

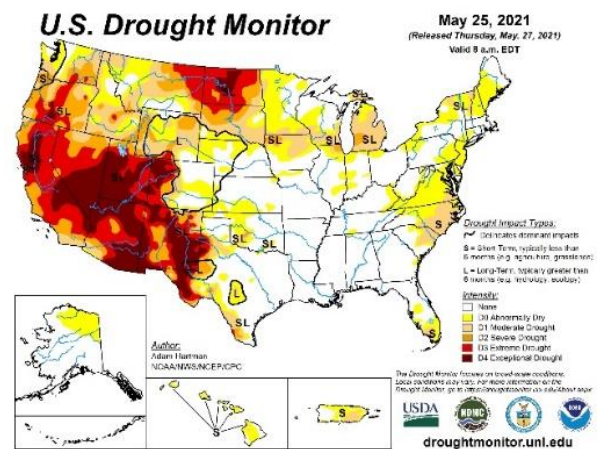
The Art of Urban Farming as an Inalienable Right

By Darryl Cotton

When I first started urban farming in early 2010, it was meant as a way for me to better understand how I could grow my own medical cannabis which I require to treat my nocturnal seizures. At the time medical cannabis was legal in California under a doctor's recommendation. I knew that there were certain cannabis strains that tended to help my condition better than even pharmaceutical prescriptions. The problem I had was that these strains were not the high TCH psychoactive strains that most consumers wanted as a head high. I required the broader spectrum, lower THC strains which were effective in preventing my seizures. That meant that for me to have steady supply of those less commercially popular strains, I would have to grow them myself.

Living in the inner city and in a region where not only cannabis cultivation is strictly controlled but in a virtual desert a concern was having enough water to grow these crops. That meant I would have to engage in techniques that would not put me at odds with the law but would serve to be an environmentally responsible method of growing that conserved on water use and did not pollute downstream aquifers with any of the nutrients, pesticides or fungicides that, in volume, upset our natural ecosystems. I also believed that given I am certainly not the only one faced with these medical issues maybe my methods would appeal to a larger audience and instill a new sense of discovery when it comes to what we, as a community can do when we envision urban farming as a community commodity. One where Agri centric skillsets are desired and nurtured. It is from these precepts my story begins.

We currently have a epic water availability crisis occurring in over one half of the United States. The US Drought Map lists mostly the Southwestern States as falling between the D2-Severe to D4-Exceptional drought levels. These drought conditions represent a very real problem as it takes water to do just about everything that affects our lives. From the water we drink to the food we eat and all sorts of industries that rely on water to produce the goods we pretty much take for granted in our everyday lives, it takes water to live our lives. This realization is what made me reevaluate the way we grow our crops in soil. It made me question if the cultivation methods we have come to rely on for generations of farmers was the best use of our resources. And those resources are not only going to consider the water conservation but the fact that our food is often grown hundreds of miles from where it will be consumed. Perhaps it was time to revisit the entire Farm to Fork concept of how we are fed.



Water rights is not a new issue in our country. In areas like the Owens Valley, Native American tribes such as the Paiute have found that when they sold their water rights to the Los Angeles Water District back in the 1930's, the impact that their Big Pine reservation would undergo meant that the water they had relied on for generations would be taken in its entirety to feed a city that had limited water sources of their own to sustain ever expanding population. As a result of those agreements, much of the Big Pine reservation is now unfarmable as today it consists of mostly sage brush. To say that lack of water has impacted their quality of life would be a massive understatement and one that justice requires be remedied.



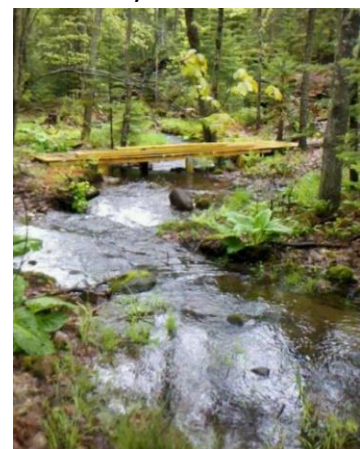
When it comes to water rights how do we right the wrongs of prior generations water rights decisions and conserve this precious resource to that we don't all suffer as a result of their not being enough water where it is needed? For that answer we have to look back some 6,000 years to the Egyptians and how they engineered agricultural water systems that allowed them to survive in the desert. The ancient Egyptians were masters at moving water in the desert and their designs were part of my inspiration as they managed to conserve water from evaporative losses and helped in the design that allowed me to



grow food and medicine in a soilless, rock media that relies on fish providing the nutrients to the plants in a constant flow of water that does not suffer from the evaporative losses other types of cultivation suffer from. It also relies on the symbiotic relationship that our fish must have with out plants for them both to thrive.

These systems are not new. They are known as aquaponic systems with the science of aquaculture

being well established. What makes our system unique is what we do with that water. We call it 151 Rock Farming and that is a new way of uniting our fish, water and plant systems in a method that can be used virtually anywhere. In a method that could indeed correct the past wrongs that our Native American brothers and sisters have suffered when it came to unjust water rights and law that deprived them of their very existence. We can and must correct that so that all oppressed members of our communities might take advantage of the economic opportunities that come from having a say in controlling their own destiny. A destiny that begins with water rights and continues on to address food quality, homelessness, jobs and social equity opportunities within our communities. his article will not go into the myriad of design elements that make this system work. That can all be seen on our website. But what I can tell you here is that we refer to this 151 Rock Farm systems design to be like "Bringing a River to Your Roots". Additionally, I can tell you that our design utilizes less than 5% of the water when compared to traditional soils crop cultivation techniques. The plants only uptake the water they need to grow. The rest of the water stays in the system as a closed loop that continuously recirculates water between the plants and the fish. Our



151 Rock Farms are modular and expandable. They may be used in a simple residential or in larger commercial farming applications. Lastly, we have a working farm located in San Diego where you can see these farms in action. While we welcome end users, we also encourage non-profit (501C3) and licensed contractors to come visit us and learn about our in-stock products or need help on designs for those larger commercial projects to meet your specific needs.

To learn more please visit us @
151Farmers.org and our [151 Farmers Facebook and Galleries](#)

To see referenced links from this article go to:
[REUTERS: Native American Tribes Fear a Parched Future](#)
[US Drought Map](#)
[151 Farms: "We Bring a River to Your Roots"](#)

***151 Farms We Really Are
Changing the World One Garden at a Time!***

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