, we have for the land that sustains us. Recently, I saw a brief model in the inaugural volume of Indigenous Stewards and the importance of land, food, air, and water from a holistic perspective for good health. However, what was missing I contend was spirituality. I have found that science frowns on any mention of spirituality because it cannot be

proven. However, if you were to come and look at my cornfield and subsequent harvests within the context of the semi-arid environment I am a part of, you might just wonder how I and many other Hopi can be so successful in their agricultural pursuits without the aspect spirituality. More of my time and also part of the focus of my dissertation work looks at demonstrating the validity of what we do traditionally to conserve natural resources such as soil and water management. The biggest difference in our approach to conservation is we use what is given to us by the environment and not pulled from a NRCS Field Office Technical Guide (FOTG). For example, if you look at the picture with the corn plant you will notice new soil surrounding the plant. The new soil was brought in by planting in an area where water and soil runoff flows into my fields in both a natural process and also guided by manmade check dams. We have



*Michael standing in front of his corn field
(Photograph by Michael Johnson).*

been doing this type of soil and water management since time immemorial. We do not use any engineering specs or western derived technical assistance we just simply observe the patterns of water run-off after a monsoon rain occurs and plan accordingly. Crop rotation and cover crops are absent from what we do because as previously stated “we simply just use what the environment gives us and adapt.” At Hopi corn is raised to fit the environment unlike western based agriculture where the environment is manipulated to fit the corn. I someday would like to turn my house into an educational learning center where people can come, especially our Hopi children, and learn things like Hopi agricultural and house building. In the meantime, I am continuing my quest in obtaining my PhD in the School of Natural Resources and the Environment so I may continue to help those people who may need me and those who may not. My father once told me that the more education you have the more responsibility you will have to help people. In a way it’s like the term so often used, “paying it forward.”



*Monsoons dump water in the desert on the Hopi Reservation nourishing the fields with water
(Photograph by Michael Johnson).*