

How to Grow Organic Potatoes: No. 1 Potato Expert Shares His Best Tips

In this exclusive interview, professional potato producer Jim Gerritsen gives the full scoop on how to grow organic potatoes, how to store your spuds, and much more.

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You'll be amazed how much better fresh, homegrown potatoes taste.

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Jim Gerritsen and family have been growing seed potatoes for 37 years at Wood Prairie Farm (<http://www.woodprairie.com/>) in Bridgewater, Maine. Gerritsen, a potato farmer whom many consider the No. 1 organic potato expert in North America, has a lot to say about the benefits of homegrown spuds.

“If you do a good job, you can harvest about 70 to 90 pounds per 100 square feet — that’s a lot of calories and a lot of nutrition,” he says. To get to that point, though, a grower first needs to learn the ins and outs of how to grow organic potatoes on a home-garden scale. Gerritsen agreed to share his potato wisdom with MOTHER EARTH NEWS, and his tips are sure to raise your potato-growing IQ. Let’s dig in!

What’s the No. 1 most important key to growing organic potatoes?

I would say it’s the seed. Seed is the most important key to growing any organic crop, and that’s especially true for potatoes. There’s a wide variation in seed potato quality, and certified seed potatoes will always do best in terms of yield, storage and overall quality.

How do you grow your seed potatoes?

We start with tissue-cultured, diseasefree mini-tubers that are produced in a greenhouse or hydroponically. We plant them in spring, and after a couple of generations we have enough to sell. Currently, we cultivate two to four generations each of 23 varieties.

Why can’t gardeners just plant potatoes sold in grocery stores?

You can use supermarket spuds, but they won’t grow well because they’re sprayed with chemicals to inhibit sprouting. Some people buy organic potatoes, thinking they haven’t been sprayed, but even these won’t do as well as certified seed potatoes that have been handled properly and are physiologically young. The proof’s in the pudding — or, in your mashed potatoes.

What are ideal growing conditions for potatoes?

The most important thing to remember is that potatoes are a cool-season crop. They simply can’t take a lot of heat and can actually die in temperatures above 95 degrees Fahrenheit.

In what area of the United States are potatoes easiest to grow?

In the northern-tier states, where potatoes can be planted anytime in summer and harvested in fall. In the South, on the other hand, growers need to plant early — either in late winter or early spring — to get the crop to finish growing before the hot weather comes on. Southern growers can also wait for cooler fall weather, planting in July or August and harvesting in October or November.

We have one customer in southern Michigan who plants her crop in fall, putting straw bales over the potatoes to protect them. Then she peels off the straw bales in spring, the plants start growing again, and she has fresh new potatoes in June.

Most growers planting a fall crop live in the southern-tier states, such as California, Arizona, Texas, across the Deep South, and maybe up as far as Virginia. But I say that if a grower can be successful with fall planting in southern Michigan, then a lot more northerners could be experimenting with it.

What’s the ideal soil for potatoes?

Fertile soil that has good aeration, plenty of organic matter and a granular structure is ideal, such as sandy loam that drains well. Heavy clay soil that holds moisture around a developing tuber will impact that tuber negatively (in such cases, growers can lighten soil with coir or leaves). Potatoes are a heavy-feeding crop, so make sure your soil’s fertility level is high, with good, balanced mineralization. After you have a high level of fertility, you can cut back on amendments. To get to that point, we add 10 to 20 tons of compost per acre, which equates to almost a pound per square foot, and then we scale down.

What do you mean by good, balanced mineralization? Nothing too high or low?

We go by the Albrecht formula developed back in the 1940s, which many organic farmers use. The formula specifies ideal ratios between different minerals. You want the ratios balanced, and a properly mineralized soil is going to grow a more nutritionally superior tuber. Good soil always grows better-quality food.

What are remedies for soil that’s less than ideal?

A soil test will aim you in the right direction. If your soil is deficient in certain minerals, you can add an amendment or apply a foliar spray, which is sprayed directly on plants’ leaves. Lighten heavy soil by adding sand, straw, grass clippings, leaves or compost — anything that will increase organic matter and improve tilth and drainage.

You advise planting potatoes when the soil warms to 50 degrees Fahrenheit, correct?

Yes. Here's the reason for that: When you cut a potato into chunks to plant, the cut pieces will not heal in soil at a temperature below 45 degrees. Because of that, the surface of the potato chunks becomes a good location for pathogenic fungi to colonize and create rot. Wait until the soil is 50 degrees so that the seed pieces will heal and grow quickly. We measure soil temperature at a 3-inch depth at 7 or 8 a.m., before the sun warms the soil.

To get a head start on planting, you can greensprout your potatoes — also called “chitting” — about four weeks before you expect the soil temperature to reach 50 degrees. Just place uncut tubers in a dark spot at 65 to 70 degrees for about a week to encourage sprouting, and then move the spuds to a cooler location of about 50 degrees and expose them to light for about three weeks. The light will make the sprouts turn green and stay short and sturdy. Then, at planting time, cut the potatoes into seed pieces, leaving at least one eye in each piece. Learn more in [Get a Head Start With Chitting Potatoes](http://www.motherearthnews.com/organic-gardening/greensprouting-potatoes-zb0z1203zlon.aspx) (<http://www.motherearthnews.com/organic-gardening/greensprouting-potatoes-zb0z1203zlon.aspx>).

Do you have any other tips related to planting potatoes?

There is one complication gardeners should know about when planting in fall or late summer: Newly harvested potatoes have to go through a dormancy period, which is anywhere from four to eight weeks, depending on the variety and the growing year. But they have to go through a dormancy period before they will sprout, which becomes problematic for growers who need to plant their fall crop in mid-August or mid-September.

Consider this example: Let's say it's the 12th of September and we're going to start harvesting our seed potato crop. Any tuber that we harvest is going to need at least a month before it's going to want to sprout, so that would push planting that seed potato to the middle of October. That schedule becomes problematic in terms of the availability of the seed, because most of the seed potatoes in this country are raised in the northern-tier states of New York, Maine, North Dakota, Minnesota, Montana and Washington. So, how are people going to get tubers early enough to plant in fall?

Some of our green-thumb gardeners in the South will purchase certified seed potatoes from us and plant them at the appropriate time for their spring crop, March 1, and harvest that crop in June, and take a portion of their harvest — just the small tubers, for instance — and put them in the back of their refrigerator for a couple of months. Then, if they have a desire to plant a fall crop in mid-August, two weeks before their expected planting time, they'll take the potatoes out of the refrigerator, allow them to break dormancy, and then those tubers will start to sprout at planting time. The next winter, these customers will come back and buy more certified seed from us. If they follow that pattern, they're never more than one generation away from certified seed that has been grown with care and an eye toward disease prevention. That schedule is one we can recommend, as it's a practical way to get tubers growers can then use for a fall crop.

Just note that you never want to be more than a generation away from certified seed, especially if you're in the in the South where virus can develop. Virus is transmitted from sick potato plants to healthy plants by aphids, and in the South, there's a lot of insect and aphid activity, so in only a couple of generations, you can get a tremendous buildup of disease. Our opinion is if you start with certified seed and grow one crop, you can afford to take some of that harvest and plant that for a fall crop, as long as you go back the following winter and buy certified seed for the next crop.

What's your opinion on mulching vs. hilling potatoes?

Few practices are better than mulching for small- to medium-scale home gardens. Mulch conserves water and makes harvesting easier come fall, and as that mulch decays, it adds valuable organic matter to the soil. Whatever mulching material you have will work, such as straw, hay or leaves. For the way we grow potatoes in the field, mulching wouldn't be practical. We grow potatoes in rows and use the tractor to hill up the potatoes, which is the traditional method on a farming scale.

What are potatoes' main pests, and what are your favorite tips for coping with them?

The three big pests in the United States are the Colorado potato beetle, the potato leafhopper and the potato flea beetle. For any pest, the best strategies are rotating crops and moving debris to the compost pile at the end of the year.

In small plots, you can get rid of the Colorado potato beetle by crushing the clusters of bright orangish-yellow eggs. If you need an insecticide, the most effective organic options are those with spinosad as the active ingredient. Organic farmers typically use the Entrust brand, but other brands are available for home gardeners.

Potato leafhoppers can be tough buggers. Look for browning and curling of plants' leaves, called “hopperburn.” One of the varieties we grow, ‘King Harry,’ has pretty good resistance. It's from a Cornell University breeding program, and has hairy leaves that release a gooey substance insects don't like. If you're under extreme pressure from potato leafhoppers, you may need to use an organic insecticide like Pyganic, a botanical pyrethrum product derived from a type of chrysanthemum.

If you're just getting damage from potato flea beetles (a shotgun-hole pattern on plants' leaves), the plants can usually outgrow it without any lasting problems. But if you get a second generation, larvae can tunnel into tubers in fall. A good solution for that is to apply beneficial nematodes.

What about potato diseases?

The two most common are late blight and early blight, which can also attack tomatoes. The names of these diseases are a bit confusing, because time-wise, your plants can actually get late blight before they get early blight.

Late blight is a bigger problem in the East and needs a wet environment to grow. To prevent it, always plant potatoes in a sunny location so dew will dry off quickly in the morning, and space out plants so they have airflow between the leaves. Weather that is perfect for potatoes is also perfect for late blight development. But if you don't have the disease inoculant, you're not going to have the disease — one more reason you'll want to buy high-quality seed. If conditions are atrocious — meaning summers are very wet and don't dry up — you can apply “fixed copper” fungicides, which are allowed in organic production, to the leaves to prevent infection.

Early blight is a bigger problem in the West. Here in Maine, it's an opportunistic disease that preys on plants under stress, especially later in the season when plants are running out of fertilizer in the soil. When we had it 20 years ago, we found that we blew through it by adding more fertilizer so that plants would not slow down in the latter part of the season.

Finally, there is a cosmetic disease called potato scab, a condition that causes rough spots on the skins. I call it “cosmetic” because this disease is just visual. It won't affect keeping quality or taste. Someone could write a whole chapter in a potato book on scab. I would argue scab is typically due to a shortage of both available phosphorus and beneficial mycorrhizal fungi in the soil. Others would argue that if you can stay away from a pH range between 5.8 and 6.1 in the soil, then you'll have fewer problems with scab.

Are certain pests and diseases worse in some regions, but not a problem in other regions?

In the South, pests are a function of temperature. The higher the temperature, the more insect activity you're going to have — so that's one benefit to growing potatoes in the North, and it's one reason most seed potatoes are grown in the northern-tier states. In places such as northern Maine, we have significantly less insect activity than even the coast of Maine, or southern New England. Fewer insects means we are going to have less vectoring of virus.

Diseases have a “disease triangle,” or three-legged stool. In order to have a disease, you've got to have three things: first, the host; second, the environment; and third, the inoculant. If you lack any one of those, you're not going to have the disease.

In the West the air is dryer, so late blight is less of a problem. The bigger problem out there is early blight — but in the end, people have grown potatoes successfully in all 50 states. We have customers in all 50 states, which indicates that potatoes are a general crop that can be grown anywhere. There are some places where growers need to stay on their toes a bit more, but potatoes can be grown.

Is late blight becoming more of a problem?

Yes, at least here in the East. We are getting wetter summers these days, so the climatic conditions are more favorable for the development of late blight. That's one factor.

The other factor is that beginning in 1992, a new strain of late blight came into the United States. The U.S. dealt with the A1 strain of late blight from the Irish potato famine, and then the A2 strain arrived in 1992. I think people first identified this strain in East Germany in the late 1980s, and I believe it came to this country on tomato plants from Mexico. The A2 blight is a much more serious disease, because, while the A1 blight colonizes on leaves, the A2 blight colonizes on the leaves and on the stem.

If you have a little bit of the A1 blight outbreak on plants' leaves, and then it turns hot and dry for two to four weeks, that strain of blight will just dry up and die. But if it's on the stem, there's a lot of residual moisture in that part of the plant, and you can go through three weeks of drought and still have enough moisture to keep the blight alive. In other words, the A2 is very tenacious, and if it starts raining again, the A2 is still there to infect the plant again.

What's the best way to harvest potatoes?

The single best method is to plant your potatoes quite shallowly and mulch them. Then, you can peel back the mulch and the potatoes will be within the top few inches of soil. A high-quality spading fork is the ideal tool for harvesting. Use your foot to push the fork in at the edge of the row, where it won't spear any tubers, and then lean back until it frees up the soil and the tubers all in one motion.

What are your best tips for storing potatoes?

First, you should cure your potatoes by keeping them in the dark at 60 degrees with high humidity for about 10 days to allow the tubers to heal. (With potatoes, curing is often called “suberizing,” or wound healing.) After that, choose cool, dark and moist conditions, with up to 95 percent humidity, at an ideal temperature of 38 to 40 degrees.

The best spot for a gardener's potato crop would be a root cellar, but an unheated, damp basement is good, too. You can try putting your harvest in a wooden apple box, and then adding some moist burlap over top of the potatoes so they can breathe. In ideal conditions, potatoes can keep for up to about eight months, especially if they're a variety known for storage quality.

Is a refrigerator a good place for storage?

A refrigerator is probably too cold, because most people keep their refrigerators at about 34 degrees. If potatoes are stored below 35 or 36 degrees for any long period of time, the starches will reduce into simple sugars and the potatoes will taste unpleasantly sweet. Plus, if you store seed potatoes in a refrigerator for more than a couple of months, they will increase respiration from a perceived threat of freezing and age prematurely. If you were to plant those potatoes in spring, they wouldn't have the same level of vigor that a properly stored seed piece would.

Again, 38 to 40 degrees is ideal, and if you store potatoes in conditions much warmer than that, the potatoes are going to sprout earlier. So, there's a narrow window for good, long-term storage. If you harvest a crop in June and want to save some tubers to plant in August, I don't consider that long-term storage, and I think a refrigerator might be a great place to store those tubers for a couple of months.

When it comes to storage, can there be too much moisture?

Potatoes like 90 to 98 percent relative humidity. It's pretty hard to have too much moisture, but it depends on your end goal. You can have too much moisture if you are storing seed potatoes, because you can get transference of disease such as silver scurf. However, I have neighbors who sell process potatoes to a French fry factory, and they use so much humidity in their storage areas that it's like walking into a London fog.

If you tried storing potatoes in a dry area, say with 50 percent humidity, the potatoes would dry out and shrivel because they're trying to make the air moister, and the air is going to win. In such conditions, you'll end up with drier tubers that are a bit rubbery.

If you have an unheated basement with a concrete floor, you can actually put down some water on the floor to create more humidity in the space. A dirt floor, which is naturally moist, accomplishes the same thing.

How do commercial growers keep potatoes from sprouting?

They treat them with a sprout inhibitor, which is basically a diluted herbicide. For quite a long period of time, this delays the sprout from sprouting. These types of chemicals are either sprayed when the crop is still growing, or after harvest while potatoes are in storage. Commercial growers gas the potato house with a poison. Organic farmers would never do this. Probably 99 percent of all potatoes that are going to be sold as food, or as ingredients in processed foods, are treated that way. Onions are also treated in that manner. I think it's crazy, because all that poison is going right onto the skin of the potato. But, there you have it: modern agriculture.

What is your opinion of container-grown potatoes, and potatoes grown in straw or “potato barrels”?

I think containers are a neat idea. A lot of people don't have a backyard for planting. We sell a product called “smart bags” for growing potatoes, and they do a great job. They are inexpensive, you can roll them up to store them, they're easy to store, and they're porous. You don't have to worry about over-watering your plants. They're really a great invention, allowing people who don't have backyard space to grow crops on a balcony or porch.

The biggest issue we've seen for people growing potatoes in containers is that they typically don't water often enough. Gardeners need to water sufficiently, because containers have a lot of surface area open to warm air, and most people don't realize how quickly that soil is going to dry out.

Are there any no-fail potato varieties?

No, but two of the most rugged varieties out there are 'Butte' and 'Elba.' I like a workhorse better than a show horse, and these are some really good workhorse varieties. They don't require a lot of attention, and they stand up to insect and disease pressure. If you were trapped on a desert island, you'd want these potatoes with you.

'King Harry' is another good, reliable one for insect resistance. Also, 'Red Dale,' 'Onaway' and 'Caribe' are short-season, high-yielding varieties that are easy to grow, and they taste great.

What are your absolute favorite varieties for flavor?

Some of the best we've come across are 'Prairie Blush,' 'Rose Gold,' 'Carola' and 'Russian Banana' fingerling.

How about for storage?

'Prairie Blush' is a great keeping variety, and so are the varieties 'Butte,' 'Red Cloud,' 'Yukon Gold' and 'Swedish Peanut' fingerling.

Which potatoes are best for which cooking methods?

We put together a chart about this, called Potatoes in the Kitchen (<http://www.woodprairie.com/kitchen>), that we've received a lot of acclaim for over the years. The gist is understanding two things when it comes to potatoes and cooking. First is the solids content. Dense potatoes have less water in them and are dry and flaky. Potatoes with more water in them, such as most red potatoes, are going to be moist. You also need to know the type of starch the potatoes have, which depends on a ratio between two starch types. Amylose starch allows for a mealy or floury consistency at the one end of the spectrum, and at the other end is amylopectin, which holds a potato together.

If you're making beef stew and you want a potato that will hold its shape, use a variety that is high in amylopectin. Examples are 'Red Dale' and 'Ottoway.' On the other hand, if you want to make the lightest, fluffiest mashed potatoes — mashed potatoes that you'll have to chain down to the table or else they'll float away — go for a dense potato with a high ratio of amylose starch. The varieties we grow that fit this bill are 'Island Sunshine,' 'Swedish Peanut' fingerling and 'Butte.'

One time, a food writer called us who was creating recipes for South American soup, and she wanted a potato that would completely break down and thicken up her soups. We knew immediately that what she wanted was the variety called 'Carola,' a German yellow variety, so we sent her some. She cooked them up and the soup turned out perfectly — it made a really thick soup exactly like she wanted.

Potatoes represent perhaps more variety than any other fruit and vegetable, at least that I know of. The fun thing about these cooking qualities is that the factors aren't complicated. If you understand the solids content and ratio of those two starches, you can understand what that potato is all about and how it is going to perform in your cooking. That's really a revelation to people.

Do commercial, "mainstream" potato growers use a lot of chemicals?

They absolutely do. I think potatoes are the third most heavily sprayed of all commercial crops. It depends on what list you go by, but the most sprayed crops are apples and cotton. Corn is right up there, but I think potatoes are probably sprayed even more than corn.

Potatoes are typically sprayed with insecticides, fungicides and herbicides. Some of the insecticides and fungicides used are systemic, so that if you spray a leaf, it will translocate to the rest of the plant. Because the tuber is part of the plant, the fungicide will not stop at the tuber wall. Those systemic chemicals were originally invented for ornamental plants. They were never intended for people to eat, but systemic insecticides and fungicides are now common in food crops. You can try to wash the chemical away, but it's inside. And that's why eating organic food — and learning how to grow organic potatoes and other crops in your garden — makes all the sense in the world.

Are potatoes genetically modified (GM) to deal with pests and diseases?

Not in the United States, right now. Back in the mid-1990s, Monsanto introduced the 'NewLeaf' series, six GM varieties created after developers gene-spliced a bacterial toxin into the plants in an attempt to poison the Colorado potato beetle. The problem is that when you splice this bacterial toxin into every cell of the plant, including the tuber portion, everybody will be eating those tubers and thus those toxins. Monsanto was actually required to register the variety as a pesticide, because the potatoes themselves contained the toxin. Now, who in their right mind would want to eat a potato that was registered as a pesticide? That lasted for about six years, until finally the market rejected Monsanto's 'NewLeaf' potatoes and they were voluntarily withdrawn from the market.

You're involved with anti-GMO work. How's it going?

I'm president of a national trade group called the Organic Seed Growers and Trade Association (<http://www.osgata.org/>) (OSGATA). In 2011, we filed a federal lawsuit in New York against Monsanto (the case is called "OSGATA et al. v. Monsanto"). We're trying to do two things with this lawsuit: First, we're challenging the validity of Monsanto's GM seed patents, and, second, we're trying to get court protection for farmers, so that, should their crops become contaminated through no fault of their own by Monsanto's patented seed, they cannot be sued for patent infringement.

What our large plaintiff group has in common is that none of us are customers of Monsanto. We don't want their seeds; we don't want their technology. None have signed licensing agreements with them. It is a perversity in the law that we who are innocent victims and suffer a contamination incident could be sued. But that's how the law reads, and that's why we have gone to the courts to gain protection. The case is still making its way through the courts.

I was part of the team that got a GMO labeling bill passed by the Maine legislature in spring of 2013, and our governor has promised he will sign the bill when the legislature reconvenes in 2014. There is increasing momentum on our side. People have the right to know about GMOs, and when we did a poll here in Maine, 91 percent of residents supported the right to know whether their food was genetically engineered.

Why do potatoes sometimes turn green? Are green potatoes safe to eat?

No, they should not be eaten. Potatoes turn green in the field — a condition often called "sunburn"— if a grower has planted too shallowly, and the potatoes have been exposed to sunlight over summer. If potatoes are exposed to light and turn green *after* harvest, they're called "light-struck."

Potatoes are called tubers because they are an extension of the plant's stem, so the stem in the presence of light turns green and converts light into plant food. The tuber is going to do the same thing. That's why it's important to keep potatoes in the dark, so they don't pick up the green. Potatoes, like tomatoes, peppers and eggplant, are all members of the nightshade family, and there are poisonous compounds in them that can accumulate in certain spots, such as the green on potatoes. Is it a deadly poison? No. Is it a poison that might give you a stomach ache? Yes. You'll want to discard any tubers that have green on them, and you'll want to hill up or mulch your potato plants so they don't get light-struck.

What about green potatoes from the grocery store?

I would take them right back. Seeing green potatoes in a store tells me that someone in the produce department didn't know what he or she was doing. I sometimes see growers or produce handlers washing potatoes and putting them in clear plastic bags — a big mistake. When we ship potatoes from the farm, we ship them in solid paper bags to protect the potatoes from exposure to light.

But why worry about the store? The beauty is that you're going to be growing potatoes in your garden, so you'll be able to enjoy beautiful potatoes that are completely free of bitterness because you handled them and stored them just right.

How is climate change affecting your business?

It's becoming a greater challenge to grow crops now because we are getting such lousy weather. We've had a lot of wet weather at harvest time. Virtually all scientists are saying we are going through a significant climate change. We need to adapt to it. Here in northern Maine, we have very stubborn periods: either very stubbornly wet or very stubbornly dry. We are getting less snow in winter because we seem to hit dry spells in wintertime, and hit wet periods in summer. When we slip into a wet pattern, we may be wet for up to 12 weeks. A couple of years ago, we had wet weather for four and a half months, from May through October, and it's tough to grow crops under those conditions. Extended rain and extended drought are making growing and producing crops more difficult, and I can only imagine it's also challenging for our customers.

But there are two sides to every coin. At the same time that gardening becomes more challenging, people are waking up and saying, "This is important for me to do because the cost of fruits and vegetables in the grocery store is going up and the quality is going down. Plus, by growing food myself, I won't be dependent on anyone else." It may be more challenging to grow things, but that's been balanced out by a greater number of people who are getting into it — not as drudgery, but, rather, growing food for fun.

What's your favorite way to eat potatoes? Do you have any favorite recipes?

We are busy farmers, so we don't get too fancy. Usually our favorite way to eat potatoes is to bake them. If you have good potatoes, you don't have to do a lot to them.

My wife, Megan, will often cook a pile of potatoes in the oven as the centerpiece of that meal — making more than we can eat for supper. Then there will be potatoes left over in the morning, which we take out of the refrigerator and cut up. We've got a cow, so we have fresh butter, which we put in the frying pan with some potatoes and peppers to make fried potatoes for breakfast.

One of our other family favorites is shepherd's pie — a layer of mashed potatoes with beef stew. On Thanksgiving and Christmas, or anytime there is extra time, Megan makes mashed potatoes and gravy. That's pretty hard to beat.

How did you first become involved in growing potatoes?

My grandfather and father grew potatoes on their farm. In their era, everybody in farming grew potatoes. The crop provides a relatively easy way to capture a lot of calories. Potatoes can become the basis of one's diet. I think potatoes are a great crop. Here in northern Maine, we are one of the top potato-producing regions in the world. We have perfect soil, a perfect, cool summer climate, and plenty of moisture. Out West, they are forced to irrigate potatoes, but here we get rain. There is a lot of knowledge up here about raising potatoes. Potatoes are just a fun crop to grow.

My father and grandfather were mainly apple farmers in Washington state, and they would rotate potatoes, alfalfa and wheat. Back then, it seems everybody used to raise potatoes. You could make money on it and feed your family on the pick-outs. It was a pretty good economy. Much of that is still true today.

How did you decide to go into potatoes exclusively?

All of my neighbors grow potatoes. Northern Maine has great soil, and we've got nice cool summers, but we don't have a lot of growing degree days. That means we would have a hard time specializing in crops such as tomatoes, peppers, okra or oranges — anything that takes a lot of heat.

We started out growing table potatoes, and became frustrated when we couldn't find the quality seed that we wanted. So, we started to think it through. We thought, "If we can't find quality seed in the middle of potato country, we've got a business opportunity." Then we started to raise seed potatoes for ourselves, and realized we could raise better-quality seed than we could buy from anybody else. We soon decided to turn that into a business.

The best business in the world is to sell to gardeners. They are the best people around, and we enjoy dealing with them.

What changes and trends have you noticed in your years of potato business?

One thing we've noticed is that more and more people are serious about the gardening they are doing. I think MOTHER EARTH NEWS deserves a lot of the credit for that. They've been talking about self-reliance 40 or so years.

If you go to the grocery store, you end up with potatoes that are green and bitter. You buy peaches that start rotting by the time they're ripe. You buy strawberries from California, but they taste like wet cardboard; there's no sweetness to them because they were picked so unripe. I think people have figured out they can get high-quality food at a real bargain by buying the seed, fertilizing the ground, and putting the time into growing food so they can eat like kings. They can have self-reliance for their family. We've noticed that the average size of our seed-potato orders is getting larger as people become more serious gardeners.

You can easily use potatoes as the foundation crop that your family lives on. You can supplement that with root crops such as carrots, beets and parsnips, and then add squash, onions and garlic, and some dry beans. People are even growing grains such as wheat so they can grind their own flour and make their own bread.

If you are diligent, and if you use potatoes as the foundation, you can grow a very high percentage of the calories your family needs to live. It's fun to work with people who have that as their intention. They're making a conscious effort to live the good life, and that's what we've seen — people have gotten more serious about growing their own food, and that's accelerated since the financial crisis hit in 2007. I know this because of my involvement in the organic seed industry. We've had some of the best years since World War II. When the economy went south, people got serious about expanding their gardens and buying more seed. I know from the trade groups that ornamentals are taking it on the chin, but vegetable seeds, fruit trees and fruit bushes are experiencing a dramatic increase in demand. I think that's a great sign. Once you gain the experience of working with nature, you're a better person — and if we have a country full of people like that, we have a better country.

To order any of the potato varieties mentioned in this article, and to learn even more about how to grow organic potatoes, go to the Wood Prairie Farm (<http://www.woodprairie.com/>) website.