# Four Basic Veggie Categories & When It's Safe to Plant Them



Flowers are blooming, the sun is shining and temperatures are rising. Spring is in the air! But don't let that fool you, frost can still happen. Read on for ways to know when it's okay to get your garden planted so you can avoid the frosty pitfalls.

### Spring has sprung, but frost still likely!

Determining when to plant a garden can be especially confusing in Utah's unpredictable, varied climate where last-frost dates can vary by many days within just a few miles. Many experienced gardeners have planted and later lost their plants to frost.

An example of how fickle Utah's climate can be is in Cache Valley. Frost-free days vary from an average of 113 days in Lewiston and Trenton to 158 days on the USU campus. Similar examples are common around the state.

Geographic characteristics of where you live can help in determining when to plant. When a yard is located in a populated area or on a mountain bench, it usually has a longer growing season. Other areas located at slightly lower elevations where cold air drains and cannot escape have a shorter season. This is why local commercial orchards are generally located on benches. Additionally, urban and suburban areas are slightly warmer than surrounding areas due to the urban heat effect. Heat from buildings and warmth generated by sunlight reflected from roads and other surfaces increases temperatures and delays frost. It can be helpful to chat with a local farmer or experienced gardener in your area to determine what works for him or her regarding when to plant.

In addition to frost information, it is important to take into account the needs of the plants. Vegetables planted locally fall into four basic categories: hardy, semi-hardy, tender and very tender. Depending on which category a plant belongs to, planting dates vary from early spring until early summer. Consider the following:

- Hardy vegetables, including asparagus, broccoli, cabbage, onions, peas and spinach, can be planted as soon as the soil is workable in early spring. This usually ranges between 45 and 60 days before the average last frost. These same vegetables can be safely planted until the average last frost date.
- Semi-hardy plants, such as beets, carrots, lettuce and potatoes, can be planted one to two weeks after the hardy group. These can be planted until the average last-frost date.
- Tender vegetables, such as celery, cucumbers, corn and most beans, should be planted on the average last-frost

date.

• Very tender plants, such as squash, beans, melons, tomatoes, eggplants and peppers, should not be planted until at least a week after the average last frost. Even if frost does not occur before this time, these plants will not grow well and are more susceptible to disease until warmer weather.

If you have lost plants to frost, you are not alone, and all you can do is try again.

This article was written by Taun Beddes, Utah State University Extension horticulturist.

## 5 Easy Tips for Indoor Gardening



These tips will help you keep your gardening skills sharp all winter long!

#### Moving the Party Inside

Many people miss having fresh garden produce in the winter so much that they are willing to grow it indoors. This can be a little challenging, but having fresh tomatoes on a sandwich or fresh peas on a winter salad makes it worth the effort.

Growing plants in a greenhouse is an option for providing winter produce, but heating and lighting can be expensive. A more cost-effective method is to provide additional lighting and optimal temperatures and grow plants in the home. Consider these tips.

1) Location — West or south-facing windows provide sufficient light for many crops. Another option is to use inexpensive florescent lights placed approximately 6 inches from the plants. Incandescent bulbs should not be used since the wavelengths of the light they produce are not readily used by plants. Grow lights are an option, but they do not work any better than florescent bulbs and are more expensive.

- 2) Temperature A good temperature for most plants is around 70 F. Some gardeners have attempted to grow plants in an unheated garage during the winter with no success. This is not surprising since the garage acts as a natural refrigerator in the winter.
- **3) Soil** Potting soil works best for indoor growing and is available from many local retailers. Once plants have been growing for about a month, they often require fertilizer to keep them healthy. Mild, liquid houseplant formulations or slow-release granular products such as Osmocote™ are good choices.
- **4) Pests and disease** Monitor plants closely for insect pests and disease. When a plant appears to be infested, isolate it from the others to prevent further spread. Heavily infested plants should be thrown away.
- 5) Vegetable choices Lettuce, peas and many herbs generally do well when grown indoors. Dwarf varieties of peas or other crops are often preferred since regular varieties may grow too large for limited indoor spaces. Dwarf varieties can be found from seed companies online and sometimes from local retailers.

The USU Crop Physiology Lab has specifically researched growing crops in indoor spaces and has identified several "super dwarf" species that work well, including Early Green Pea and Microtina Tomato. These varieties and others have actually been grown aboard the International Space Station.

This article was written by Taun Beddes, Utah State University Extension horticulturist, 801-851-8460, taun.beddes@usu.edu

#### How to Harvest Onions



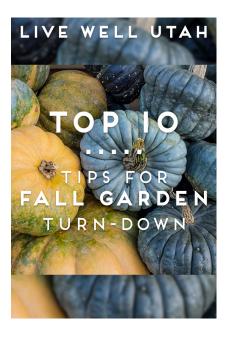
Do Onions Make You Cry? Not With These Harvesting Tips!

Do you have onions in your family garden? If so, Ron Patterson from USU Extension in Carbon County has some great tips on how to harvest onions the right way!

Harvesting your onions correctly will make them last longer and will significantly reduce their chance of getting a disease.



## Top 10 // Tips for Winterizing Your Garden



Follow these tips to winterize your garden!

#### Turn Down for What?

It has most definitely been a long and rewarding gardening season. Many delicious crops have been harvested and enjoyed.

However, this time of year gardeners are ready to be done pulling weeds, dealing with snails and other creepy crawlers and being heartbroken by crops that didn't turn out as expected.

Before you take a break from your garden however, make sure you leave it in a good place for the winter season. Although it seems like spring is in the extremely distant future, it

will come faster than expected! You will be grateful that you took these extra steps to properly turn-down your garden before the chill of winter takes over your yard.

Here are two tips for proper garden turn-down:

**Tip #5. Mulch tree leaves** and add to compost pile along with a couple cups of nitrogen fertilizer to speed up the composting rate.

**Tip #7. Plant perennials!** Visit your local nursery and save big on hardy perennial plants like thyme, sage and oregano. If you're feeling adventurous, try planting a rhubarb plant too!

For eight other wonderful, garden-saving tips, click here.

#### References:

The Organic Forecast

Fall Garden Checklist- Top 10

# Cooking In Season // Summer Squash



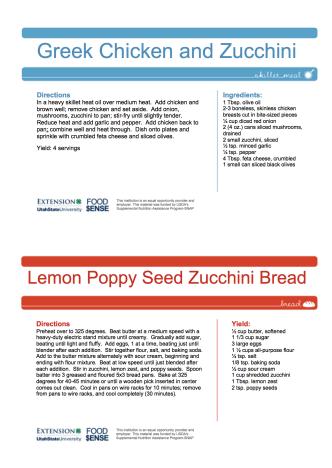
Learn how to prepare and enjoy summer squash this fall!

#### Don't Just Squish Your Summer Squash

This time of year is filled with crisp air, golden leaves and an abundance of summer squash floating throughout almost every kitchen.

With so many ways that it can be prepared, summer squash is one of the most versatile and nutritious foods you can get a hold of. These varieties of squash are a great addition to any soup or casserole as well as any sort of sweet bread.

Don't let your squash harvest go to waste! To help you get started, below is a recipe for a savory entree as well as a delicious sweet treat. For six other delicious recipes and even more info about how to enjoy your summer squash, click here. Happy squashing!

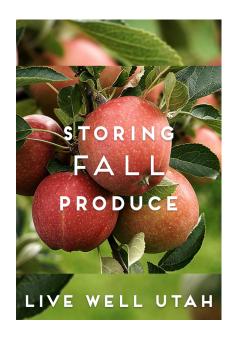


\*Click on each recipe for a printable version.

#### References:

Eat Well Utah
Cooking in Season // Summer Squash

#### Storing Fall Produce



Don't let your beautiful fall produce go to waste!

### Carrots, and Apples, and Onions! Oh, My!

Fall is a fabulous time to glean from the summer growing season some of the best produce, apples, pears, winter squash, root vegetables, and more.

Once harvested it is important to store these wonderful foods properly in order to maximize length of storage, nutrition, and freshness.

There are two important considerations for storage: humidity and temperature. Each food has its own 'best temperature and humidity' zone for optimum storage. These conditions may be controlled in a number of different storage spaces, but each have their advantages and disadvantages.

#### **Cool Basements**

While most basements average around 60°F it may not be the most ideal conditions for some types of food storage.

#### Refrigerator

This option is a great way to store small amounts of produce that require cold or cold and moist conditions.

#### **Root Cellars**

Root cellars are nice in areas that have cold winters where there is moisture as well, but are subject to rodents and inconvenient access during storms or lots of snow.

#### Mock Root Cellars

Mock root cellars are storage conditions designed or built specifically to take advantage of cold weather, but are safe from rodents and possible freezing. These can be old coolers buried in the ground, under a porch, or next to the house. Some have built specially designed boxes in breezeways, sheds, or in the garage.

Along with each of these options, it will be important to choose the packing options best suited for the produce and form of storage used. Packing options include straw, newspaper, clean sawdust, peat moss, or even clean dirt or sand.

Whether you are harvesting your own garden produce, or buying it locally in season, these few tips will be valuable to keep in mind:

- 1. Harvest produce as close to peak maturity as possible.
- 2. Use only the best produce for storage…free from bruises and blemishes.
- 3. Avoid any produce that has severe insect damage.
- 4. Leave as much of the stem on as possible…at least an inch or more on most veggies is best to reduce water loss and avoid infection.
- 5. Choose 'late maturing' varieties for storage.

The following chart may be helpful in determining the storage environment best for these foods.

PRODUCE	TEMPERTURE (°F)	HUMIDITY (%)	LENGTH OF
			STORAGE
Apples	32	90	2-6 months
Beets	32	95	3-5 months
Cabbage, late	32	95	3-4 months
Carrots	32	95	4-5 months
Cauliflower	32	95	2-4 weeks
Cucumbers	45-50	95	10-14 days
Garlic	32	65-70	6-7 months
Grapes	32	90	4-6 weeks
Green tomatoes	50-70	90	2-4 weeks
Hot peppers	50	60-65	6 months
Onions	32	65-70	6-7 months
Pears	32	95	2-7 months
Pumpkins	50-55	70-75	2-3 months
Potatoes, late	39	90	4-9 months
Sweet potatoes	55-60	80-85	4-6 months
Winter squash	50-55	50-60	2-6 months

\*One last note: Store fruits separate from vegetables. Fruits pick up the taste of other veggies and veggies will age faster from the ethylene gas produced from fruit.\*

#### References:

Isenberg, F. M. R. Storage of Home Grown Vegetables. Cornell University Department of Vegetable Crops, Master Gardener Reference.

Olsen, S., Drost, D., Hunsaker, T. Harvest and Storage of Vegetables and Fruits. Utah State University Extension, FN/FoodPreparation/2015-02.

Storage Guidelines For Fruits & Vegetables. Cornell Cooperative Extension, Chemung County. http://www.gardening.cornell.edu/factsheets/vegetables/storage.pdf

This article was written by Teresa Hunsaker, Extension Finance and Consumer Sciences Agent, Weber County.

# Ask an Expert // Top 5 Drought-Tolerant Plants



Enjoy beautiful blooms all the way from early spring through frost!

#### Gardening in a Desert

Gardening in a desert has its challenges. While many plants don't hold up to scorching heat, cold nights or dry soil, there are quite a few plants that thrive in a desert environment; you just have to find them!

Fortunately, gardening expert Susie Jones from the Ogden Botanical Gardens in Ogden, Utah, has recommended 5 of her favorite drought-tolerant plants. These beautiful plants will keep your garden looking beautiful and fresh without needing a frequent drink from your hose.

#### 1. Pasque Flower

"I love this one because it's one of the first flowers in my

garden and it blooms for 6 weeks!"



#### 2. Plumbago

"Its true beauty doesn't really show until late August, when it puts on a wonderful show with its beautiful blue flowers."



#### 3. Stemless Four-Nerve Daisy

"This is the little engine that could… it just keeps on going ALL season long."



#### 4. California Fuchsia

"This plant is very drought-tolerant, has fantastic color and the hummingbirds love it!"



#### 5. Broadleaf Penstemon

"This penstemon is a great companion plant with cool-season grasses and bearded iris."



\*Utah hardiness zones range from 4a to 9a. Most cities along the Wasatch Front fall between 6a and 7a. If you don't know your hardiness zone, check out this map from the USDA.



## Getting Rid of Scary Pests Without Scary Chemicals



There's no need to put your family at risk to get rid of pesky pests!

#### Going Back to Basics

Have you noticed a few more guests showing up to your parties recently? Some people may say, "The more the merrier," but guests that walk with more than two legs should not be invited into your house!

If you want to get rid of unwanted houseguests without hurting the ones that are already welcome, check out this **video on natural pest control** featuring Teresa Hunsaker. Now it's easy to get rid of scary critters without using scary chemicals!



### Top 10 // Tips for Gardening with Your Kiddos



Make your garden kid friendly with these simple tips!

#### It's Time to Play Dirty!

What child doesn't love to have fun in the mud? Now instead of scolding them for it, you can encourage it! How is this possible you might ask? The answer is gardening.

Gardening is a great way to have fun and bond with your kids while teaching them important lessons too. The curiosity that children have and their love of playing in the dirt make them natural gardeners.

To help get your garden kid-ready and kid-friendly, the Organic Forecast has compiled 10 top tips!

**Tip 2: Incorporate kids crafts in the garden.** Have your kids paint 'marker' stones or color garden stakes to mark plants. For a fun and easy DIY stepping-stone project, **click here**.

For 9 other fun and helpful tips, check out the article "Top 10 Tips for Gardening with Kids."

Remember, it's never too early to introduce your kids to the wonders of the garden. There's nothing quite like fresh garden vegetables, colorful flowers and of course, surprise visits from eight-legged friends!

### Top 10 // How to Keep Your Grass Green the Smart Way



It's that time of year when it seems like no matter how much you water your lawn, it still goes brown. USU Extension can help!

### The Grass Is Greener… On Both Sides!

Contrary to popular belief, there is so much that can be done to keep your lawn green without wasting water. Utah is the second driest state in the nation based on annual precipitation, yet among the top per capita users of water!

Do you know where most of that H2O is going? Yep, that's right, straight into the dirt. Over 60 percent of residential water usage is used outdoors!

Of course it's preferable to have a green lawn, but once you see the cost that excessive watering has on your bank account and the environment, those yellow patches and prickly grass

blades suddenly seem much more endearing.

Fortunately, USU Extension has figured out a way to make the grass greener on both sides! **Here are 10 tips** to help keep your lawn green during the roasting summer heat. Do you want to know what the best part is? Most of these tips are free and will actually help you save money!

#### References

extension.usu.edu