



## MOAB BEE INSPIRED GARDENS:

A collaborative community movement

Moab is located in the heart of the Colorado Plateau. Ecologically, the Colorado Plateau is a rich and unique ecosystem, supporting one of the highest levels of endemism (species that are only found in this area) in the U.S. Ten percent of the plant species found in the Colorado Plateau are found only in this region. The uniqueness of our geography, combined with the fact that Utah as a whole is home to approximately 900 native bee species as well as the European Honeybee provides the conditions for an extensive ecological diversity. Yet do landscapes within Moab currently reflect this diversity?

The Utah Division of Water Resources lists our state as the second driest but we are also the highest water users in the nation. Much of our municipal water is used to irrigate non-native, water-demanding turf grass lawns. In addition to

water-inefficient landscapes, landscaping is often designed in a way that treats rainfall as a problem to be diverted while relying on piped culinary municipal water for landscaping.



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According to Eric Johanson, City of Moab Engineer, “once rainfall hits the ground, most of it gets lost.” Meaning that, in this arid desert, we let most of our annual rainfall wash away. How much rainfall actually falls in Moab and how does that compare to what the average Moab household uses? According to U.S. Climate data, Moab’s average annual precipitation is 9.49 inches. The U.S. Census Bureau’s 2012 population for Moab was 5,093, and total surface area within city limits is 3,049 acres. If we take our average annual precipitation and convert that into gallons per acre, we get 257,694 gallons per acre, per year (1 inch rain equals approximately 27,154 gallons). So, the average annual precipitation falling on the surface area of Moab is 785,709,942 gallons.

In 2013, average household water use in Moab was 185,000 gallons. With an average of 2.43 people per household, this translates to 76,132 gallons per person, per year or about 209 gallons per person per day. If we divide the average annual precipitation falling on the surface area of Moab by the population, we can see that our rainfall within city limits could provide 154,273 gallons per resident per year, or 423 gallons per resident per day. **This means that our annual precipitation is more than double that of the average resident’s daily use in Moab.** Imagine what the benefits of using this “extra” water and changing our behavior could mean! What we realize in these numbers is the reality of our resources and the disadvantage of mismanagement. What does it take to better manage water (and rainfall) as a resource? Simple shifts in basic infrastructure.

Although Moab shows strong support for local food systems through the Moab Farmers’ Market, the Moonflower Cooperative, and surrounding farms, we import almost all of the food consumed here. Given that the closest city is Grand Junction (113 miles away) and the food distribution center in Utah is Salt Lake (234 miles away), any food we grow within our town and do not need to import results in a large food mile reduction (food miles are the associated carbon footprint when food is transported over long distances).

Because of our unique geography and involved community, Moab community members wondered if Moab could serve as a hub of water-wise, pollinator friendly, perennial, edible and native public gardens. These gardens and educational workshops could inspire the community to practice similar techniques at the household level.

As a result, in 2014, the Bureau of Land Management, City of Moab, Community Rebuilds, Grand County Conservation District, Moab Charter School, MoaBees Beekeepers, USDA Natural Resources Conservation Service, USU Extension Sustainability, Wildland Scapes, and Youth Garden Project came together to address these issues. We named our group Moab Bee Inspired Gardens and began brainstorming plans to amplify Moab’s diversity.





The mission of Moab's Bee Inspired Gardens is "To inspire locals and visitors using gardens, workshops and classes in a way that demonstrates and supports efforts toward pollinator health, community food systems, water conservation and an economy that provides for our people and benefits our ecology."



Bee Inspired Gardens are popping up in and around Moab. Locations include Youth Garden Project, USU Moab, Rotary Park, Community Rebuilds Intern Campus, Moab Charter School, Canyonlands Field Institute Professor Valley Field Camp, Aarchway Inn, and Goose Island. Each garden provides three key habitat needs of bees, including:

- Flowers that bloom in succession from spring to Fall, to provide pollen and nectar all season long.
- Nesting sites, including bare ground, twigs, dead wood, brush piles, rock piles, bunch grasses, etc.
- Protection from pesticides.



The gardens are complemented by community educational workshops, in which residents and visitors alike learn specific techniques tied to the concepts of water conservation, community food systems, and pollinator health. The ultimate vision is to create a connected walking corridor for tourists and locals alike to learn about beautiful, functional, and ecological landscaping in the desert.

For more information about workshops or how to get involved, visit [beeinspired.usu.edu](http://beeinspired.usu.edu) or contact:

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Community Rebuilds  
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Youth Garden Project  
Natural Resources Conservation Service  
MoaBees Beekeeping Group  
Grand County Conservation District