Review: Last week we learned about different ways of gardening. This week we are going to learn about the differences between annuals and perennials and which ones do best in the unique climate of Iowa.

Annual: An annual is a plant that completes its full life cycle from germination to production of seeds within one growing season. In Iowa, a large portion of vegetable garden and decorative plants are grown as annuals because of Iowa’s extreme climate. Common examples are tomatoes, basil, peppers, squash, beans, spinach, lettuce, and cucumbers.

Tomatoes are a great example of a perennial plant usually grown as an annual in Iowa. In the Andes of South America where tomatoes originate, they grow as wild perennials. If you wanted to experiment with growing a tomato as a perennial in Iowa here are a few options.

1. Grow it in a container that you can move into a greenhouse or space that stays over 50 degrees Fahrenheit year-round.
2. To create a tomato clone, in the late fall before frost you can take 10” cuttings of suckers from your tomatoes in the garden. Remove the bottom leaves and place the cuttings into water. Put them inside your house in a sunny spot or under grow lights. When the cuttings have roots over 1-inch long you can pot them in soil and grow indoors until the last frost of spring.
3. Not technically a perennial tomato, but I find great joy in discovering volunteer tomato plants in the garden usually planted by chipmunks in my yard. It is always a mystery as to what variety they will be and what location they will pop up. I think of them as a bonus and always chuckle at the strange locations they end up growing.

A few important considerations if you want to experiment with growing perennial tomatoes. Variety is important and hybrids will generally have better resistance to pests and disease. Indeterminate tomatoes work better as perennials as the vine will continue to grow during the plant’s entire life. Determinate tomatoes generally referred to as bush tomatoes because they have limited growth, do not work as well.
**Perennial:** The simple definition of a perennial plant is a plant that lives more than two seasons. Some common edible perennials in Iowa are asparagus, rhubarb, grapes, strawberries, blueberries, raspberries, and other fruits. A large variety of herbs like chives, thyme, and sage are also perennials.

There are some benefits of perennial plants. They require much less work since you do not have to plant them every year. They can require less watering once established and provide large harvests as they grow in size over time. They can help to build soil health since you do not have to dig. Some challenges are that you have to select their location wisely since you only plant them once. Consider placing them at the edges or ends of your garden. They may get quite large over the years so make sure you give them space to grow. They may take a few years to become established and produce a harvest.

**Biennial:** A biennial is a plant that requires two years to complete its life cycle. Examples include garlic, onions, carrots, swiss chard, beets, and cole crops like brussels sprouts and kale. Many of these are tougher and more bitter the second year so are grown as annuals unless you are growing them to save seeds.

Garlic is a biennial that can be grown like a perennial as the new cloves will grow each year. One of my favorite early summer garden foods is the garlic scape, the flower stalk of the garlic. They can be diced and sautéed, pickled, or made into pesto. The garlic bulbs can be planted in the fall or spring and once a garden plot of garlic is established can be transplanted, harvested, and left for years to come.

My partner and I did a test this year in our personal garden with kale. We harvested the kale late last fall and left the plants roots in the ground. In early spring the kale regrew new leaves and by April 6 we were harvesting large tasty kale leaves for an early spring salad, delicious! If you are like us, we can’t wait for that first garden-fresh meal after a long winter.

There are so many annuals and perennials, there is not enough room to mention them all here, especially in the realm of flowering and pollinator plants. I encourage each of you to keep exploring, keep experimenting, and keep creating new varieties of fruits and vegetables to share with future generations. Many of the varieties we take for granted today have been developed over many millennia by the ancestors before us. It is a collaborative process of selection and breeding, and it is so important that we each do our part to make it diverse and genetically rich. Who knows, you might be the one that develops a bountiful perennial corn with deep strong roots protecting rich soil and that saves us the time needed to plant and the money necessary to buy seed annually. Or maybe you will rediscover a delicious fruit or vegetable variety that has been passed down from generation to generation. Only the future will tell but know that you are part of the equation!

**RESOURCES**

Suggested Vegetable Varieties for the Home Garden: [https://store.extension.iastate.edu/product/3980](https://store.extension.iastate.edu/product/3980)
Growing Annuals in Containers: [https://store.extension.iastate.edu/product/5707](https://store.extension.iastate.edu/product/5707)
Tomatoes: [https://store.extension.iastate.edu/product/3981](https://store.extension.iastate.edu/product/3981)
Growing and Using Basil: [https://store.extension.iastate.edu/product/5744](https://store.extension.iastate.edu/product/5744)
Peppers: [https://store.extension.iastate.edu/product/5479](https://store.extension.iastate.edu/product/5479)
Growing Grapes in the Home Garden: [https://store.extension.iastate.edu/product/5251](https://store.extension.iastate.edu/product/5251)
Asparagus in the Home Garden: [https://store.extension.iastate.edu/product/4320](https://store.extension.iastate.edu/product/4320)
Rhubarb in the Home Garden: [https://store.extension.iastate.edu/product/4059](https://store.extension.iastate.edu/product/4059)
Growing Strawberries in the Home Garden: [https://store.extension.iastate.edu/product/4057](https://store.extension.iastate.edu/product/4057)
Growing Blueberries in Iowa: [https://store.extension.iastate.edu/product/5735](https://store.extension.iastate.edu/product/5735)
Growing Raspberries in the Home Garden: [https://store.extension.iastate.edu/product/5250](https://store.extension.iastate.edu/product/5250)
Growing Fruit in Iowa: [https://store.extension.iastate.edu/product/5354](https://store.extension.iastate.edu/product/5354)
Garlic: [https://store.extension.iastate.edu/product/5490](https://store.extension.iastate.edu/product/5490)
Onions: [https://store.extension.iastate.edu/product/5481](https://store.extension.iastate.edu/product/5481)
Cole Crops: [https://store.extension.iastate.edu/product/5494](https://store.extension.iastate.edu/product/5494)