

# Introduction



How to effectively create a garden in a desert climate



By Hailey Smith

# Why is it a problem?

There is a lack of education on how to be self-reliant with food, especially in drier regions

There is no haste to be sustainable because of the convenience of grocery stores

Creating a garden in a desert climate can be intimidating

# How can I reduce heat stress on the vegetables in my garden?

- 1) Postpone transplanting young plants until there are cooler temperatures
- 2) Provide shade for the plants so they are not continuously in direct sunlight
- 3) Wait to fertilize plants until the temperature is cooler, otherwise new growth might not grow well
- 4) Watch for signs of heat stress (dry leaf edges, premature flowering, and hardened, discolored, sunken spots on vegetables)
- 5) Do not prune during extreme heat, this can weaken the plant and make them more susceptible to pests

# How can I effectively water in a dry climate?

- 1) Create a water drip at the roots of the plant, since that is where the uptake happens. This reduces waste from evaporation and wind.
- 2) Incorporate mulch – it creates a barrier that locks in moisture so the plants stay hydrated for longer periods of time
- 3) Collect rainwater. Utahns can keep two 100 gallon water drums without having to register it with the state
- 4) Reserve an area for your vegetables away from plants that may compete for water
- 5) Remove weeds from the root so they do not absorb all the water the vegetables need

# Gospel Connection

Ecclesiastes 3:1-3 teaches us that “To every thing there is a season, and a time to every purpose under the heaven: a time to be born, and a time to die; a time to plant, and a time to pluck up that which is planted, a time to kill, and a time to heal; a time to break down, and a time to build up...”

Much of being a wise steward of our resources comes through timing and preparation.

# My Project Plan

- 1) Begin composting foods
- 2) Design the garden, find a good location
- 3) Clean away debris from my chosen garden area
- 4) Build a garden bed
- 5) Place a topper, such as mulch or leaves, over the garden bed

I was inspired by this garden:





# Key Steps

This was my chosen location. I researched vegetables that would work well in direct sunlight in an area that would not be disturbed



I added compost so it could decompose and release nutrients over the winter



Finally, I covered my garden with a couple inches of mulch to contain nutrients and prevent weeds from sprouting in the spring



# Reflection

I learned that creating a sustainable garden in a desert climate is not as difficult as it seems

There are several ways to be good stewards of our resources. These include:

Appropriately timing when we do things

Being efficient in how we use what we are given

Acting upon the blessings we are given

Being willing to adapt to challenges as they arise



# Next Steps

In the future, I want to expand my garden to include different vegetables and begin planting and maintaining fruit trees, too.

In order to efficiently do this I will need to learn how to collect and store larger amounts of water

I will also need to learn how to more easily transport water from rain barrels to my garden

# References

Gospel connections:

<https://www.churchofjesuschrist.org/study/scriptures/ot/eccl/3?lang=eng>

How to reduce heat stress on plants:

[§https://extension.oregonstate.edu/gardening/flowers-shrubs-trees/heat-wave-garden-how-identify-prevent-heat-stress-plants](https://extension.oregonstate.edu/gardening/flowers-shrubs-trees/heat-wave-garden-how-identify-prevent-heat-stress-plants)

How to effectively water plants:

[§https://water.utah.gov/sprouting-sustainability-part-2/](https://water.utah.gov/sprouting-sustainability-part-2/)