

# Gardening Guide



## GARDENING...

- provides nutritious foods
- reduces family food budgets
- conserves resources
- creates opportunity for recreation and exercise



## TOOL CHECKLIST

- Spading fork
- Shovel
- Hoe
- Trowel
- Sprayer or duster
- Pointed stakes and labels
- String and yardstick
- Water hose

### For larger gardens:

- Garden tiller
- Garden tractor
- Wheel cultivator
- Wheelbarrow

## How does your garden grow?

At TLC, we believe **an outdoor life is a better life** and we want to help you have the best outdoor life you can. This guide will help you build and care for a thriving garden that will provide you and your family a supply of fresh fruits and vegetables.

### What's Inside:

- Preparing Your Garden
- Crop Information Chart
- Planting Schedule
- Caring For Your Garden
- Composting
- Fall Gardening

## Planning Your Garden

When planning your garden, you should first consider its location. You should pick a location with ample sunlight that is relatively level with good drainage. It is a good idea to pick a location with a wind block like a fence or building to protect plants from the Kansas wind, but avoid areas around large trees as the tree roots can make planting difficult and starve the garden of nutrients.

The next step is to decide what plants to put in your garden. Using the charts on the following pages, determine how much space is needed for each crop and when you should plant and harvest each one. This will help you determine the location of each crop in your space and how much you will plant. If you do not plan to can or freeze your harvest, it is advisable to stagger your plantings (plant a few plants

every 4-5 days) so you have a steady supply of crops rather than one large harvest. Also keep in mind that the space used to grow early crops like spinach, lettuce and onions can be reused to grow late season crops like beans and tomatoes. Once you have decided what and when to plant, draw a sketch of the garden to use as a reference for planting.

Next you should determine how many of each crop you need to plant. Again, use the charts on the following pages to determine this number. You should also decide whether you want to buy seeds or transplants. For some varieties seeds need to be started 6-8 weeks before the planting date in containers stored in a warm area.

Remember when you're planning your garden: don't be afraid to try new things! Each garden is unique and should be uniquely yours!

# Preparing Your Garden

## Soil Preparation

After picking a location, you should test and prepare the soil. Vegetable gardens do best in sandy loam soils, but this soil composition is usually not found in home garden areas. Have samples of the soil tested for any deficiencies by the local extension office. Often the soil composition can be corrected through the use of soil additives. It is advisable to add manure or other organic composts, like Cotton Burr Compost, to your garden to create a nutrient rich environment for plants, but be careful to avoid adding too much nitrogen-rich additives, as doing so can burn plants. Soil additives should be worked in to the top layer of soil. This can be accomplished through the use of a garden tiller in large gardens.

You should also till your garden in the spring to loosen the soil and break up large clods of dirt. Some soils are much denser and are prone to developing large clods easily. If this is the case in your garden, it is recommended that you also till your garden in the fall. Most vegetable plants do well with small surface clods of dirt, but some tiny vegetable seeds like lettuce need very fine surface soil that should be prepared by hand using a rake.



## Plant Starts

If you are growing your own transplants from seed, the seeds should be planted in a small box or flat filled with sphagnum moss, vermiculite, or sand (to prevent disease, soil should not be used initially). The starts should be kept in a warm, sunny location. Once the seeds have germinated and have 2-4 leaves, they should be replanted to small pots that contain soil mixed with sand or peat.

It will take 6-8 weeks from the time of planting for the plants to be ready to be transplanted to the garden. Approximately ten days before transplanting you should begin to “harden” your plants to avoid transplant shock. Give your plants less water than normal, but not to the point that they are wilting. Expose the plants to outdoor conditions by placing them in a protected outside location. Do not apply any fertilizers during this period.

## Planting

Whether you have grown your own transplants or have bought them from a garden center, you should follow the same procedure to plant the starts. Water the plants well immediately before and after transplanting. Dig a hole that is wider and deeper than the root system of the plant. Add loose soil back into the hole so the soil line of the plant is level with the garden surface. Place the plant in the hole and add loose soil around the plant to secure it.

For crops that are planted as seeds in the garden, refer to the planting chart on the following page to find out the correct depth that each seed should be planted. Again, water seeds well immediately after planting.



**TLC**  
**Recommends:**



Cotton Burr Compost

Peat Moss

Fertilome Gardeners' Special Fertilizer

Fertilome Root Stimulator

Tri Star seeds



Crop	Type of Planting	Plants or Seeds Per 100' Row	Optimum Temperature (F)	Depth of Planting (In.)	Avg. Spacing Within Row (In.)	Avg. Spacing Between Rows (In.)	Frost Resistance
Asparagus	Perennial (Crowns)	75	—	8	18	48	Hardy
Asparagus	Seed (Transplant)	2 oz.	65-75	1	3	6	Hardy
Rhubarb	Perennial (Crowns)	30	—	1	36	35-48	Hardy
Beans Snap	Seeded	½ lb.	70-85	2	3-4	36	Tender
Beans—Lima	Seeded	½ lb.	75-85	2	4-8	36	Tender
Beets	Seeded	2 oz.	50-60	½	2-4	18	Half-Hardy
Broccoli	Seed or Transplant	¼ oz. or 75	(50-60)	(¾)	18-24	36	Hardy
Brussels Sprouts	Seed or Transplant	¼ oz. or 100	(50-60)	(¾)	12-18	36	Hardy
Cabbage	Seed or Transplant	¼ oz. or 75	(50-60)	(¾)	12-18	36	Hardy
Chinese Cabbage	Seeded	¼ oz.	55-70	½	10-12	36	Hardy
Carrots	Seeded	1 oz.	55-70	½	2-3	18	Half-Hardy
Cauliflower	Seed or Transplant	¼ oz. or 75	(55-70)	(¾)	18-24	36	Half-Hardy
Cucumbers	Seed or Plants	¼ oz.	75-85	½-1	10-48	48-72	Very Tender
Eggplant	Transplants	50 plants	(75-85)	—	18-24	36	Very Tender
Garlic	Sets	3 lbs.	—	1	4-6	18-36	Hardy
Horseradish	Roots	75-100 roots	—	3-4	12-18	36	Hardy
Kale	Seeded	1 oz.	50-60	½	2-4	36	Hardy
Kohlrabi	Seed or Transplant	¼ oz.	(50-60)	(¾)	5-6	18-24	Hardy
Lettuce (Seed)	Seeded	¼ oz.	50-70	¼	2-4	18-24	Half-Hardy
Lettuce (Plants)	Transplants	100-200 plants	(50-70)	(¾)	2-4	18-24	Half-Hardy
Head Lettuce	Seed or Transplants	1½ oz. or 75	60-70	½	12-15	18-24	Half-Hardy
Muskmelon	Seed or Plants	¼ oz.	75-85	1-1½	48-72	48-72	Very Tender
Mustard	Seeded	¼	50-60	¼	2-4	18-24	Hardy
Onion (Sets)	Sets	2 qts.	—	1½-2	3-4	12-24	Hardy
Onion (Plants)	Transplants	300 plants	—	1½-2	3-4	12-24	Hardy
Okra	Seeded	2 oz.	75-85	½	18-24	36	Tender
Parsley	Seeded	¼	55-70	¼	2-4	18-24	Half-Hardy
Parsnip	Seeded	¼ oz.	55-70	¼-½	3-4	18-24	Half-Hardy
Peas	Seeded	1 lb.	50-65	2	1-2	12-24	Hardy
Peppers	Transplants	50 plants	(75-85)	(¾)	18-24	36	Tender
Potatoes	Tuber Pieces	10 lbs.	50-60	2-3	8-12	36	Half-Hardy
Pumpkin	Seeded	1 oz.	75-85	1	72-90	72-90	Half-Tender
Radish	Seeded	1 oz.	50-60	¼	2-3	12-18	Hardy
Rutabaga	Seeded	¼ oz.	50-60	¼	4-6	18-24	Hardy
Salsify	Seeded	1 oz.	55-70	¼	2-3	12-18	Half-Hardy
Spinach	Seeded	2 oz.	55-70	1	2-3	12-18	Half-Hardy
Squash—Summer	Seeded	1 oz.	75-85	1	36-48	48-72	Very Tender
Squash—Winter	Seeded	1 oz.	75-85	1	60-72	96	Very Tender
Sweet Corn	Seeded	¼ lb.	70-80	2	14-18	36	Tender
Sweet Potatoes	Plants	75-100 plants	—	—	12-16	36-48	Very Tender
Swiss Chard	Seeded	1 oz.	55-70	¼-1	6-8	18-24	Half-Tender
Tomato	Transplants	30-60 plants	(75-85)	(¾)	24-48	36-48	Tender
Tomato	Direct Seeded	¼ oz.	75-85	¼	24-48	36-42	Tender
Turnips	Seeded	1 oz.	60-70	¼	3-4	12-18	Hardy
Watermelon	Seeded	1 oz.	80-90	1-2	72-90	72-90	Very Tender

( ) = Seeding information for hotbed; allow 6-8 weeks in hotbed or greenhouse.

							Plant	Harvest
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
	Beets		Beets	Beets			Beets	
		Beans (Snap)	Beans (Snap)			Beans (Snap)		
		Beans (Lima)		Beans (Lima-Bush)				
		Beans (Lima)		Beans (Lima-Pole)				
	Cabbage		Cabbage					
				Cabbage			Cabbage	
	Collards	Collards						
	Chard		Chard					
		Cucumbers		Cucumbers				
	Carrots		Carrots	Carrots			Carrots	
Broccoli			Broccoli					
				Broccoli			Broccoli	
Endive		Endive		Endive			Endive	
Cauliflower			Cauliflower	Cauliflower			Cauliflower	
		Eggplant			Eggplant			
					Kale		Kale	
	Melons			Melons				
Lettuce	Lettuce					Lettuce	Lettuce	
	Lettuce	Lettuce						
		Peppers			Peppers			
Potatoes			Potatoes					
			Potatoes				Potatoes	
		Okra		Okra				
Radish	Radish					Radish	Radish	
		Pumpkins					Pumpkins	
	Salsify						Salsify	
Onions					Onions			
OnionSets		Green Onions						
Peas		Peas						
Spinach	Spinach					Spinach	Spinach	
		Sweet Potatoes					Sweet Potatoes	
	Sweet Corn			Sweet Corn				
	Squash	W.Squash		Squash	Winter Squash			
	Tomatoes			Tomatoes				
Turnips			Turnips			Turnips	Turnips	

# Caring for Your Garden

## WATERING

Garden Plants need water for vigorous growth and fruit production. Cool season crops (harvested in spring and fall) tend to have shallower root systems than warm season crops (harvested in summer). For this reason cool season crops require frequent, shallow watering while warm season crops will benefit from deeper watering as their root system can reach more water sources. Watering can be done with a sprinkler or drip system. Watering should be done in the morning or early evening to prevent excessive evaporation and to allow the foliage enough time to dry before nightfall. Plants should be watered frequently and should never be allowed to be under water stress for extended periods of time. Depending on the type of soil in your garden, it may be necessary to water every day or less frequently. Adding a layer of mulch to your garden can help the soil retain moisture and reduce the frequency of watering.

## STAKING

Some plants like tomatoes and beans need to be staked or given a trellis to grow on. Tomato cages are an easy way to stake your tomato plants and are available at most garden centers and outdoor supply stores. Trellises can be created from wire and metal stakes. All stakes and trellises should be installed early in the plants growth.

## WEEDS

Weeds can steal valuable water and nutrients from garden plants if not kept under control. The easiest way to control weeds is to manage them while they are small. Cultivating and loosening the soil frequently will prevent weeds from developing a good root system. Be careful when cultivating around plants to ensure you do not damage the crop's root system. Adding a layer of mulch to your garden can help prevent weeds from germinating. Mulches can be man-made or organic, but some of the most popular mulches are hay, straw, leaves, and peat moss.

## PRUNING

Some plants benefit from removing leaves and suckers. This allows more light to penetrate the plant and prevents suckers from starving the plant of nutrients. Suckers are plant starts that grow around the stem of the plant or in the angle between the stem and branches. Removing these early when they are one or two inches tall will keep your plant healthy and happy.

## HARVESTING

Plants should be harvested during the times indicated on the growing chart. Some years, weather patterns may move the harvest times slightly, but you should always harvest your crop when they visually indicate that they are ready.

This Gardening Guide is a publication of TLC Nursery and Outdoor Living.

Some information in this publication, including the crop and planting charts, was provided by Kansas State University's Research and Extension Office.

For more information about gardening, please visit the TLC website or visit with one of our knowledgeable staff members.



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# Composting

Compost is an excellent way to improve the quality of your garden by returning nutrients to the soil. Creating your own compost pile is also a great way to reduce the amount of trash you throw away.

To create your own compost pile, choose a location where water does not stand. Create an enclosure using woven wire, cement blocks, bricks, or scrap lumber. An enclosure 5 foot by 5 foot by 5 foot is usually ideal for most home composts. If you want to compost more than that, consider creating several enclosures to keep this years compost and last years compost separate.

Good organic material to compost includes leaves, grass clippings, weeds, straw, garden refuse, and mulch. Kitchen scraps like egg shells and plant scraps can be added if covered to prevent flies. Meat and bones should not be used as they attract animals.

To build the compost pile start with a 2-3 inch layer of soil or sand. Add a layer of the organic material on top. Layers should be 2-3 inches thick for fine materials and 6-8 inches thick for coarse materials. To speed up the composting process, add a small amount of



garden fertilizer to the pile (about 1-2 cups per square yard). Continue layering soil, organic material and compost, watering each new layer.

The compost pile should have a bowl shape on top to allow rain water to soak into the pile. The compost pile should not be allowed to dry out as this can create compost not fit for use in the garden. To speed up the decomposition process the layers can be stirred. Your compost pile should be ready to use in 4-6 months.

## Fall Gardening

In Kansas, many crops are adaptable for falling planting. Cabbage, broccoli, Brussels sprouts, cauliflower, beans, carrots, lettuce, summer squash, and cucumbers have the most success as fall crops. Tomatoes, okra, peppers, and spinach can also continue to produce fruit into the fall season with proper care.

For fall gardens being planted in spaces used for spring crops, little soil preparation is necessary, in fact tilling too deeply will damage the soil composition. An all purpose fertilizer may be necessary to return some nutrients to the soil but use it sparingly as

adding too much during warmer weather can burn plants. Also avoid adding organic materials like manure and compost before fall plantings.

To accommodate the higher soil temperatures during the fall planting season, it is important to acclimate plant starts by letting them sit in the direct sunlight and wind for several days before planting. Seeds should be planted slightly deeper than normal.

Newly planted fall crops require frequent watering until they have sprouted and adjusted to the heat. Usually, plants sprout very quickly thanks to the hot temperatures

so the period of frequent watering is very short. After the plants are established they should require less water than spring crops because of increased amounts of rainfall.

Frost can damage tender plants in the fall. When frost is in the forecast, you should take precautions to protect crops like cucumbers and beans by covering the plants in plastic or blankets. Because the first frost is usually followed by a period of warmer weather, protected and hardy crops will continue to produce well into the fall.