

# Pumpkins..an amazing journey from seed to veggie !

## Planting Preparation!

The first thing Farmer Howard does is prepare the soil, by testing to determine the needs for fertilizer and nutrients and also spraying to eliminate all weeds and grasses.



He then “plows” in a different way, using a “ripper” that opens up the ground versus turn-

ing it over, working to eliminate erosion and loss of soil. He opens up the soil to a depth of 12”-14” in 8” to 10” strips.



Coating the seeds with a fungicide will protect against mold and fungus growth.

## Planting

Farmer Howard plants 20 to 25 varieties of pumpkins, gourds and squash. He plants the seeds using a specially adapted planter that puts the seeds 1 1/2 “ deep and evenly spaced in rows 6’ apart.



## Protecting

Farmer Howard spends one entire day erecting a deer fence that will protect all his planting from local wild life that could easily destroy and/or damage every pumpkin. He works to control grass and broadleaf plants using residual herbicides, to protect his plant from these predators that steal soil nutrients and sunshine from his pumpkins.



Farmer Howard is also an IPM (integrated pest management) Scout, as he searches to protect his crop

from the Striped Cucumber Beetle. He also protects his plants from frost by covering them until the weather is warm enough and the plants are strong enough to thrive.

**OPEN to the centerfold for more information**



- 1)Pumpkin seeds and pumpkin flowers can be eaten.
- 2) People used to believe that pumpkins could cure snake bites.
- 3) People used to believe that pumpkins could take off freckles.
- 4) Pumpkins give people potassium and/or vitamin A.
- 5) Pumpkins can be used to make soups and/or pies and/or breads.

Answers: 1: True; 2: True; 3: True; 4:Both potassium AND vitamin A; 5: all three...soups, pies, and breads

*Special thanks to Tim Jones for his amazing photographs of the full growing season, to Gareth Howard, our “Pumpkin Farmer” and to Marilyn Howard for her creative donation that has made this brochure possible.*

**The Foundation has developed tools & resources to “sow the seeds of understanding”. Our programs are available throughout New York State. We invite all who utilize agriculture in the form of food, shelter and clothing to invest in our programs and help us as we work to accomplish our mission.**

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Sowing the Seeds of Understanding

**The Foundation**

New York Farm Bureau  
Foundation for Agricultural Education, Inc.

Pumpkin from seed to ...?



**Discover how Farmer Howard  
grows pumpkins fit for Royalty!**

Our Mission : to inform and educate all New Yorkers regarding agriculture and to increase understanding between the farm and non-farm public.

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# A Pumpkin Patch Season with Farmer Howard!



## Pumpkin Necessities



Some pumpkin needs are supplied by Mother Nature; light (newborn pumpkin seedlings need as much light as possible); and water. Nutrients are

supplied through the application of fertilizer, as needed for Nitrogen (N), Phosphorous (P) and Potassium (K). Most fertilizers display three numbers on the packaging (5-10-5) which denotes the N-P-K percentages. Dependent on growth stage and plant needs, the fertilizer used will vary.



## Pollination

The honey bee, as well as other insects, are pollinators. Even the pumpkin grower's enemy, the cucumber beetle, is a

pollinator! Insects that are attracted to the pumpkin flower are potential pollinators if they travel in the correct order from the male flower to the female flower. Usually it takes 6-7 bee visits for successful pollination...which can only occur while the blossom is open, from 6 am until Noon on one special day when the female flower is mature!

Male flowers are on a thin stem that shoots above the vine from several inches to a foot. The center stamen contains the pollen. There is usually a mature male or two ready to pollinate whenever a female matures.



Female flowers have a tiny baby pumpkin located between the stem and the flower. The female flower is close to the vine and the stem is only a few inches long. A multi-segmented stigma is in the center, and



must be pollinated in order for the fruit to develop. When pollination is successful, the female flower dies and falls off and the tiny pumpkin beneath begins to grow.

## Fruit Set

Fruit Set is the overall process of pollination and early growth of a pumpkin and has occurred after pollination. Other factors affect the proper setting of fruit. The emergence of male and female flowers is an important part of this process.

Farmer Howard must watch for powdery mildew on his pumpkins by inspecting them regularly. Another threat is Downy Mildew. Both can kill all of his pumpkins so he works with his Extension Agent to protect his crop.

## Harvesting

It is best to leave the fruit on the vine as long as possible, until each pumpkin is fully orange and has hardened. You can measure it every few days to see if it is still growing. Farmer Howard usually ships 1,000# bins for wholesale in mid-September, and opens his U-Pick on October 1st, 7 days a week until Halloween. It is best to use a sharp clipper to cut off the stem at the vine. Be careful not to damage the vine if there are more pumpkins still on it.

A good pumpkin has a good stem. **Do not carry the pumpkin by the stem.** Carry the pumpkin out of the field by holding it in the palms of your hands as the stems are fragile.



## Post Harvest

The work is never done! The deer fence must be removed and a disc is run over the ground to cut up immature and rotten pumpkins so that they become compost and feed the soil.

**Pumpkin Nutrition & Trivia!** The bright orange color tells us it is loaded with an important antioxidant, beta-carotene, which is converted to vitamin A in the body. 1 cup cooked, boiled, drained, without salt is 49 calories and 2 grams of Protein, 12 grams of Carbohydrate & 3 grams of Dietary Fiber.

Pumpkins are: 90% water, a fruit, and used for feed for animals. Pumpkin flowers are edible and the seeds can be roasted as a snack.