

# 10 Reasons to Grow a School Garden in Winter

## 1) Low-maintenance by nature

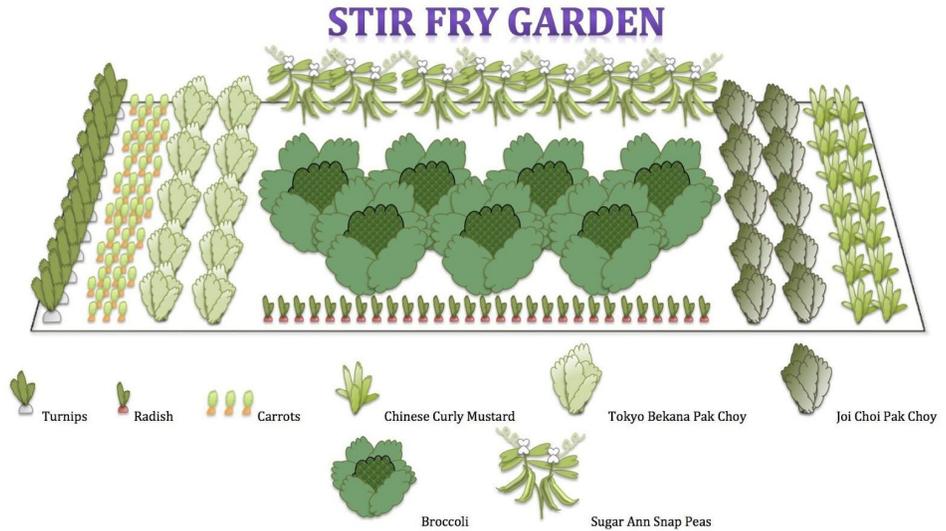
There's no weeding November through February. There isn't even a need to water, since evaporation and plant transpiration drops so significantly. Gro-Guard fabric row covers, permeable to air and water, are more than sufficient protection for winter growing. *Covering the beds with Gro-Guard on October 30th.*

## 2) Discovering leafy greens and root crops

Choose vegetables that will help them explore new tastes. Greens and root crops become so incredibly sweet and tender grown in winter – you'd be surprised by the students' reactions. *"Make Your Own Salad Dressing" contest.*

## 3) Finding joy in winter weather

Since the publication of Richard Louv's *Last Child in the Woods*, there is growing recognition of the role outdoor experiences have in healthy child development. Convincing children to spend time outdoors in winter is an even bigger challenge than other times of the year but students are so excited to work in the garden, they don't grumble and complain about the winter's chill. *Small carrot, but BIG joy. Harvesting from Cole Slaw bed.*



## 4) Fewer pests and disease

Growing in winter is ideal for organic methods, as freezing temperatures aren't conducive to pests, or the fungi and bacteria that cause most plant diseases. *Although active in early fall (October 1st here), cabbage worms disappear when freezing temperatures arrive.*

## 5) A seed-to-seed view

It's easy to see where beans and tomatoes come from, since we eat their seeds when we consume them, but how about kale or beets? Many cold-tolerant plants bolt in the spring after overwintering, giving students a unique perspective on the life cycles of the vegetables they've learned to love. *Kids LOVED eating the edible kale blossoms.*

## 6) Stem to STEM

How do plants survive? As they watch plants freeze and thaw without damage, students learn that most plant adaptations to cold, such as the accumulation of sugars, or the antifreeze proteins that modify the propagation of ice crystals in plant tissues, are largely chemical in nature; biology, chemistry, and the physical sciences easily weave together. Under the protection of low tunnels, vegetables survive temperatures many degrees lower than what they would otherwise, illustrating how concepts in engineering solve a real world problem. *create educational videos & compare temps inside vs. outside the tunnels. Temps will still get cold enough for veggies to freeze, but they bounce back.*

## 7) Grow your own fertilizer

Establish a good cover crop before leaving for the summer break. Nitrogen-fixing legumes like hairy vetch, alfalfa, or clover not only build soil fertility, but smother weeds that may try to invade the beds. In the late summer, the cover crop can be cut and composted elsewhere, or composted in-ground by tilling it into the soil – the bed will be ready for planting in 2 weeks, and rejuvenated with rich organic

matter and nutrients. *A win-win. Students learn the science of composting and nutrient cycling, and the school garden gets free fertilizer.*

### 8) More than an add-on

When gardening is year-round, there's simply more opportunity for a school garden to become a fixed part of the school culture. It's a fantastic idea to have summer school students work in a garden, but shouldn't ALL students get to help a garden grow from seed to harvest? Winter gardening provides an opportunity for all students to participate, all year long. *These students are following the garden from planting to harvest.*

### 9) Longitudinal learning

Most school projects are "once-and-done" – a single experiment, a writing project, a poster presentation. Student learning in a winter garden is inherently longitudinal – the planning and planting of the garden when school begins in late summer, weeding and thinning plants in fall, observing and harvesting in winter, and final harvests and cover crop establishment in spring. It's a great opportunity for journaling, and for conducting long-term, authentic experiments. *-Planting the Rainbow Kale bed*

### 10) Inspiring others

Growing in winter goes against everything that most of us have been told about gardening, making students all the more eager to share what they're doing with their peers, parents, and community members. And I like to think that it inspires a can-do, anything-is-possible attitude. Have you ever watched a wilted, frozen plant spring back to life after it's warmed in the sun? It's nothing short of magical. *You'll never think of "frozen vegetables" the same way. Cold-tolerant plants desiccate and become limp in freezing weather, preventing their cells from bursting. They bounce right back when temperatures warm.*

Source: <http://www.motherofahubbard.com/growing-school-gardens-in-winter/>

## RECOMMENDED WINTER VEGETABLES AND PLANTING DATES FOR PLANT HARDINESS ZONE 6B

*All dates are for direct sowing, unless transplants are indicated (T).*

Vegetable	Recommended Varieties	Open	Low Tunnel
Arugula		8/15-10/1	10/1-11/1
Beet	Cylindra, Bull's Blood	8/1-9/1*	8/15-11/1*
Broccoli (T)	Premium Crop, Packman	8/1-8/21	8/15-10/1
Brussel Sprouts (T)	Catskill Long Island Improved, Jade Cross	7/15-8/7	7/15-9/15
Cabbage, loose leaf (Asian)	Michihili, Canton Bok Pak Choy	8/15-10/1*	9/1-11/1*
Cabbage, heading (T)	January King, Savoy types	7/15-8/7	7/15-9/15
Carrots	Napoli, Danvers, Nelson	7/1-8/15	8/7-9/7
Cauliflower (T)	Snowball Self-Blanching Fall	8/1-8/21	8/1-10/21
Claytonia		9/15-10/15	10/1-11/20
Collards (T)		8/15-10/1	9/1-11/1
Cress	Pepper Cress	9/1-10/1	10/1-11/1
Endive/Escarole/Radicchio	De Meaux Endive, Palla Rossa Radicchio	7/15-8/15	8/15-10/1*
Fava beans	Aquadulce, Sweet Lorane	8/1-11/15*	10/1-11/7*
Garlic (from cloves)	Inchelium Red, Georgia Fire	10/15-11/15	--
Kale	Red Russian, Blue Curled Scotch	7/15-9/15*	9/1-11/1*
Kohlrabi	Early Purple or White Vienna	8/1-9/1	8/15-9/15
Leek (T)	Tadorna	7/1-8/1	8/15-9/15
Lettuce	Rouge d'Hiver, Winter Density, Lollo Rossa	8/15-10/1	10/1-11/1*
Mache (Corn Salad)	Vit	9/15-11/1	9/15-12/1*
Minutina		8/1-9/1	9/1-10/1
Mustard Greens	Mizuna, Japanese Giant Red	8/15-10/1*	10/1-11/1*
Parsnip	Lancer	7/1-8/1*	8/1-9/1*
Peas	Sugar Ann, Oregon Sugar Pod	7/15-9/1	--
Radish	Round Black Spanish, Violet de Gournay	8/15-10/1	9/21-10/15
Rapini (Broccoli Raab)	Sorrento, purple sprouting broccoli	8/15-9/15	9/1-10/15*
Rutabaga	Laurentian	7/1-8/15	8/1-9/15
Spinach	Tyee, Bloomsdale Longstanding	8/15-9/15	9/1-11/1*
Swiss Chard	Bright Lights, Verde de Taglio	6/15-9/10	8/1-10/1*
Tatsoi		8/1-10/7*	9/1-11/1*
Turnip	Hakurei, Golden Globe	7/15-9/7	9/1-10/1*

\*Later dates are for production of baby greens, or an early spring start.