

How to Plan Your Garden In Your Local Climate? /Tome Shaaltiel

Before starting to grow your garden, to figure out what types of plants to grow, first figure out what the local climate is. Every location in the world has a different type of climate, with that a different type of vegetation. A plant growing in one kind of climate, won't necessarily survive in another.

Sometimes farmers will go out of their way to create a customized environment for their crops, so specific plants can grow outside of their optimal climate. A greenhouse is a great example for that. Climate affects not just the growth of a plant but also the work of the caretaker. Farmers go to their field in all sorts of weather conditions to be able to take care of their crops and grow food for their communities.

I would like to share with you my process of planning a garden and what tools I used to plan the garden I take care of at Pearlstone.

What is climate?

To understand what your local climate is, first you must understand what climate is in general. According to Collins Dictionary, the definition of *climate* is: "the prevailing or average weather conditions of a place, as determined by the temperature and meteorological changes over a period of years". There are different types of climates on Earth, and each is measured by their distance to the equator. The closer to the equator, the warmer it is:

1. Tropical (humid and hot- closest to the equator)
2. Dry (hot and dry during the day and cold at night, like a desert)
3. Temperate (warm and humid summers, mild winters)
4. Continental (warm to cool summers, cold winters)
5. Polar (extreme cold, like the arctics).

For example, Pearlstone is in Reisterstown, Maryland, USA which is considered a temperate climate zone. To learn more about the Koppen climate zones [follow this link](#).

Plant Hardiness Zones in the U.S.A

United States Department of Agriculture (USDA) divided the country into different plant hardiness zones and created a [map](#) where gardeners and farmers use to find out which plants can grow best in their local region. The map is based on the average annual minimum winter temperature, divided into 10-degree Fahrenheit zones. The map was last updated in 2012. This tool can help you start understanding what kinds of plants you can grow in your location, when to grow them and how often. You can either search your hardiness zone by state or for more accuracy, by zip code. For example, Pearlstone is in Reisterstown, MD which is [plant hardiness zone 7a](#) according to the map above.

Planting Schedule

Each plant is profoundly different from the other by characteristics, family relation and because of that each plant has different needs: full sun exposure, shade, large amount of water or barely any at all, acidic or alkali soil, planted with specific kinds of plants or pollinators, and all those aspects are affected by ones climate. Thanks to many experienced farmers and gardeners, over the years they have compiled resource sheets that provide that kind of information for each commonly grown plant.

Once you know your plant hardiness zone, the next step is planning a planting schedule. Urban Farmer Seeds have a great planting guide to help you find out how to do that. They explain [how to use the hardiness zones map](#), share a [planting schedule guide based on your particular zone](#), which is based on your [frost dates](#), and even go into detail providing [customized garden planting guides](#) for growing many varieties of flowers, vegetables, fruit and herbs. For example, Pearlstone would use this [planting schedule](#) according to zone 7. Also the University of Maryland cooperative Extension created in 2010 a [vegetable planting calendar for central Maryland](#).

Other ways to determine how to plan a planting schedule is according to a [biodynamic calendar](#). A gardening planner based on the phases of the moon, the lunar cycle, such as: waxing, waning, full moon, new moon, etc. Farmers and gardeners who rely on a biodynamic growing system choose to grow in a sustainable, holistic approach that includes: organic, locally sourced plants and fertilizers (added nutrients to the soil for its conditions improvement) and views the farm as a closed, bio-diverse ecosystem. The biodynamic calendar shows you when to plant or harvest crops that are fruit bearing plants, root plants, leaf plants or flower plants, meaning plants you are growing for those specific parts of the plant. For example, carrot is a root plant. [The Biodynamic Association](#) has a great amount of accurate information about this. Astro-Seek is a good example for a biodynamic calendar guide, for example this is the [planting schedule](#) for the month of April 2020.

Similarly, the [Jewish calendar](#) is based on the moon cycle, each month beginning with the new moon, Rosh Chodesh, and the middle of the month is aligned with the full moon. An example of weaving the Jewish calendar into your garden is Pearlstone's calendar garden which is designed with 12 raised garden beds placed in a circle, each representing a Hebrew month. The idea originated in 2007 by a summer fellow Rebecca Lemus who was working at the time on the farm with Jakir Manela, who is now Pearlstone's CEO and in 2010, Kayam hero-carpenter Howard Farber built the first version of it. Today I am responsible of caretaking for the calendar garden, planting in each garden bed plants that will grow best in the month in which they are planted. The Jewish growing calendar is based on ancient laws in Jewish traditional agriculture, most of these laws are written in a book called the Mishnah. The Mishnah is an edited record of the complex body of material known as oral Torah that was transmitted in the aftermath of the destruction of the Second Temple in 70 CE. For example, one law is called Orla, where you wait three years from the time the fruit tree was planted in the ground to the time of harvesting the fruit. Pearlstone has created a curriculum guide for a Jewish calendar garden if you want to teach others about it.

The Old Farmer's Almanac shares both the planting schedule based on frost dates and moon dates. For example, Pearlstone would use this [planting schedule](#) according to its location.

How climate change affects this process?

We are currently at a time when climate is in a constant change, and that creates a massive challenge for agriculture. NASA describes [Climate change](#) simply as a change in the average conditions — such as temperature and precipitation — in a region over a long period of time. [Here](#) is a 60 second explanation to the causes of climate change. Some places around the world have been suffering from major natural disasters in the past few years that affected their growing calendars, some places have been experiencing drastic changes in

temperature, which changes the first and last frost dates of the year. We must be more flexible and aware of what is happening around us. This calls out to grow community as well as food. It is helpful to talk to local farmers or neighbor gardeners to hear from them what plants they planted that thrived, they will have the closest experience to you.

Climate Analogue

One way to learn from each other is get to know other places around the globe that have a similar climate to yours. The research program on Climate Change, Agriculture and Food has created a [Climate analogue tool](#) that finds parallel climates on Earth. This way food growers can share farming methods that worked well in another country with the same climate. In addition, University of Oregon created their own [climate analogue tool](#) sharing a step-by-step recipe of how to find your climate analogue.

These are just a few examples of resources that exist to support those of you who want to start growing your own food. There are many people out there who care for us and have made their life's work to do just that. I appreciate them all.