



Lower Columbia School Gardens

Introduction to Monthly Planting Guide

This guide was created for use by Volunteers in School Gardens in the Pacific NW, specifically (but not solely) in Cowlitz County and surrounding areas. We hope it will make things simpler and provide much of the planting information that is needed - all in one place. We've borrowed and/or narrowed down ideas and info from multiple sources - thank you, sources! Those sources include **SchoolGardenProject.org** in Eugene, **Territorial Seed Co.** and **Seattle Tilth's Maritime NW Garden Guide**, tailoring it to our own experience of what has worked well. Comments, questions or suggestions can be sent to info@lcschoolgardens.org. *Happy Growing!*

CROP	The type of plant you will be growing. Specific varieties of each type of plant vary greatly and different varieties may be better-suited for certain seasons or locations. Locally-produced seed varieties generally yield better results in the garden as the seeds will have a predisposition to that climate. Within this document you will find a list of our preferred varieties, based on our experience growing for School Gardens in Cowlitz County and surrounding areas.
SOIL TEMP.	Measure temperature about 3" beneath the soil's surface. Proper temps are essential for germination and healthy plants, whether starting seeds indoors or putting them directly in the ground. Planting within the correct range will produce better germination and help with crop yields.
PLANTING DATE	An estimate of when one can generally plant a certain crop in the Maritime NW, based on the date of the "last frost" for this area (USDA Hardiness Zone 8b). <i>(For best results plant seeds based on soil temperatures).</i>
SPACING	Proper spacing is very important to plant health. Certain plants grow just fine when planted very tightly together (i.e. onions) while others do not. Adequate spacing can also help provide proper air circulation and help avoid pressure on the soil to provide nutrients for too many plants.
DEPTH	How far beneath the soil a seed should be placed for proper germination. <i>The rule of thumb is to plant a seed about twice as deep as its longest side.</i>
METHOD	Seed: Directly plant the seeds <i>outdoors</i> in the garden. Indoors: Start the seeds indoors in a bright window, with UV grow lights, or in a greenhouse, in trays or pots. When seeds are started indoors they will need to be transplanted into the garden by a certain date. Some will be "potted up" before being transplanted to the garden (tomatoes, peppers, etc.), giving them more room to grow in a bigger pot before being set outside. See notes for more information on when to pot up and/or transplant. Transplant: take a plant that has been grown in a pot or container (inside a greenhouse, etc.) and plant it in the garden - don't forget to harden off before transplanting.
FROM SEED TO HARVEST	The general amount of time (in weeks) it will take a crop to fully mature from seed. This info can aid greatly in School Garden planning. Check seed catalogs (like Territorial Seed Co.) or seed packets for maturation dates, as that can vary greatly between varieties.
ADDITIONAL INFO	At the bottom of each month's page you will find additional information, including crops that can be continually planted that month, crops that have been previously started indoors and need to be transplanted to the garden that month, and other general garden information.
<u>Harvest Time</u>	The harvest list is not exhaustive but intended as a guideline for what a "typical" season might look like. Some fruits and vegetables may be ready sooner or later depending on varieties and factors like weather. Refer to seed packets or "from seed to harvest" for a better idea of when varieties will be ready for harvest.



 <h1 style="text-align: center;">Lower Columbia School Gardens - Monthly Planting Guide</h1>							
FEBRUARY						USDA Hardiness ZONE 8b	Estimated Last Frost: April 30 Estimated First Frost: Oct 31
CROP	SOIL TEMP.	PLANTING DATE	SPACING	DEPTH	METHOD	FROM SEED TO HARVEST	NOTES
Arugula	50 - 70	15 th	2" bands	¼ - ½"	Seed	4 - 5 wks	Sow every 2 weeks for continual harvest, except June - Aug.
Artichoke	65 - 75	1 st	n/a	¼"	Indoors	5 months	Transplant after last frost.
Beans, Fava	60 - 85	15 th	3 - 6"	1 - 2"	Seed	9 - 15 wks	Flowers, leaves & beans are edible.
Beets	50 - 75	15 th	4 - 6"	½ - ¾"	Seed	8 - 12 wks	Start under cloche. Sow every 2 wks until late May. Thin at 4 wks/6" tall.
Broccoli	55 - 75	15 th	n/a	¼"	Indoors	8 - 14 wks	Transplant between mid-March and mid-April.
Cabbage	55 - 75	15 th	n/a	¼"	Indoors	9 - 12 wks	Transplant between March and April.
Cauliflower	55 - 75	15 th	n/a	¼"	Indoors	7 - 10 wks	Transplant between mid-March and mid-April.
Carrots	55 - 80	15 th	2 - 4"	¼"	Seed	8 - 10 wks	Sow every 2 weeks until July. Thin at 4 weeks/6" tall.
Kale	55 - 75	15 th	n/a	½"	Indoors	10 - 12 wks	For spring/summer harvest. Transplant between mid-March and mid-April.
Leeks	55 - 75	1 st	n/a	¼"	Indoors	13 - 15 wks	Transplant mid-April into well-dug soil.
Lettuce	40 - 75	15 th	8 - 12"	¼"	Seed	6 - 8 wks	Thin to 10 - 16" apart at 4 weeks. Sow every other week for continual harvest, except July - Aug.
Mustard	55 - 75	15 th	8 - 12"	½"	Seed	4 - 12 wks	Start under cloche. Harvest continually April - June.
Scallions	55 - 75	1 st	n/a	1/8 - ½"	Indoors	7 - 9 wks	Transplant to garden early April.
Onions, Sweet + Storage	55 - 75	1 st	n/a	1/8 - ½"	Indoors	16 - 18 wks	Transplant to garden early April. Harvest in June or July - do your best to keep sweet and storage varieties separate. <i>Sweet varieties do not store well.</i>
Peas, Snap + Snow	40 - 75	15 th	1"	1 - 1 ½"	Seed	8 - 9 wks	For pole/tall varieties, provide trellis or plant near other climbing structure/tree. Sow every 2 wks throughout March - April.
Radishes	45 - 80	15 th	1 - 2"	½"	Seed	3 - 5 wks	Sow every 2 weeks for continual harvest, except July - Aug.
Spinach	50 - 70	15 th	1"	½"	Seed	6 - 8 wks	Sow every 2 weeks for continual harvest, except June & Sept.

- **Don't forget:** LCSG offers a Free School Garden Volunteer Training this month. Email info@lcschoolgardens.org for more information.
- **Cloche** = transparent structure for protecting plants from cold temps; a season jump-starter. Can also protect plants from pests. Floating row cover (reemay) or a low plastic hoop are examples. Try to have cloches in place a few weeks prior planting seeds so soil has a chance to warm up.
- **Lettuce and spinach can also be started indoors Feb - May** and transplanted out when a few weeks old.





Lower Columbia School Gardens - Monthly Planting Guide

MARCH

USDA Hardiness
ZONE 8b

Estimated Last Frost: April 30
Estimated First Frost: Oct 31

CROP	SOIL TEMP.	PLANTING DATE	SPACING	DEPTH	METHOD	FROM SEED TO HARVEST	NOTES
Basil	70 - 85	15 th	n/a	¼"	Indoors	10 - 12 wks	Pot up at 4 weeks. Transplant out late-May/mid-June.
Brussels sprouts	55 - 75	15 th	n/a	¼"	Indoors	12 - 18 wks	Sweeter for harvest after a frost or two.
Celery + Celeriac	60 - 70	1 st	n/a	1/8- ¼"	Indoors	15 - 20 wks	Transplant out mid-April.
Cilantro	60 - 75	1 st	4"	½ - 1"	Seed	4 - 12 wks	Sow weekly March - October (except July/Aug). Harvest weekly until frost.
Collards	55 - 75	15 th	12 - 16"	¼ - ½"	Seed	8 - 12 wks	Sow monthly March - June. Can also be started indoors and transplanted out when 3 wks old.
Eggplant	75 - 85	15 th	n/a	¼"	Indoors	7 - 11 wks	Pot up at 3 weeks. Transplant out late May/early June.
Flowers (out)	Alyssum, Bachelor Buttons, Calendula, Coreopsis					varies	Seed directly in the garden.
Flowers (in)	African Daisy, Chinese Lantern, Cosmos, Hollyhock, Mallow, Marigold, Nasturtium, Phlox, Scabiosa, Statice, Yarrow, Zinnia					varies	Seed indoors to transplant out in late April.
Ground Cherry & Tomatillo	70 - 90	15 th	n/a	¼"	Indoors	10 - 14 wks	Pot up at 3 weeks. Transplant out mid-May.
Kale	55 - 75	15 th	8 - 16"	¼ - ½"	Seed	10 - 12 wks	For late-Spring and Summer harvest.
Parsley	50 - 75	1 st	4"	¼ - ½"	Seed	11 wks	Harvest continually April - June. Sow again in April.
Peas, Snap + Snow	40 - 75	1 st + 15 th	1"	1 - 1 ½"	Seed	8 - 9 wks	For pole/tall varieties, provide trellis or plant near other climbing structure/tree.
Peppers	70 - 90	1 st	n/a	¼"	Indoors	9 - 13 wks	Pot up at 3 weeks. Transplant out late-May.
Potatoes	50 - 70	15 th	12 - 24"	4 - 6"	"Seed"	14 - 19 wks	Add bone meal to soil before planting. Plant March - early May.
Swiss Chard	50 - 75	1 st	2 - 3"	½"	Seed	7 - 9 wks	Sow March - July, harvesting continually.
Tomato	70 - 90	1 st	n/a	¼"	Indoors	10 - 16 wks	Pot up at 3 weeks. Transplant out mid-May.
Turnips	50 - 70	1 st	1 - 2"	¼ - ½"	Seed	6 - 9 wks	Sow Mar - Aug, harvest young, when golf ball-sized.

- **Spring Garden programs begin this month!** Visit <http://www.lcschoolgardens.org> or email info@lcschoolgardens.org for more information or to find out how you can volunteer.
- **Sow directly in garden weekly or every other week in March:** arugula, beets, carrots, cilantro, lettuce, peas, radishes, and spinach.
- **Transplant to garden mid-March (after hardening off):** broccoli, cabbage, cauliflower, kale, kohlrabi, lettuce, and spinach.
- **This is the month to start planting seed potatoes,** contact info@lcschoolgardens.org to see what varieties may be available.
- **Begin weeding with gusto** throughout the garden this month and **checking for slugs/snails regularly.**
- **Trim all onion seedlings in pots** to 3 inches tall and use the trimmings the same way you would use chives - top a baked potato, add to a salad or sprinkle over scrambled eggs.
- **Turn and care for compost regularly.**





Lower Columbia School Gardens - Monthly Planting Guide

APRIL

USDA Hardiness
ZONE 8b

Estimated Last Frost: April 30
Estimated First Frost: Oct 31

CROP	SOIL TEMP.	PLANTING DATE	SPACING	DEPTH	METHOD	FROM SEED TO HARVEST	NOTES
Beans, Runner	65 - 85	15 th	2 - 4"	1"	Seed	11 weeks	Plant near trellis/climbing structure April - May. Ideal for growing on a tee-pee. Harvest 4 - 6" tender pods or allow to fully mature and dry for fun, easy seed-saving. Beautiful seeds!
Cucumber	65 - 90	15 th	3 ft in garden	½ - 1"	Indoors	7 - 10 weeks	Transplant out at 3 weeks. May also be direct-seeded in June.
Dill	55 - 70	1 st	3 - 6"	¼ - ½"	Seed	6 - 9 weeks	Sow weekly April - June. Plant near cabbage and squash family and allow to flower/set seed to attract beneficial insects.
Flowers (out)	Borage, Calendula, Campanula, Mallow, Nasturtium, Nigella, Phacelia, Scabiosa, Zinnia						Sow throughout April - May.
Gourds	65 - 85	15 th	3 - 5 ft in garden	1 - 1 ½"	Indoors	12 - 16 weeks	Dry gourds for art projects and bird houses. Transplant out at 4 weeks. May also be sown into hills in late May.
Melon	70 - 85	15 th	4 ft in	½ - 1"	Indoors	9 - 13 weeks	Transplant out at 4 weeks. May also be sown outdoors in late May.
Parsnips	55 - 75	1 st	3 - 4"	½"	Seed	17 - 20 weeks	For Fall/Winter harvest. Sow throughout April - May with no fertilizer.
Pumpkins (ornamental)	65 - 85	15 th	3 - 5 ft in garden	1 - 1 ½"	Indoors	13 - 16 weeks	For carving and edible seeds. Transplant out at 4 wks. May be sown outdoors in late May. Plant pollinator-attracting flowers nearby.
Summer Squash & Zucchini	65 - 85	15 th	3 - 5 ft in garden	1 - 1 ½"	Indoors	7 - 10 weeks	Transplant out at 4 weeks. May also be sown outdoors in late May. Plant pollinator-attracting flowers nearby in the garden.
Sunflowers!	65 - 75	15 th	12 - 18"	½"	Seed	8 - 14 weeks	Sow every 2 weeks late April - early June.
Winter Squash (for eating!)	65 - 85	15 th	3 - 5 ft in garden	1 - 1 ½"	Indoors	12 - 17 weeks	Transplant out at 4 weeks. May also be sown outdoors in late May. Plant pollinator-attracting flowers nearby in the garden.

- **Start indoors in biodegradable pots:** cucumbers, melons, summer and winter squash, and pumpkin, then plant entire pot into garden around 3 weeks from germination. These plants (especially cucumbers) can also be trellised in the garden, allowing for easier harvest and healthier plants because of better air circulation.
- **Continue sowing indoors throughout April:** basil, ground cherry, and tomatillo.
- **Continue sowing directly in garden throughout April:** arugula, Asian greens, beets, broccoli, Brussels sprouts, caraway, carrots, chervil, chives, cilantro, collards, fennel, kale, leeks, lettuce, lovage, parsley, snap + snow peas (look for varieties that are "enation-resistant"), potatoes, radishes, scallions, spinach, Swiss chard, and turnips.
- **Thinning:** 6-inch tall beets to 4 - 6" apart, 6-inch tall carrots to 2 - 4" apart, 4-inch tall radishes to 1 - 2" apart.
- **Hill up soil around green potato shoots** when they are at least 6 inches tall. *Do this every 3 weeks or so until harvest time.*
- **Transplant to garden mid-April (after hardening off):** broccoli, cabbage, cauliflower, celeriac, celery, kale, kohlrabi, leeks, lettuce, scallions, spinach, and sweet + storage onions. (Scallions can be transplanted to garden in groups of 6 and sweet onions in groups of 3).
- **Transplant to garden late April (after hardening off):** artichokes, and flowers seeded indoors during March.
- **Transplant to larger pots mid-April to late April:** basil (March-seeded), eggplant, ground cherry, peppers, tomatoes, and tomatillo.
- **Turn and care for compost regularly.**
- **Harvest time:** arugula, Asian greens, asparagus, brassica flowers, broccoli, cabbage, calendula, cilantro, fava leaves and blossoms, fennel, kale, lettuce, mint, mustard, parsley, radishes, rosemary, sage, scallions, sorrel, spinach, Swiss chard, and thyme.



		Lower Columbia School Gardens - Monthly Planting Guide						USDA Hardiness ZONE 8b		Estimated Last Frost: April 30 Estimated First Frost: Oct 31	
		MAY									
CROP	SOIL TEMP.	PLANTING DATE	SPACING	DEPTH	METHOD	FROM SEED TO HARVEST	NOTES				
Basil	70 - 85	15 th + 31 st	2 - 8"	n/a	Transplant	6 - 8 wks from transplant	Harvest continually to promote new growth.				
Beans, Dry	65 - 85	15 th	2 - 4"	1"	Seed	10 - 14 weeks	Harvest snap beans often to keep them producing. Grow pole types on a trellis or teepee. Plan for two plantings of snap beans.				
Beans, Snap	65 - 85	15 th + 31 st	2 - 4"	1"	Seed	8 - 10 weeks					
Brussels sprouts	55 - 75	15 th	4 - 6"	¼"	Seed	11 - 17 weeks	Sweeter for harvest after a few frosts.				
Corn, Sweet	65 - 85	1 st	4"	1 - 2"	Seed	11 - 13 weeks	Will cross-pollinate each other so stagger plantings by 2 wks according to maturity date. Plant in blocks of <i>at least</i> "4 plants per row by 4 rows" for proper wind pollination. (Also see <i>Three Sisters</i> info below).				
Popcorn	65 - 85	1 st	4"	1 - 2"	Seed	13 - 15 weeks					
Flowers (out)	Amaranth, Calendula, Cleome, Coreopsis, Cosmos, Marigold, Nasturtium, Sunflowers, Zinnia					Sow directly in garden during May for blooms from August - early Fall.					
Sow directly in garden throughout May	Amaranth, arugula, Asian greens, beets, broccoli, cabbage, carrots, cilantro, collards, dill, kale, kohlrabi, leeks, lettuce, onions, parsnips, late potatoes, radishes, runner beans, scallions, spinach, Swiss chard, turnips										
Sow directly in garden late May (under a cloche)	Basil, cucumbers, gourds, melons, pumpkins, and summer + winter squash										
Transplant to garden late May/ early June	Basil, collards, cucumbers, eggplant, gourds, ground cherries, melons, peppers, pumpkins, summer + winter squash, tomatillos, tomatoes					Harden off all plants before transplanting to garden. Take several days to gradually acclimate them to the unprotected outdoors; don't rush the process of moving them from a protected environment into garden beds.					

- **Don't forget:** the annual School Garden Plant Sale is day before Mother's Day at Northlake! It's a great opportunity to support School Gardens **and** buy Mom a living gift.
- **Thinning:** 6-inch tall beets to 4 - 6" apart, 6-inch tall carrots + parsnips to 2 - 4" apart, 4-inch tall radishes to 1 - 2" apart, 8-inch tall chard/collards/kale/lettuce/mustard to 8 - 12" apart.
- **Three Sisters:** a tradition of some Native American tribes, Three Sisters is a companion planting of corn, beans, and squash. For best results plant sweet corn **or** popcorn by itself and then several weeks later within the same 2 square feet plant pole beans and winter squash; the corn will act as a trellis for the bean plant, the squash will shade out weeds as well as keeping the soil cooler with its leaves, and the beans will fix nutrients in the soil. *May is an ideal month to do this.* <http://www.reneesgarden.com/articles/3sisters.html>
- **Summer watering reminders:** deep watering in the early morning or later evening is your best bet when it's above 70 degrees outside (though some plants may prefer more frequent and shallow watering).
- **Recruit students and their families** to sign up for one week of watering and caring for the garden each, over the summer while school is out.
- **Look at different invertebrates in the garden** and decide whether they are beneficial or "pests". Visit <http://eatthinkgrow.org/wp-content/uploads/2012/04/1S21.pdf> for a lesson about good bugs in the garden.
- **Turn and care for compost regularly.**
- **Harvest Time:** arugula, Asian greens, asparagus, borage, brassica flowers, broccoli, calendula, chervil, chives, cilantro, fava leaves and blossoms, fennel, kale, lettuce, mint, mustard, nasturtiums, parsley, snap + snow peas, radishes, rosemary, rhubarb, sage, scallions, sorrel, spinach, strawberries, Swiss chard, and thyme.



	Lower Columbia School Gardens - Monthly Planting Guide						
	JUNE					USDA Hardiness ZONE 8b	Estimated Last Frost: April 30 Estimated First Frost: Oct 31
CROP	SOIL TEMP.	PLANTING DATE	SPACING	DEPTH	METHOD	FROM SEED TO HARVEST	NOTES
Cover Crop	varies	1 st	Scatter	½ - ¾"	Seed		Sow buckwheat and/or phacelia to enrich soil for fall + winter crops. Chop up and mix cover crop into soil a week or two before transplanting Fall + Winter crops.
Transplant to garden early June/late May	Basil, collards, cucumbers, eggplant, gourds, ground cherries, melons, peppers, pumpkins, summer + winter squash, tomatillos, tomatoes						Harden off all plants before transplanting to garden. Take several days to acclimate them to the unprotected outdoors; don't rush the process of moving them from a protected environment into garden beds.
Sow directly in garden throughout June	Amaranth, Asian greens, cilantro, cucumbers, dill, leeks, lettuce, orach, scallions, snap beans (bush + pole varieties), summer squash						
Fall + Winter Veg sow in pots and/or outdoors late June	Broccoli, Brussels sprouts, cabbage, cauliflower, celery, bulb fennel, kale kohlrabi, mustard, scallions					Fall + Winter veggies need soil beds full of nutrients to grow properly during hot summer weather, so plant cover crop this month in whatever area of the garden will be their eventual home and then turn the cover crops in to the soil a week or so before transplanting. Whether you plant in pots or directly in the garden, be sure to start all Fall + Winter veggies in a shaded, cool location and water consistently.	
Fall + Winter Veg sow directly in garden late June/early July	Beets, carrots, rutabagas, snap + snow peas, turnips						

- **Don't forget:** the School Garden Produce Sale begins this month - every Wednesday at the Northlake School Garden until the end of September. Email info@lcschoolgardens.org for more info.
- **Spring Garden Programs end this month and Summer Programs begin!** Visit <http://www.lcschoolgardens.org> or email info@lcschoolgardens.org for more information or to find out how you can volunteer.
- **Thinning:** 6-inch tall beets to 4 - 6" apart, 6-inch tall carrots + parsnips to 2 - 4" apart, 8-inch tall chard/collards/kale/lettuce/mustard to 8 - 12" apart.
- **"Be the Bee/Pollinator" activity can be done mid-month when lots of pollen is in the garden:** have students mimic pollinators by using q-tips or feathers to collect pollen and move it from one blossom to another to help pollinate plants - tomatoes, squash, calendula, zinnia, phacelia, sunflowers, etc. <http://eatthinkgrow.org/wp-content/uploads/2012/04/1S31.pdf>
- **To check soil moisture:** stick a finger *a few inches down into the soil*, near the root of the plant(s) that you are going to water. If the soil still feels moist, the area doesn't need watering just yet, so move on to another plant or another bed. It's also important to use your finger to gauge when the soil has started to absorb the water and the moisture is soaking past the surface and down toward plant roots. *Check for this regularly while watering!*
- **Have a Harvest Party to celebrate the abundance of the garden:** before school is out for the summer see about scheduling a simple meal with students, families, volunteers, and staff in the garden, using some of the produce that is abundant.
- **Encourage students to take home plants like tomatoes, peppers, eggplant and basil** to plant and grow for their family during the summer. (This is a great option for students unable to participate in Summer Garden Programs).
- **Continue to turn and care for compost regularly.**
- **Harvest time:** artichokes, borage, broccoli, cabbage, calendula, cherries, chervil, chives, collards, currants, fava beans + leaves, fennel, garlic scapes, kale, lettuce, mint, nasturtiums, parsley, snap + snow peas, radishes, raspberries, rhubarb, rosemary, sage, scallions, sorrel, spinach, strawberries, Swiss chard, and thyme.



		<h1 style="text-align: center;">Lower Columbia School Gardens - Monthly Planting Guide</h1>	
		<h2 style="font-size: 2em;">JULY</h2>	USDA Hardiness ZONE 8b
CROP		NOTES	
Flowers (in or out)	Columbine, Delphinium, Hollyhock, Lobelia, Mallow, Snapdragon, Wallflower	Late June to early July is the best time to sow biennial and perennial flowers and herbs - indoors or out. After a year or two they will be strong enough to transplant to a different area if so desired (best done in Fall).	
Herbs (in or out)	Agastache, Bee Balm, Catmint, Catnip, Chives, Fennel, Garden Sorrel, Garlic Chives, Hyssop, Lamb's Ear, Lemon Balm, Lovage, Oregano, Sage, Thyme, Winter Savory		
<i>Fall + Winter Veg</i> transplant to garden early July	Broccoli, Brussels sprouts, cabbage, cauliflower, celery, bulb fennel, kale, kohlrabi, mustard, scallions	Harden off all plants before transplanting to garden. Take several days to acclimate them to the unprotected outdoors; don't rush the process of moving them from a protected environment into garden beds.	
<i>Fall + Winter Veg</i> sow directly in garden early July	Asian greens, broccoli, cauliflower, collards, bulb fennel, kale, parsley, radishes + daikon radishes, rutabagas, turnips, scallions, snap + snow peas, Swiss chard	Whether you plant in pots or directly in the garden, be sure to start all Fall + Winter veggies in a shaded, cool location and water consistently.	
Sow directly in garden throughout July	Amaranth, Asian greens, lettuce, orach, snap beans (bush + pole varieties)	These summer vegetables will grow in the hot weather of July and August for an early September harvest. Keep them well-watered to help with germination and to prevent bolting.	
<i>Fall Veg</i> sow directly in garden late July	Asian greens, Chinese cabbage, collards, kale, kohlrabi, lettuce, daikon radish, spinach	These quicker-growing crops should do well in hot weather and be ready for a late Fall harvest. Planting into enriched soil will mean less water is needed to keep plants from bolting.	

- **Planting Fall + Winter Veg now** will prolong the garden harvest into September (and beyond) when students have started a new school year.
- **Don't forget to keep weeding regularly** - if you're careful with your watering and only water the areas where you are growing food you won't have to deal with as many weeds.
- **Continue to turn and care for compost regularly** - a compost pile is a living thing that needs air, water, volume, time, and the right mix of materials. For more information visit <http://www.seattletilth.org/learn/resources-1/compost/compost>
 - **OK for your compost pile:** grass clippings, deciduous leaves, garden plants, annual weeds w/o seeds, house plants, flowers, finger-sized twigs, straw w/o seeds, barnyard manure (chicken, horse, cow, goat, duck, rabbit, llama, sheep)
 - **Not OK for your compost pile:** meat, dairy, oil, evergreen needles and leaves, poisonous plants, noxious/invasive weeds (morning glory, ivy, buttercup, etc.), plants infested w/ pests, branches bigger than your thumb, weed seeds, feces (from dog, cat, rodent, exotic bird or humans)
- **Harvesting garlic and onions for storage:** late July and August are the time to harvest and cure garlic and storage onions. Garlic can be harvested when bottom leaves have turned brown and 4 – 5 green leaves are left on top. Visit <http://www.filareefarm.com/growing.html> and <http://www.rodalorganiclife.com/garden/onions-keeps> for more info.
- **Harvest time:** artichokes, arugula, Asian greens, basil, borage, snap beans, runner beans (4 - 6" long pods, but also allow some to fully mature), fava beans and leaves, beets, blackberries, blueberries, broccoli, calendula, carrots, cherries, cucumbers, currants, dill, bulb fennel, garlic, gooseberries, kale, kohlrabi, lettuce, nasturtiums, storage + sweet onions, parsley, snap + snow peas, radishes, raspberries, scallions, spinach, strawberries, summer squash, sunflowers, Swiss chard, cherry tomatoes, and turnips.



		<h1>Lower Columbia School Gardens - Monthly Planting Guide</h1>	
		<h2>AUGUST</h2>	USDA Hardiness ZONE 8b
CROP		NOTES	
Flowers (out)	Bachelor Buttons, Breadseed Poppy, Delphinium, Mallow, Nigella, Phacelia, Saffron Crocus	If sowed directly in the garden in early August these flowers will bloom in late Fall and add a beautiful contrast to changing leaves.	
<i>Fall + Winter Veg</i> sow directly in garden throughout Aug	Beets, broccoli raab, carrots, chervil, cilantro, collards, lettuce, onions, radishes, scallions, spinach, Swiss chard	Sowing Fall greens and roots now will provide a healthy and nutritious harvest in October. Cover crops with a cloche when nighttime temps fall below 45 degrees to extend the harvest.	
<i>Fall + Winter Veg</i> sow directly in garden late Aug	Arugula, Asian greens, cabbage, winter lettuce, mustard, spinach	The end of August can sometimes mean slightly cooler weather, which makes perfect conditions for Fall greens and overwintering salad crops.	
<i>Fall + Winter Veg</i> sow in pots for transplant in Sept	Kale, lettuce, mustard, spinach, Swiss chard	Whether you plant in pots or directly in the garden, be sure to start all Fall + Winter veggies in a shaded, cool location and water consistently.	

- **Turn compost and screen it for use in the Fall or Spring garden**

- **How to tell if your compost is ready for use?** Harvest compost when it looks like dark, rich soil. It can be screened through ½-inch wire mesh before mixing into garden soil or just be mixed in as is. Large pieces can be used as mulch or returned to the pile.
- **Using compost in the garden:** add compost in the Fall or Spring, when soil is dry enough to work. Mix into top 6-8 inches or use as topdressing.
 - New veggie beds: dig in 2-4 inches of compost.
 - Existing veggie beds: dig in ½-2 inches of compost.
 - If digging isn't an option, spread 1 inch of compost on top of well-weeded soil.

- **Powdery mildew** is a fungus that can show up on plants this time of year - especially grapes and members of the squash family (cucumbers, melons, pumpkins, summer + winter squash).

- **An easy non-toxic homemade spray** can be made by mixing a *quarter-pound of garlic, 1 quart of water and 1 TBSP of vegetable oil* for 10 minutes in a blender. Remove the solids with a cheesecloth and dilute the solution 1:10 with water before spraying on plants.
- **Adding a topdressing of good compost** around the main stem of squash family and grape plants every few weeks can also help increase their resistance - plants tend to be more resilient and less prone to diseases when they are grown in healthy soil.

- **Harvest time:** apples, artichokes, arugula, Asian greens, basil, runner beans (4 - 6" long pods, but also allow some to fully mature), snap beans, shelling beans, blackberries, blueberries, broccoli, cabbage, calendula, carrots, cauliflower, celery, cherries, cilantro, collards, sweet corn, cucumbers, currants, dill, eggplant, fennel, figs, garlic, gooseberries, ground cherries, kale, kohlrabi, lettuce, melons, nasturtiums, storage + sweet onions, parsley, parsnips, peaches, peppers, potatoes, raspberries, scallions, strawberries, summer squash, sunflowers, Swiss chard, tomatillos, tomatoes, and turnips.



		<h1>Lower Columbia School Gardens - Monthly Planting Guide</h1>	
		<h2>SEPTEMBER</h2>	USDA Hardiness ZONE 8b
CROP		NOTES	
Flowers (in or out) early September	Alyssum, Bachelor Buttons, Breadseed Poppy, Clarkia, Flanders Poppy, Johnny Jump Up, Larkspur, Mountain Phlox, Nigella, Peony Poppy, Phacelia	Hardy, self-sowing annuals provide great benefits both as a reliable nectar source for beneficial insects as well as suppressing weeds.	
Overwintering Veg sow directly in garden late Sept	Arugula, Asian greens, beets, carrots, chervil, cilantro, fava beans (also excellent cover crop), grains (barley, oats, rye, spelt, triticale, wheat - all excellent cover crops), kohlrabi, lettuce, mustard, radishes, scallions, snap + snow peas, spinach, sprouting broccoli, Swiss chard, turnips (for greens)	These crops are meant to be overwintered - they will go into Winter with only a few "true leaves" and then won't grow more until late Winter or early Spring. They are intended for Harvest from late Feb - April. Some may need extra protection from cold using a cloche/reemay.	
Overwintering Veg transplant in garden late Sept	Kale, lettuce, mustard, spinach, Swiss chard	If you find your garden lacking space to plant Winter vegetables it may be time to harvest some late-summer crops to make way.	

- **Fall Garden Programs begin this month!** Visit <http://www.lcschoolgardens.org> or email info@lcschoolgardens.org for more information or to find out how you can volunteer.
- **Don't forget:** LCSG offers a Free School Garden Volunteer Training this month. Email info@lcschoolgardens.org for more information.
- **September is an ideal month to introduce students to their school garden!** So many things are growing, the weather is still mild, and students are just back from Summer vacation and can use help getting focused back into the school year.
 - Re-introduce students to the Edible Parts of a Plant. Visit http://lcschoolgardens.org/files_to_share/EdiblePartsofaPlant.pdf for a lesson about the Edible Parts of a Plant.
 - Invite students to taste as many different fruits, vegetables, herbs, and edible flowers as possible in the garden.
 - Introduce students to the garden by having a scavenger hunt or doing an art project where they draw things they see in the garden.
 - Bring microscopes out so students can look more closely at garden flora and fauna; they can also draw what they see through the microscope.
- **Despite the temptation, DO NOT add organic fertilizer to your overwintering vegetables.** The goal right now is to slow plant growth throughout the fall and early winter before the plant goes into stasis (think hibernating bear). (In the Spring you can apply organic fertilizers or composted manure to spur faster growth when plants have woken from their slumber).
- **Harvest time:** apples, artichokes, arugula, Asian greens, basil, runner beans (4 - 6" long pods, but also allow some to fully mature), snap beans, fava beans + leaves, beets, blackberries, blueberries, broccoli, cabbage, Chinese cabbage, calendula, carrots, cauliflower, celery, cilantro, collards, sweet corn, cucumbers, dill, eggplant, bulb fennel, figs, ground cherries, kale, leeks, lettuce, melons, onions, orach, parsley, parsnips, snap + snow peas, peaches, pears, hot peppers, sweet peppers, plums, potatoes, raspberries, rutabagas, scallions, summer + winter squash, spinach, strawberries, Swiss chard, tomatillos, tomatoes, and turnips.





Lower Columbia School Gardens - Monthly Planting Guide

OCTOBER

USDA Hardiness
ZONE 8b

Estimated Last Frost: April 30
Estimated First Frost: Oct 31

CROP	SOIL TEMP.	PLANTING DATE	SPACING	DEPTH	METHOD	FROM SEED TO HARVEST	NOTES
Arugula	40 - 75	1 st	2" bands	¼ - ½"	Seed	4 - 8 wks	Use cloche to extend harvest into cooler weather.
Barley	55 - 75	1 st	Broadcast	n/a	Seed	n/a	Cover crop for weed suppression and erosion control.
Cilantro	60 - 75	1 st	4"	½ - 1"	Seed	4 - 12 wks	Sow weekly until end of October. Harvest weekly until frost.
Crimson Clover	60 - 75	1 st	Broadcast	n/a	Seed	n/a	Cover crop for fixing nitrogen, also nectar source for beneficial insects.
Fava Beans	60 - 85	1 st + 15 th	3 - 6"	1 - 2"	Seed	4 - 5 months	Great as cover crop for fixing nitrogen but will also fill a gap in early Spring with its flowers and leaves. Beans will be ready for harvest late Spring or early Summer.
Garlic	40 - 65	1 st + 15 th	6"	1 - 2"	"Seed"	9 - 10 months	Can be planted Oct - mid-Nov. Scapes (aka Garlic curls) will be ready for harvest on hard-neck varieties in June or early July. Harvest whole heads in late July or August.
Peas, Snap + Snow	45 - 75	1 st	1"	1 - 1 ½"	Seed	6 - 8 months	Choose varieties that will overwinter and provide you with an early Spring harvest (Cascadia, Sugar Ann, Oregon Sugar Pod II).

- **October is the month for Harvest Festivals in many School Gardens!** Be on the lookout for one near you. Email info@lcschoolgardens.org for details on how to get involved.
- **October is the month for planting garlic:** contact info@lcschoolgardens.org to find out how you can get some seed garlic to plant in your school garden, and visit <http://www.lcschoolgardens.org/blog/growing-your-own-garlic> for more growing info.
- **Gather seeds in the garden from fully dried flowers, herbs, and vegetables,** taking care to label varieties and vegetable types.
 - **Easy-to-save "dry" seeds include:** artichokes, arugula, asparagus, beans (dry, fava, snap, and runner), popcorn, sweet corn, kale, lettuce, mustard, onions, peas, radishes, spinach, Swiss chard, nasturtium, calendula, marigold, borage, chives, bachelor buttons, sunflowers, phacelia, cosmos, zinnia, bee balm, gaillarda, catnip, dill, cilantro, parsley, sage, and epazote.
 - **Seeds that have to be saved from fully-formed vegetables or "wet" seeds include:** cucumbers, melons, peppers, pumpkins, summer squash, winter squash, tomatoes, tomatillos, and ground cherries.
- **Harvest time:** apples, arugula, Asian greens, basil, dry beans, fava beans, runner beans, snap beans, beets, broccoli, Brussels sprouts, cabbage, Chinese cabbage, calendula, carrots, cauliflower, celery, cilantro, cucumbers, collards, sweet corn, eggplant, bulb fennel, figs, gourds, ground cherries, kale, hardy kiwi, kohlrabi, leeks, lettuce, melons, nasturtiums, pears, snap + snow peas, parsley, parsnips, hot peppers, sweet peppers, plums, potatoes, pumpkins, quince, raspberries, rutabagas, rosemary, spinach, summer + winter squash, Swiss chard, thyme, tomatillos, tomatoes, and turnips.



		Lower Columbia School Gardens - Monthly Planting Guide					USDA Hardiness ZONE 8b	Estimated Last Frost: April 30 Estimated First Frost: Oct 31
		NOVEMBER + DECEMBER + JANUARY						
CROP	SOIL TEMP.	PLANTING DATE	SPACING	DEPTH	METHOD	FROM SEED TO HARVEST	NOTES	
Barley	55 - 75	Nov 1 st	Broadcast	n/a	Seed	n/a	Cover crop for weed suppression and erosion control.	
Crimson Clover	60 - 75	Nov 1 st	Broadcast	n/a	Seed	n/a	Cover crop for fixing nitrogen, also nectar source for beneficial insects.	
Fava Beans	60 - 85	Nov 1 st	3 - 6"	1 - 2"	Seed	4 - 5 months	Great as cover crop for fixing nitrogen but will also fill a gap in early Spring with its flowers and leaves. Beans will be ready for harvest late Spring or early Summer.	
Flower Bulbs	Anemone, Asian Lilies, Checkered Lily/Fritillaria, Crocus, Daffodil, Grape Hyacinth/Muscari, Iris, Trillium, Tulips					All of these bulbs are Spring-blooming but are best planted throughout November.		

NOVEMBER

- **Fall Garden Programs end this month but there are still many opportunities to volunteer.** Email info@lcschoolgardens.org for more information or to find out how you can volunteer.
- **Make sure all garden beds are protected from erosion** by adding compost, leaves and/or other organic materials to each one.
- This is a good time of year to **test garden soil(s)** and find out what nutrients need to be added when Spring arrives and what nutrients your soil already has in plenty supply.
- **Turn off** watering systems for the Winter, put away hoses (let them drain fully first) and wrap faucets if necessary.
- **Harvest time:** apples, arugula, dry beans, fava beans, runner beans, beets, borage, broccoli, Brussels sprouts, calendula, carrots, cauliflower, chives, cilantro, collards, gourds (for decoration), kale, fuzzy kiwi, kohlrabi, leeks, lettuce, nasturtiums, parsley, parsnips, peas, potatoes, pumpkins, rutabagas, winter squash, spinach, Swiss chard, and turnips.

DECEMBER

- **Add compost and leaves to all garden beds.** (Compost and leaves can still be added to beds where there are plants, but be sure to give plants a bit of breathing space).
- **Sprouting experiments indoors** are a fun and easy way to keep students connected with gardening during Winter months. Try a variety of seeds - sunflower, radish, bean, broccoli, various herbs - and have students make observations and comparisons of different seeds based on germination rates, fastest growing, biggest seed, etc.
- **Use Winter months to do garden upkeep** - haul away debris too big for the compost, spread wood chips, mulch around fruit trees, shrubs, and perennials, continue to turn the compost pile, do major projects that there is no time for when the garden is busy.
- **Harvest time:** apples, arugula, Asian greens, broccoli, Brussels sprouts, calendula, chives, collards, kale, fuzzy kiwi, leeks, lettuce, parsnips, persimmons, spinach, Swiss chard, and turnips.

JANUARY

- **Test soil temperatures with students** - ask them to make predictions about how soon seeds can go in the ground, or hypothesize why soil temperatures vary between different parts of the garden. Soil temperature is best tested 3 inches below the surface.
- **Have students create garden plans, growing plans, and garden maps** for the coming season.
- **Let students look through seed catalogs** and decide what they would like to grow next year.
- **Harvest time:** arugula, Asian greens, beets, broccoli, sprouting broccoli, Brussels sprouts, cabbage, calendula, carrots, chervil, chickweed (grows wild), collards, kale, leeks, lettuce, mustard, parsley, potatoes, parsnips, radishes, rosemary, rutabagas, sage, scallions, sorrel, spinach, Swiss chard, thyme, and turnips.



Lower Columbia School Gardens - Monthly Planting Guide



Our Preferred Varieties

Different varieties are better-suited to certain seasons and/or our area (Maritime NW, Zone 8b). The following varieties are those which we have found to do well in our Cowlitz County School Gardens, are just plain delicious or were “kid picks”. Just because a variety is not listed doesn’t mean you shouldn’t grow it. If you have a variety you would like to recommend, please let us know at info@lcschoolgardens.org. Our list is ever growing and changing!

Seed Saving 101

Visit these links for more info on saving seeds: <http://www.seedsavers.org/learn> <http://www.nativeseeds.org/learn/seedsaving>
Easy-to-save seeds are marked with an *asterisk* in the list below.

Slow Food USA – Ark of Taste: varieties marked with a # are found on the Ark of Taste, a listing of various foods with strong cultural and regional connections at the risk of going extinct. For more information, visit <http://www.slowfoodusa.org/ark-of-taste>

ARTICHOKE*	Green Globe
ARUGULA*	Sylvetta
ASPARAGUS*	Jersey Knight (from crowns)
BEANS, DRY (BUSH)*	Jacob’s Cattle#
BEANS, DRY (POLE)*	Good Mother Stallard, Cranberry, Tiger’s Eye
BEANS, FAVA*	Broad Windsor, Aprovecho
BEANS, SNAP (BUSH)*	Provider, Maxibel
BEANS, SNAP (POLE)*	Blue Lake, Fortex, Kentucky Wonder, Violet Podded Stringless, Rattlesnake
BEANS, YARD LONG (POLE)*	Red Noodle (so fun!)
BEANS, SCARLET RUNNER*	Painted Lady, Scarlet Emperor
BEETS	Chioggia, Early Wonder Tall Top, Cylindra, Bull’s Blood, Red Ace, Golden



BROCCOLI	De Cicco, Umpqua, Thompson, Sorrento, Purple Peacock
BRUSSELS SPROUTS	Roodnerf, Nautic
CABBAGE	Farao, Ruby Ball, Derby Day (aka Golden Acre), Danish Ballhead
CARROTS	Yaya, Romance, Scarlet Nantes, Purple Haze, Merida (fall/overwintering), Red Dragon, Danvers Half-Long
CAULIFLOWER	Amazing, Purple of Sicily, Veronica (Romanesco), Snow Crown
CELERY & CELERIAC	Utah, Brilliant
COLLARDS	Georgia, Champion
CORN, FLOUR*	Painted Mountain, Oaxacan Green Dent
CORN, POPCORN*	Dakota Black
CORN, SWEET*	Golden Jubilee (only plant one variety of sweet corn, no matter what variety you choose)
CUCUMBERS*	Straight Eight, Marketmore, Lemon
EGGPLANT	Millionaire, Black King, Prosperosa
FLOWERS, EDIBLE	Jewel Mix Nasturtium*, Empress of India Nasturtium*, Calendula* (any variety), Borage*, Grosso Lavender, Royal Velvet Lavender, Chives*, Gem Marigolds, Bee Balm, Dianthus, Bachelor Buttons, Salvia, Sunflowers - many vegetables and herbs have edible flowers as well, Arugula, Broccoli, Mustard, Okra, Squash, Scarlet Runner Bean, Strawberry, Agastache, Basil, Chervil, Cilantro, Dill, Fennel, Lavender, Oregano, Sage, Thyme
FLOWERS, for BEES & GOOD BUGS	Phacelia (Bee's Friend)*, Mammoth Sunflower*, Arikara Sunflower*, Bachelor Buttons*, Buckwheat*, Cosmos*, Chives* & Garlic Chives*, Oregano, Mint, Crimson Clover, Borage*, Grosso Lavender, Royal Velvet Lavender, Anise Hyssop, Catnip, Alyssum, Butterfly Weed, Echinacea, Bee Balm*, Zinnia*, Lobelia, Portulaca, Yarrow, Dahlias, Hops, Hellebore, Goblin Flower, Gaillarda*
FLOWERS, ORNAMENTAL	Snapdragons, Rudbeckia, Penstemon, Delphinium
GARLIC	Inchelium Red#, Lorz Italian#, Spanish Roja#,
GREENS	New Zealand Spinach*, French Sorrel*
HERBS	Long Island Mammoth Dill*, Fernleaf Dill*, Santo Cilantro*, Caribe Cilantro*, Italian Flat Leaf Parsley*, Moss-Curled Parsley*, Culinary Sage, Chocolate Mint (keep contained), Oregano, Genovese Basil, Garlic Chives, Lemon Balm, Barbeque Rosemary, French Tarragon, Bay Laurel, Epazote, Pineapple Sage, Winter/German Thyme



KALE*	Lacinato/Dino/Nero di Toscano/Black (all names for the same variety), Red Russian, Wild Garden Kales Mix (Territorial), Tronchuda, Winterbor
KOHLRABI	Superschmelz, Blaril
LEEKs	Giant Musselburgh (Winter-hardy), Bandit (Winter-hardy), Zermatt
LETTUCE, SPRING*	Red Sails, Valmaine, Simpson, Flashy Trout's Back, Winter Density, Two Star, Salad Bowl, Amish Deer Tongue#, Mesclun Mix, Wild Garden Lettuce Mix (Territorial)
LETTUCE, FALL*	Valmaine, Amish Deer Tongue#, Crisp Mint, Provencal Winter Mix (Territorial)
MELONS*	Moon & Stars Watermelon#, Sugar Baby Watermelon
MUSTARDS*	Wild Garden Mustard Mix (Territorial), Spicy Green
OKRA	Red Burgundy
ONIONS, BUNCHING/SCALLIONS	Evergreen Bunching, Red Baron
ONIONS, STORAGE	Cortland, Red Zeppelin, Red Bull, Rossa di Milano
ONIONS, SWEET	Walla Walla (can also be grown for bunching onions)
PARSNIPS	White Spear
PEAS, SHELLING*	
PEAS, SNAP*	Sugar Sprint, Cascadia, Sugar Ann
PEAS, SNOW*	Oregon Sugar Pod II, Oregon Giant
PEPPERS, HOT*	Anaheim, Early Jalapeno, Ancho, Pizza, Beaver Dam#, Fish#
PEPPERS, SWEET*	California Wonder 300, Italian Sweet, Gatherer's Gold, Mini Bell, Jimmy Nardello#
PERENNIALS	These are plants that can become a permanent fixture in a garden and don't need to be replanted every year. Many herbs fall into this category but this space is for plants aside from herbs: Egyptian Walking Onions, Multiplier Onions,
POTATOES*	Yukon Gold (Early), Yellow Finn (Mid), Kennebec (Late), Russian Banana (Late), Ozette# (Late)



PUMPKINS (ORNAMENTAL)*	Dill's Atlantic Giant, Howden, Decorative Gourds
RADISHES*	French Breakfast (Kid pick!), Cherry Belle, White Icicle, Easter Egg, Watermelon (plant early!)
RUTABAGAS & TURNIPS	Joan Rutabaga, Golden Ball Turnip
SPINACH*	Tyee (All-Season), Winter Giant (Fall/Overwintering), Bloomsdale Savoy, Olympia
STRAWBERRY, EVERBEARING	Tri-star
SUMMER SQUASH & ZUCCHINI*	Tromboncino, Costata Romanesco, Black Beauty, Patty Pan
SWISS CHARD*	Perpetual Swiss Chard, Bright Lights (aka Rainbow or Five-Color Silverbeet), Fordhook
TOMATILLOS & GROUND CHERRIES*	Purple Tomatillo, Mexican Strain Tomatillo, Aunt Molly's Ground Cherry#
TOMATOES, SLICING*	Mostly heirloom varieties: Brandywine, Black Krim, Cherokee Purple#, Japanese Trifele, Oregon Spring, Stupice, Willamette, Taxi, Persimmon, Jaune Flamme
TOMATOES, CHERRY*	Sungold, Chocolate Cherry, Sweetie
WINTER SQUASH & PUMPKINS (FOR EATING)*	Small Sugar Pumpkin, Winter Luxury Pumpkin, Baby Pam Pumpkin, Sugar Hubbard#, Waltham Butternut, Kabocha, Delicata, Thelma Sanders#, Acorn, Spaghetti, Boston Marrow#, Candy Roaster#, Sibley#,

