



PUMPKIN PASSION

By Michelle Summer Fike

I have yet to meet anyone who can resist the bright orange, plump and cheerful harbinger of autumn cheer—the pumpkin. Whether for savoury dishes, desserts, seed oil, animal feed, decoration, cosmetics or Hallow’s Eve carving, this famous and worldly cucurbit deserves space in every garden, large or small.

Pumpkins were likely developed in South America from wild plants that date back from 7000 to 5500 B.C. For centuries, aboriginal peoples in North America grew pumpkins with sunflowers and beans, and later with corn and beans, in the Three Sisters gardens central to First Nations agriculture.

What makes a pumpkin a pumpkin, distinct from a winter squash? Actually, nothing biological or genetic. Pumpkins are simply a group of orange, round, green-stemmed squashes, not a distinct species.

Many people are familiar with two ‘types’ of pumpkins, the pie pumpkin and the jack-o’-lantern. Pie pumpkins are generally smaller with denser, sweeter flesh that can be used like winter squash in cooking. Jack-o’-lantern pumpkins tend to be larger with stringy, flavourless flesh. They are best used for ornaments and animal feed.

Early European settlers to North America depended heavily upon pumpkins as a source of vitamin A and food energy. They also made pumpkin beer by fermenting the fruit with persimmons, hops and maple syrup.

***For pottage and puddings and custards and pies
Our pumpkins and parsnips are common
supplies,***

***We have pumpkins at morning and pumpkins at
noon,***

If it were not for pumpkins we should be undone.

—Pilgrim verse, circa 1633

I love the story of the origin of pumpkin pie. It is thought that settlers sliced off the top of a pumpkin, removed the seeds, and filled the cavity with milk, spices and honey. The pumpkin was then baked in the hot ashes of a dying fire.

Pumpkin apple soup

2 cloves garlic, peeled and minced
2 onions, peeled and finely chopped
2-inch piece of ginger, grated or minced
½ tsp cinnamon
1 cooking pumpkin, peeled and roughly chopped (about 8 cups)
4–5 apples, peeled, cored and roughly chopped (about 4 cups)
4 cups vegetable stock
2 cups apple cider
1 can coconut milk or 1.75 cup cream
Salt and pepper

Sweat the garlic, onions, ginger and cinnamon.
Add pumpkin, apples, stock and cider.
Bring to a boil and simmer until pumpkin and apples are cooked.
Taste and season with salt and fresh pepper.
Blend with a hand blender.
Add coconut milk or cream and serve immediately.

Michelle Summer Fike shows off her Neck Pumpkin, a.k.a. Pennsylvania Dutch Crookneck.



Varieties

Pumpkins can be found in a wide array of colours, shapes, sizes and “personalities.” Pumpkins can be white (e.g. Lumina), miniature (e.g. Jack-Be-Little), warty (usually a mid-sized pumpkin variety crossed with a gourd), or gigantic (e.g. Big Max and our locally-famous Dill’s Atlantic Giant).

My favourites include:

- Rouge Vif d’Etampes, a bright orange-red heirloom squash from France that looks like a giant wheel of cheese and is often called the Cinderella Pumpkin,
- Small Sugar or New England Pie, a small pie pumpkin that goes by a number of names,
- Connecticut Field, a large jack-o’-lantern heirloom pumpkin (not a good choice for eating), and
- Neck Pumpkin, also called Pennsylvania Dutch Crookneck squash,

which looks nothing like a pumpkin except for its exquisite thick, solid, bright orange, sweet flesh.

Planting

My planting technique produces healthy plants with abundant fruit year after year. My system is based on the observation that pumpkins do best with lots of heat and nitrogen.

In short-season Canadian climates, ensuring adequate heat for ripening is essential to seed viability, good storage qualities and sweetness of flavour. Choosing appropriate varieties is important as well.

I plant pumpkins in hills built in the centre of raised beds, which are 4-ft. (1.2-m) wide. Occasionally, I plant pumpkins in freshly-tilled ground-level beds. In both cases, the process is the same.

- 1) Dig a hole 8–10 inches (20–25 cm) wide by 6–8 inches (15–20 cm) deep, piling removed soil beside the hole.
- 2) Fill the hole with compost or leaf mulch.
- 3) Using the soil dug from the hole, build a hill over the compost.
- 4) Press the soil firmly so that the hill feels quite solid. It should be at least a few inches high and 8 inches across at the base.
- 5) Form a shallow indentation or moat 5–6 inches wide across the top of the hill so water will collect in the moat.
- 6) Plant four or five seeds 1–2 inches deep into the moat, or transplant three seedlings (which were started indoors three to four weeks earlier).
- 7) Water deeply and mulch with leaves, straw or composted hay.
- 8) Space hills four to eight feet

(1.2–2.4 m) apart, depending on the variety.

9) Mulch between hills.

The hills allow the soil to warm up in the spring and the moat catches water. The mulch keeps the patch weed-free and keeps the fruit clean and off the ground. As a bonus, the compost and degraded mulch allow me to plant another nitrogen-loving crop in the same area the following season.

Transplanting

When I have placed transplants out at the same time as I seeded the hills, I could see no significant difference in their yields by the end of the season. However, you might want to use transplants to grow a long-season variety in a short-season area or to grow pumpkins in a cool area.

An important step is to set transplants out a week or two earlier than your last frost date and protect the plants with cloches, water tents, plastic pop bottles, heavy row cover or temporary tunnels. Keep the plants covered well into June or even early July but make sure the covers can be opened or taken off temporarily during hot sunny days. Long-season varieties need the supplemental heat offered by these coverings to grow vigorously early in the season. The additional heat, more than simply extra days in the ground, seems to be the trick to getting long-season varieties to ripen fully in cool Canadian climates.

Another reason to try transplants might be to get an early crop. Again, early supplemental heat helps. Unlike many crops, however, an earlier harvest is not necessarily a market advantage

because pumpkins don't begin to sell well until September.

Growing

Keep the hills well-watered until the plants are 7–10 days old. Here, in Nova Scotia's Annapolis Valley, we plant pumpkins in the first week or two of June to avoid late killing frosts (planting too early can be a fatal mistake!), but we find June can be quite dry and the seeds (or transplants) need consistent moisture.

Once the plants are established, they require little attention besides the occasional weeding (minimized if the hills are well-mulched) and very occasional supplemental water in very dry weather. By using mulch and moats, I have only watered our pumpkin crop twice in the past fifteen summers.

Make sure you give pumpkins lots of space to sprawl, full sunlight, and fertile soil that drains well. Besides planting too early, the biggest mistake gardeners make is crowding plants, resulting in lower yields. Pumpkins are big, rambling, bold plants in the garden, not suitable for the minimalist garden. As Canadian poet Lorna Crozier writes in the wonderful and celebratory 'Why I Love Pumpkins,' "Because they are not a vegetable for the delicate, the weak-hearted. When you knock on their doors, someone might answer, beckon you inside."¹

Pests

The focus of pest control should be on creating healthy soils and a healthy farm ecosystem. These will help to deter pests and provide habitat for predatory birds and insects. Having strong, robust plants will deter pests or at least

enable the plants to resist pest pressure. Crop rotation and moving crop residue every fall to a distant composting area can prevent pests from establishing themselves around your garden.

Common pumpkin pests include the squash bug (*Anasa tristis*), vine borer (*Melittia cucurbitae*) and both spotted and striped cucumber beetles (*Diabrotica undecimpunctata howardi* and *Acalymma vittatum*).² Pest control methods include:

- covering plants with floating row covers,
- hand-picking or vacuuming,
- sprinkling wood ash on the soil,
- wrapping aluminum foil around the base of the plants,
- applying *B.t.* (check certifier for compliance), and
- applying ground oyster shell around the base of plants.

In my garden, cucumber beetles do the most damage. However, hand-picking combined with healthy, vigorously-growing plants has always been effective.

Saving seeds

Saving pumpkin seed can be extremely simple. The important thing to know is that the four common species of the squash genus *Cucurbita* will not cross with one another*—*Cucurbita pepo*, *C. maxima*, *C. moschata* and *C. mixta* are distinct species. Individual varieties within each species will readily cross-pollinate with one another as insects move pollen from male to female flowers. Therefore, any two varieties from the same species (e.g. *C. pepo*) must

*Note that some crossing may occur between certain strains of *C. moschata* and *C. mixta* (now often called *C. argyrosperma*).



Tag the female flower of the squash with ribbon after pollinating and taping the flower closed.

be separated by at least one kilometre in order for a variety's seeds to remain pure.

For most gardeners, this usually means that it is best to grow only one member of each squash species in your garden in any given year. For example, you may choose to grow Small Sugar Pumpkin (*C. pepo*), Rouge Vif d'Etampes (*C. maxima*) and Neck Pumpkin (*C. moschata*). However, you could not grow Small Sugar Pumpkin and Baby Pam Pumpkin the same year because they are both varieties of *C. pepo* and can cross-pollinate. The resulting seeds would likely contain traits from both parent varieties and would not grow 'true.' (Note that zucchini, summer squash and some winter squash are also *C. pepo*.)

Growing only one member of each species in your garden each year is an easy way to ensure seed purity and varietal continuation, but many seed savers want to grow more varieties. They do this by growing individual varieties in mesh-covered cages or by hand-pollination.

Hand pollination

To hand-pollinate, go out in the evening and find male and female flowers that are going to open the following morning. The females have a small swollen ovary at their base and the males do not. They're at the right stage when colour is beginning to show along the seams and the tips look like they are just about to break apart. Tape these flower tips shut using masking tape.

The next morning, pick two or three male flowers. Remove the tape from the male flowers and tear off the flower petals. Next, locate a female flower from the same variety and remove the tape. Hold the male flowers like paint brushes and gently

Pumpkin pancakes

½ cup pumpkin purée (boil or bake pumpkin, cool and mash)

½ cup vanilla yogurt

¼ tsp baking soda

4 large egg yolks

¼ cup flour (add a bit more if batter is too runny)

4 large egg whites

¼ tsp salt

¼ tsp of each cinnamon and nutmeg

Maple syrup or honey

Cooking oil

Whisk together pumpkin, yogurt, baking soda, egg yolk and flour. Whisk egg whites with salt and spices. Fold into pumpkin mixture.

Heat a cast iron pan. Add cooking oil. Spoon in one third cup batter for each pancake.

Flip when tops are covered with bubbles and edges are slightly brown (about 3 minutes per side).

Drizzle with syrup or honey to serve.

rub the pollen onto the stigma of the female flower. Pollination is improved if you use more than one male flower per female flower. Re-tape the female flower so it can't be cross-pollinated by bees.

Tie brightly-coloured yarn, survey tape or ribbon around the vine close to the female flower. This marker will remain in place all season so tie it loosely but securely. In the fall, save seed from only the marked fruit.

I generally wait until November or December before I start harvesting pumpkin seeds. Cut the cured fruit open and scrape out the seeds and pulp. Carefully separate the seeds from the pulp by squeezing the seeds between your thumb and finger.

Greg Wingate, owner of Mapple Farm seed company, suggests soaking the pulp and seeds for a few hours or overnight in a bowl of water to help the seeds separate from the pulp more easily.

Once the seeds are separated from the pulp, rinse them several times. Try to get as much pulp and stickiness off the seeds as possible. Pour the clean seeds onto a towel and pat them well dry. Lay seeds on a cookie sheet, screen or plates to dry in a well-ventilated, room-temperature room for one to two weeks. As they dry, I stir the seeds every day or two and remove any coating or bits of pulp that free themselves during drying. Store the dry seeds in an



Two Small Sugar pumpkins nestled among Buttercup and Delicata squash.

air-tight jar or bottle in a cool, dark, dry location. Pumpkin seeds will generally store well for six years.

Harvest

Pumpkins are harvest ready when:

- the stems are beginning to dry where they attach to the vines,
- the fruit have become somewhat less shiny and more dull,
- they feel heavy for their size,
- there is a spot of a different colour on the skin where the fruit rests against the ground, and

It's important not to leave mature pumpkins in the garden.

- the colour of the fruit has changed almost fully from green to orange, white or red.

Harvest pumpkins using a sharp knife or pruning shears. Cut the stem just above where it joins the vine so a small piece of vine remains. Do not pick pumpkins up by the stem; rather, carefully pick them up by the body.

It's important not to leave mature pumpkins in the garden. Even a light frost can damage a pumpkin and reduce its storage qualities.

Also, slugs and other fall pests (even deer) can damage the fruit.

To improve the flavour and storage quality, cure pumpkins indoors in an unheated porch or outbuilding, or any place with good air circulation for three weeks. Slightly warmer temperatures can be helpful, but I use an unheated barn. Curing allows nicks in the skin to heal, ripens the seed, and toughens the rinds so that the pumpkins have a longer shelf-life. Although pumpkins generally do not keep as long as many winter squash, I have kept pumpkins into February.

The best storage room is similar to an unheated dry basement: 10 to 15°C with a relative humidity of 50–70%. Note that this is warmer than a cold room or fridge. Each fruit should be placed on a floor or rack, not touching any other fruit, with adequate airflow around it. Check fruit weekly and use any that are showing any signs of spoilage.

I have included a few recipes to use with your pumpkin harvest, or to pass along to customers. A quick look through any cookbook or on the internet will show you that chefs have taken the humble pumpkin to new heights in recent years, showcasing its delicious, nutty, antioxidant-rich flesh in a

Pumpkin martini

Ice

2 tbsp (1 oz) vodka, chilled

2 tbsp (1 oz) vanilla liqueur

3 tbsp (1½ oz) orange juice

1 tbsp pumpkin purée

Pinch of each cinnamon and nutmeg

Fill a cocktail shaker with ice. Add vodka, vanilla liqueur, orange juice, pumpkin purée and a pinch of cinnamon. Shake well and strain into a cocktail or martini glass. Garnish with a pinch of nutmeg. Makes 1 serving.

truly amazing array of culinary offerings. So do yourself and your customers a favour and add hills of pumpkins to your garden next spring.

Michelle Summer Fike is the owner of Pumpkin Moon Farm. She grows herbs, native plants, heirloom vegetable seeds and lots of pumpkins at her farm in Nova Scotia's Annapolis Valley. Visit her or download her seed catalogue (including seed for Small Sugar Pumpkin and Neck Pumpkin) at www.pumpkinmoonfarm.com.

Endnotes:

1. Crozier, Lorna. *Inventing the Hawk*. McClelland and Stewart Ltd., Toronto. 1992.
2. Goldman, Amy. *The Compleat Squash: A Passionate Grower's Guide to Pumpkins, Squashes and Gourds*. Workman Publishing, New York. 2004.

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