



Spring Vegetable Selections – Square Foot Gardening Guidelines

Vegetables are listed **in order of the date** for starting inside or direct sowing outside.

Weeks to harvest are counted from the date of outside sowing or outside transplant.

St. Louis **last frost date** used for reference is **≈ April 15th**.

Vegetable	Plants per Square Foot	Start Inside/ Transplant Outside	Direct Sow	Comments	Weeks to Harvest
Parsley	4	Jan 28 / Mar 13	no	Biennial – will self-sow next spring after wintering over	14 wks
Endive	9	Feb 4 / Mar 18	Mar 18	Needs cool weather; start very early or put in a fall crop	9 wks
Leeks	16	Feb 4 / Mar 18	Mar 18	Plant in deep trench and keep covering with soil as plants grow taller	17 wks
Broccoli	1	Feb 6 / Mar 20	no	Harvest when heads are still tight; side-shoots continue the harvest	10 wks
Cabbage	1	Feb 6 / Mar 20	no	Do not crowd; handpick cabbage loopers	10 wks
Cauliflower	1	Feb 6 / Mar 20	no	Tie leaves over heads to blanch	11 wks
Kale	4	Feb 6 / Mar 20	Mar 20	Succession sow every 2-3 weeks	8 wks
Beets	16	Feb 11 / Mar 15	Mar 15	Each seed makes many plants; cut 1" baby greens, leave one plant	7 wks
Collards	4	Feb 15 / Mar 15	Mar 15	Easiest of the brassica family; harvest lasts through mid-summer	8 wks
Mustard (Giant)	4	Feb 15 / Mar 15	Mar 15	Attractive color; spicy and nutritious cut-and-come-again crop	6 wks
Onions/Shallots	16	Feb 18 / Mar 18	sets: Mar 18	Easy but needs loose soil; avoid planting with peas or beans	15 wks
Eggplants	1	Feb 18 / May 10	no	Heat lover; wait to set out until soil warms up & nights are above 50°	9 wks
Peppers	1	Feb 18 / May 10	no	Stake at transplant time; heat lover; set out when soil warms up	8 wks
Arugula	4	Feb 25 / Mar 15	Mar 15	Easy; will reseed when happy; edible flowers	4-7 wks
Lettuce	4	Feb 25 / Mar 15	Mar 15	Keep well-watered to avoid bitterness, plant in shade for summer	4-7 wks
Mesclun	scatter	Feb 25 / Mar 15	Mar 15	Succession sow every 2-3 weeks for continual harvests	3-4 wks
Micro-Greens	scatter	Feb 25 / Mar 15	Mar 15	Can be grown year-round in containers with rapid on-going harvests	1-2 wks
Mache	16	Feb 25 / Mar 15	Mar 15	Slow to germinate; harvest lasts into summer; easy to grow in pots	4-7 wks
Swiss Chard	4	Feb 25 / Apr 1	Apr 1	Easy; replaces difficult spinach; cut & come again – lasts all summer!	4-7 wks
Tomatoes	1	Feb 25 / May 10	no	Stake or trellis; heat lover; wait until soil warms up; harvest regularly	10-13 wks
Okra	1	Mar 11 / May 1	no	Heat lover; set out when soil warms up; harvest regularly	9 wks
Peas	8	No	Mar 15	Keep soil evenly moist; fixes nitrogen in the soil; harvest regularly	8 wks
Radish	16	No	Mar 15	Succession sow every 2-3 weeks; harvest small for juiciness & taste	3 wks
Carrots	16	No	Mar 15	Slow germinating; keep seedbeds moist; succession sow	8 wks
Scallions	16	No	Mar 15	Grows easily direct sown in garden; mix in when harvesting greens	7 wks
Mizuna/Mustard	16	No	Mar 15	Succession sow every 2-3 weeks; harvest young; edible flowers	3 wks
Sorrel	4	Mar 18 / Apr 1	Apr 1	Perennial; harvest young; cut back mid-summer, harvest new growth	4-7 wks
Spinach	9	no	Mar 20	Tricky; needs cool soils; slow to germinate; keep soil moist	7 wks
Potatoes	4	no	Mar 20	Plant in deep trench and keep covering with soil as plants grow taller	8 wks
Turnips	16	no	Mar 20	Harvest at radish size for salads; sow every 2-3 weeks for greens	4-7 wks

Summer Vegetable Selections – Square Foot Gardening Guidelines

Pre-moisten Bean and Corn seeds by wrapping in moist paper towels for 8-16 hours before sowing. Melons, Squash and Cucumbers have fragile root systems: start inside in peat pots 2-3 weeks before setting out, pot and all.

Vegetable	Plants per Square Foot	Start Inside/ Transplant Outside	Direct Sow	Comments	Weeks to Harvest
Melons	1	Apr 8/May 1	May 1	Heat lover; needs good moisture when young and during pollination	11 wks
Cucumbers	2	Apr 15/May 10	May 10	Trellis; second indoor sowing in June, transplant 2 weeks later	7 wks
Bush Beans	9	no	Apr 15	Keep well-watered; produces large crop all at once; succession sow	8 wks
Corn	1	no	Apr 25	Succession sow; needs a LOT of room; interplant greens in its shade	9-13 wks
Squash	1 per 2 sq ft	Apr 29/May 10	May 10	Trellis; needs fertile soil and strong sun; second sowing in early June	7 wks
Pumpkins	1 per 2 sq ft	Apr 29/May 10	May 10	Needs fertile soil and strong sun; harvest after 1 or 2 light frosts	13 wks
Pole Beans	8	no	May 1	Keep picked to continue production	8 wks
Eggplants	1	buy plants/May 10	no	Very decorative fruit and flowers; pick fruit when young and tender	9 wks
Peppers	1	buy plants/May 10	no	Very carefree plant; keep picked to continue production	8 wks
Tomatoes	1	buy plants/May 10	no	Plant deeply burying all but top 4 leaves; trellis; remove suckers	10-13 wks
Tomatillo	4	buy plants/May 10	no	Difficult from seed but transplants will grow like crazy and reseed!	9 wks

Summer Option 1 : Continuous Harvest

These spring-planted vegetables are “cut-and-come-again” and may continue to be harvested into the summer months: *Arugula, Beet Greens, Collards, Kale, Lettuces (in the shade!), Mache, Mustard (Giant), Parsley, Scallions, Sorrel, Swiss Chard.*

Summer Option 2 : Relay & Succession Planting

Relay planting: to continue to sow or transplant every two to three weeks into the summer months.

Succession planting: to replace a finished crop (such as early cole crops) with another crop.

The following plants are all possibilities for either strategy to lengthen the harvest:

Vegetable	Plants per Square Foot	Direct Sow or Transplant From:	Comments	Weeks to Harvest
Beets	16	Mar 15 to Apr 29	Start more seeds inside - does not germinate well in heat	7 wks
Carrots	16	Mar 15 onward	Keep seedbed moist; time your last planting to harvest just before the first frost	8 wks
Collards	4	Mar 15 onward	Withstands the heat of the summer unlike other cole crops	8 wks
Lettuce	4	Mar 15 onward	Start inside; 3 weeks to transplant size; set new plants in shade of beans or peppers	4-7 wks
Mesclun	scatter	Mar 15 onward	Start in side; grow in shadier area during hot months or grow in patio pots	3-4 wks
Micro-Greens	scatter	Mar 15 onward	Also may be grown in containers on the patio	1-2 wks
Mizuna/Mustard	16	Mar 15 onward	Harvest regularly to keep from bolting	3 wks
Scallions	16	Mar 15 onward	Hill up soil to blanch in the garden	7 wks
Radish	16	Mar 15 to Jun 3	Does not do well in hottest part of summer	3 wks
Bush Beans	9	Apr 15 onward	Interplant with greens to give them shade	8 wks



Fall Vegetable Selections – Square Foot Gardening Guidelines

Vegetables are listed **in order of the date** for starting inside or sowing outside.

St. Louis **first frost date** used for reference is **≈ October 15th**.

Consistent watering will be necessary and using shade cloth is recommended for July and August.

Vegetable	Plants per Square Foot	Start Inside	Transplant Outside	Direct Sow	Comments
Cauliflower	1	July 20-Aug 5	3-4 weeks later	no	Harvest continues 4 weeks or more after first frost date
Pac Choi	4	July 20-Aug 5	3-4 weeks later	Aug 1 - 20	Likes cool weather
Turnips	16	no	no	July 20-Aug 15	Mulch in late fall to keep soil from freezing; dig all winter
Brussel Sprouts	4	July 25-30	3-4 weeks later	no	Takes a long time to mature; best flavor comes after frost;
Broccoli	1	July 25-Aug 5	3-4 weeks later	no	Harvest continues 4 weeks or more after first frost date
Cabbage	1	July 25-Aug 5	3-4 weeks later	no	Harvest continues 4 weeks or more after first frost date
Kohlrabi	16	July 25-Aug 5	3-4 weeks later	no	Bulb forms above-ground so deep soil is not mandatory
Mustard (Giant)	4	July 25-Aug 5	3-4 weeks later	Aug 5-Sept 30	Best flavor comes after frost; harvests continue into winter
Carrots	16	no	no	July 25-Sept 10	Mulch in late fall to keep soil from freezing; dig all winter
Collards	4	July 25-Sept 30	3-4 weeks later	Aug 5-Sept 30	Best flavor comes after frost; harvests continue into winter
Kale	4	July 25-Sept 30	3-4 weeks later	Aug 5-Sept 30	Best flavor comes after frost; harvests continue into winter
Scallions	16	no	no	August 1	Restart relay or succession plantings up until frost date
Beets	9	Aug 1-10	3 weeks later	Aug 1-20	Mulch in late fall to keep soil from freezing; dig all winter
Swiss Chard	4	Aug 1-10	3 weeks later	Aug 15-30	Harvest continues 4 weeks or more after first frost date
Arugula	4	Aug 1-10	3 weeks later	Aug 15-30	Spring/summer crop can be cut back hard for fall regrowth
Bush Beans	9	no	no	Aug 1-20	Pre-moisten seeds; shield seedlings from heat of sun
Lettuce	4	Aug 1-20	3 weeks later	Aug 15-30	Shield seedlings; harvest up to 4 weeks after first frost date
Spinach	9	no	no	Aug 1-20	Shield seedlings; harvest up to 4 weeks after first frost date
Radishes	16	no	no	Aug 1-25	Shield seedlings; harvest up to 2 weeks after first frost date
Endive/Escarole	4	Aug 6-20	3-4 weeks later	no	Shield seedlings; harvest up to 4 weeks after first frost date
Peas	8	no	no	Aug 15	Shield seedlings; harvests are right around first frost date

Summer Crops Still Growing

Harvest continues until first frost for:

Pole Beans, Carrots, Corn, Cucumber, Eggplant, Melons, Okra, Peppers, Scallions, Summer/Winter Squash, Swiss Chard, Tomatillos, Tomatoes.

Winter Vegetable Selections For Cold-Frame Use

Cold frames are protected plant beds that, without any artificial heat added, are able to raise their inside temperature from 5°F to 10°F. They are used to extend the season of cold-tolerant vegetables both before and after they can be grown in open soil. A cold frame should be placed in an easily accessible site near water (and possibly electricity) and should have a southern or southeastern exposure with a slight slope to ensure good drainage and maximum solar absorption. They need to open easily so they can be vented during warm, sunny days. They can be covered when it's very cold with a blanket to conserve heat. Additional heat can be provided by surrounding the perimeter with plastic water bottles painted black which absorb solar heat during the day and radiate it during the night. Electric heating elements can also be added.

For further information and building directions go to the University of Missouri Extension website: <http://extension.missouri.edu/p/G6965>.

Or see Eliot Coleman's tips in this article: <http://www.vegetablegardener.com/item/2504/cold-frame-gardening>.

Salad greens are always a first choice for cold frame gardening! They can be broadcast every two to three weeks and harvested as micro- or baby-greens, or kept as a cut-and-come-again crop. Try these:

- Leaf lettuces: 'Rouge d'Hiver' or 'Marvel of 4 Seasons'; Mesclun or Micro-Greens mixes.
- Greens: Arugula, Mache, Minutina, Claytonia (Miner's Lettuce),

Here are the easiest **vegetables** to grow in a cold frame:

- Spinach, Swiss Chard, and Mizuna/Salad Mustard
- Parsley, Sorrel, Endive, Escarole, and Raddichio
- Leeks, Scallions, Radishes, Turnips, Beets, and Carrots (round or baby)
- Broccoli and Broccoli Raab, Kale, Collards, Mustard (Giant), Cabbage, and Bok Choy

Garlic and Shallots: True Winter Crops!

Garlic is grown from "seed" - the individual cloves - planted in October. The garlic roots in and sends up green, strappy foliage during winter. Growth is slow but steady. In early spring the development quickens, with more and more leaves coming on. In April, garlic plants send up a flowering spike, or scape, which garlic farmers cut off to redirect energy into the developing garlic bulb. These scapes are edible, delicious, early farmer's market fare! When the leaves start to wither and brown in July, the garlic bulbs are dug up and spread out to cure in a cool, shaded place with good air circulation. Directions are exactly the same for shallots except that their development is similar to seed onions and so yield is lower per pound of seed, about 4-5 times the amount planted.

Cover Crops: Improve Your Soil Structure & Nutrient Profile

Whether you farm a quarter-acre or grow vegetables in raised beds, your garden soil will benefit tremendously from growing a winter cover crop. Cover crops are vegetation that grows in a bed during the "off-season." Properly managed cover crops will provide several benefits to garden soil. Their roots help to break up clay soils and enable deep penetration of air and water. The green growth above-ground helps to suppress weeds and reduces wind and water erosion by holding the soil in place. Many cover crops are legumes which fix nitrogen in the soil, and deep-rooted choices (such as rye) may make nutrients in the subsoil more readily available. Last, but not least, cover crops can be turned into the soil as an amendment, or "green manure" around three to four weeks before spring planting time. This timing allows the organic matter to begin to break down and make nutrients available to your garden. Annual rye grass, crimson clover, hairy vetch (a legume), and a pea/oat mixture are the best cover crops for this area. These crops will not survive a killing frost but the remains of the plants act as mulch and help protect the soil from erosion.

Acknowledgements

Information for the four pages of this tip sheet has been gathered principally from:

Bartholomew, Mel. *All New Square Foot Gardening*. Cool Springs Press, 2006.

and from the University of Missouri Extension website (publication G6201) <http://extension.missouri.edu/main/DisplayCategory.aspx?C=67>