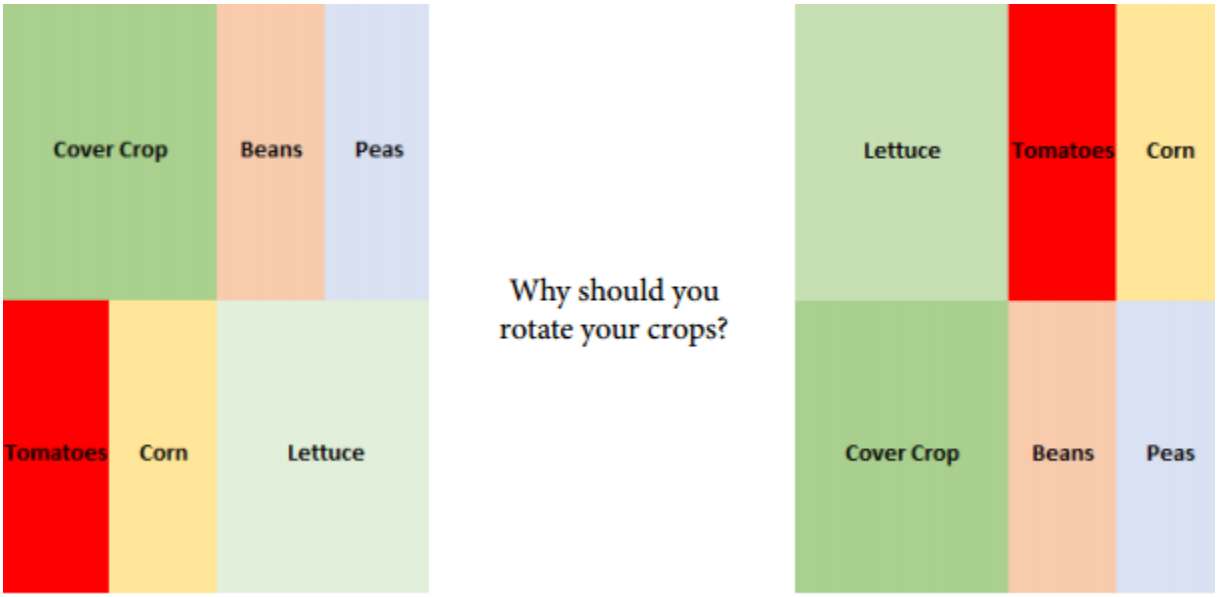
Crop Rotation

Crop rotation is a strategy that is essential to a healthy garden. Planting the same crop in the same place year after year will cause numerous problems. It will deplete your soil of specific nutrients, increase pest and disease pressure, and reduce your overall production significantly.

To avoid this, you will want to change where in your garden you grow different types or families of crops.

Examples of Different Plant Families in the Garden:

- Solanaceous Crops: tomatoes, eggplant, peppers, potatoes
- Legumes: beans and peas and legume cover crops such as vetch and clover
- Cucurbits: cucumber, squash, melons, pumpkins
- Brassicas: cabbage, cauliflower, broccoli, kale, turnips, radish, mustard, collards
- Carrot Family: carrots, parsnips, celery, dill, cilantro, parsley, caraway, fennel
- Asters: sunflowers, lettuce, endive, radicchio, Jerusalem artichoke, artichoke
- Alliums: asparagus, onions, leeks, chives, garlic, shallots



To reduce the pressure from pests and diseases

• Members of different plant families often share pests and diseases which will thrive if the same plants are in the same space year after year. These garden menaces will build up on a given site over time if you do not rotate your crops. Moving your plant families from place to place in the garden helps break up the life cycles of harmful organisms.

To maintain adequate fertility

• Specific crops often use some nutrients more than other, so if you plant the same crop in the same place, the soil on that site can quickly be depleted of specific nutrients.

• Some crops are heavy feeders, meaning they require high levels of fertility while other crops need less fertility to thrive. Growing heavy feeders in the same place from year to year will deplete soil fertility and quickly impact the health of your plants.

Crop Rotation Planning

The most effective way to plan crop rotations is to plan three or more years ahead. This sounds like a lot, but when you consider it in terms of how many planting successions take place in that period, it starts to make sense. The best practice is have a crop family in a bed for one succession, and then keep that bed free of that family for two years to break up pest and disease life cycles.

Once you have your garden broken down into sections or beds for planting different crops, you can start planning your rotations:

Consider:

-The space requirements for each crop you will grow
-The family of the crop you are growing
-Your crop's fertility needs
-How and when you will incorporate soil building practices like cover crops into your rotation

Planting Dates

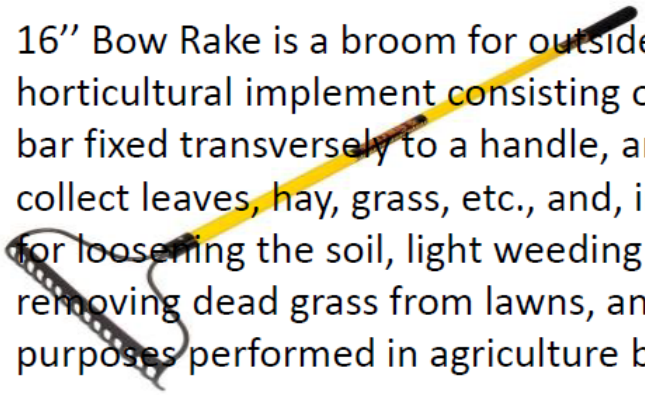
April 10-25	**April 25-May 20**	**May 20-June 1**	**June 1-30**	**July 1-Aug 20**
Onion plants	Carrots	Carrots	Carrots	Radishes
Peas	Radishes	Radishes	Radishes	Spinach
Carrots	Spinach	Spinach	Spinach	Leaf Lettuce
Radishes	Beets	Beets	Beets	Mesclun
Spinach	Leaf Lettuce	Leaf Lettuce	Leaf Lettuce	
Kale	Mesclun	Mesclun	Mesclun	
		Beans		
		Corn		
		Cucumbers		
		Melons		
		Squash		

From the University of KY

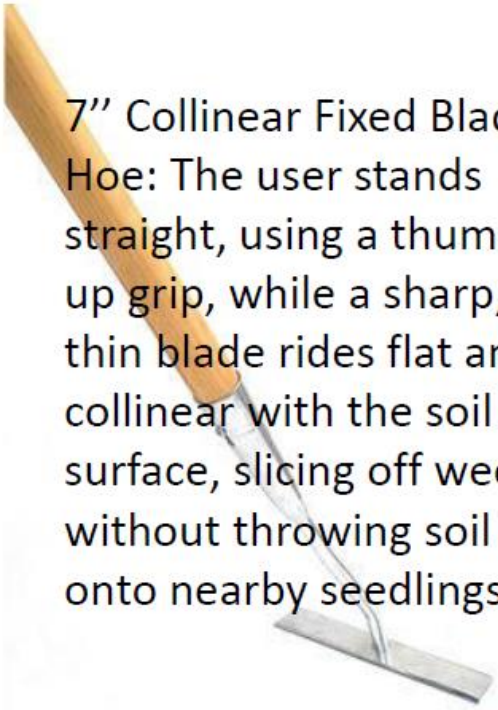
Table 14. Vegetable yields and amounts to plant per person.

Vegetable	Average Crop Expected per 100 Feet	Approximate Planting per Person	
		Fresh	Storage, Canning or Freezing
Asparagus	30 lb	10-15 plants	10-15 plants
Beans, snap bush	120 lb	15-16 ft	15-20 ft
Beans, snap pole	150 lb	5-6 ft	8-10 ft
Beans, lima bush	25 lb shelled	10-15 ft	15-20 ft
Beans, lima pole	50 lb shelled	5-6 ft	8-10 ft
Beets	150 lb	5-10 ft	10-20 ft
Broccoli	100 lb	3-5 plants	5-6 plants
Brussels sprouts	75 lb	2-5 plants	5-8 plants
Cabbage	150 lb	3-4 plants	5-10 plants
Cabbage, Chinese	80 heads	3-10 ft	---
Carrots	100 lb	5-10 ft	10-15 ft
Cauliflower	100 lb	3-5 plants	8-12 plants
Celeriac	60 lb	5 ft	5 ft
Celery	180 stalks	10 stalks	---
Chard, Swiss	75 lb	3-5 plants	8-12 plants
Collards and Kale	100 lb	5-10 ft	5-10 ft
Corn, sweet	10 dozen	10-15 ft	30-50 ft
Cucumbers	120 lb	1-2 hills	3-5 hills
Eggplant	100 lb	2-3 plants	2-3 plants
Garlic	40 lb	---	1-5 ft
Kohlrabi	75 lb	3-5 ft	5-10 ft
Lettuce, head	100 heads	10 ft	---
Lettuce, leaf	50 lb	10 ft	---
Muskmelons (cantaloupe)	100 fruits	3-5 hills	---
Mustard	100 lb	5-10 ft	10-15 ft
Okra	100 lb	4-6 ft	6-10 ft
Onions (plants or sets)	100 lb	3-5 ft	30-50 ft
Onions (seed)	100 lb	3-5 ft	30-50 ft
Parsley	30 lb	1-3 ft	1-3 ft
Parsnips	100 lb	10 ft	10 ft
Peas, English	20 lb	15-20 ft	40-60 ft
Peas, Snow	20 lb	10-15 ft	30-40 ft
Peas, Southern	40 lb	10-15 ft	20-50 ft
Peppers	60 lb	3-5 plants	3-5 plants
Potatoes, Irish	100 lb	50-100 ft	---
Potatoes, Sweet	100 lb	5-10 plants	10-20 plants
Pumpkins	100 lb	1-2 hills	1-2 hills
Radishes	100 bunches	3-5 ft	---
Salsify	100 lb	5 ft	5 ft
Soybeans	20 lb	50 ft	50 ft
Spinach	40-50 lb	5-10 ft	10-15 ft
Squash, summer	150 lb	2-3 hills	2-3 hills
Squash, winter	100 lb	1-3 hills	1-3 hills
Tomatoes	100 lb	3-5 plants	5-10 plants
Turnip greens	50-100 lb	5-10 ft	---
Turnip roots	50-100 lb	5-10 ft	5-10 ft
Watermelons	40 fruits	2-4 hills	---

Tools

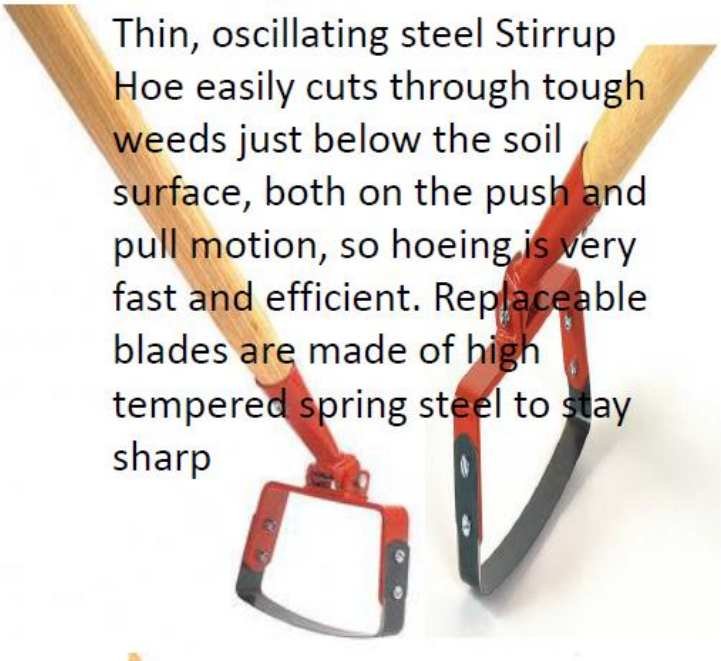


16'' Bow Rake is a broom for outside use; a horticultural implement consisting of a toothed bar fixed transversely to a handle, and used to collect leaves, hay, grass, etc., and, in gardening, for loosening the soil, light weeding and levelling, removing dead grass from lawns, and generally for purposes performed in agriculture by the harrow.



7'' Collinear Fixed Blade Hoe: The user stands straight, using a thumbs-up grip, while a sharp, thin blade rides flat and collinear with the soil surface, slicing off weeds without throwing soil onto nearby seedlings.

Glaser 3-tooth Cultivator



Thin, oscillating steel Stirrup Hoe easily cuts through tough weeds just below the soil surface, both on the push and pull motion, so hoeing is very fast and efficient. Replaceable blades are made of high tempered spring steel to stay sharp

The Digging Fork w/ a Poly Carbon Handle is great for most digging jobs and garden preparations