



Country Living

Provided to you by the

OSU Extension Service Columbia County

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October 2023

Programs for you . . .

Listen to the *Gardening Spot* on KOHI (1600 am) radio - Every Saturday, 8:05 to 8:15 a.m.

October 5th: *Columbia County Beekeepers Monthly meeting.* Fonta Molyneaux will speak on Alternative Hives. Her talk recording will only be available for 30 days. Thursday, October 5th, at 7pm meeting at the Saint Helens /OSU Extension Office or by Zoom. Please email for the zoom link. All are welcome. Columbiacountyoregonbeekeepers@gmail.com

October 17th: *Chat with Chip.* A roughly one-and-a-half-hour interactive Zoom program on garden and related topics with Chip Bubl. Tuesday, October 17th from 6:30 – 8pm. You are invited to attend! Reserve a place: <https://beav.es/STR>

October 26th: *Monthly OSU/Columbia County Master Gardener Meeting* is open to all. The meeting and program will be on Thursday, October 26th at 6:30pm at the Extension Office 505 N. Columbia River Highway, St. Helens. **Topic: The Healthy Gardener: Preventing Injuries and Staying Fit with Patricia Kolling (Retired Physical Therapist)**



Oregon State University
Extension Service
Columbia County

Chip Bubl

Chip Bubl, OSU Extension Faculty, Agriculture

Agricultural Sciences & Natural Resources, Family and Community Health, 4-H Youth, Forestry, and Extension Sea Grant programs. Oregon State University, United States Department of Agriculture, and Columbia county cooperating. The Extension Service offers its programs and materials equally to all people.

In the garden

Nutrition & flavor in vegetable gardens

I once asked a vegetable farmer which crops were seldom touched by slugs. Her answer was fast – the ones that have more intense flavors. Her slugs liked their vegetables to be mild, not bitter, sweet but not hot, and not too acidic. They also didn't like hairy leaves. Were slugs onto something?

Plants spent a long evolutionary time honing their genetic edge to keep from being devoured by mammals, insects, reptiles etc. These defensive plant chemicals are very important.

When humans came on the scene, we learned what was safe to eat and what was not. An unsafe plant might have a warning taste, often, but not always, bitter. Some bitter plants were recognized for their medicinal value.

Then, humans started reversing that process, selecting the milder tasting plants when they started farming plants rather than just gathering them. They clearly eroded the vegetables defensive capacity but some strains with a somewhat bitter and/or strong flavored edge were maintained for cooking or fresh eating.

There are many good examples including asparagus, spinach, chicory, arugula, cilantro, most of the herbs, slightly stressed celery, garlic, horseradish, and others.

Most of these vegetables and herbs have people that love them and others that don't. Cilantro tastes "soapy" to some so most of them hate it. Other people roll past that soapy sensation and consume cilantro as an important part of their meals. A fair number of people don't taste the "soapy" at all. I was a

soapy taster but came to love cilantro during an odyssey in South and Central America many years ago. Another note, cilantro goes to seed quickly as summer warms. Seeds can be harvested for the spice, coriander.



The food culture you were raised in will be with you forever but experiences once you leave home may open your taste buds dramatically. Genes that were dormant come alive.

It is all very complex. For an interesting discussion on this topic, see <https://theconversation.com/can-we-train-our-taste-buds-for-health-a-neuroscientist-explains-how-genes-and-diet-shape-taste-205456>.

Next month, I may delve into umami, the flavor that is part of soy sauce, and other foods.

Finally, in the end, it is all about eating food that gives us pleasure **and** keeps us healthy. A health-giving vegetable garden will have a mix of leafy greens, some root crops, onions and garlic, and plants like winter squash, carrots, and sweet potatoes that provides the vitamin A in such a pleasant package.

Some years back, Cornell University put out a diagram of a very small vegetable garden that was bulging with good nutrition. Their upstate New York climate is somewhat different than ours with generally hotter and fairly humid summers and lots of summer rainfall. But really, with the possible exception of blackeye peas, it is a garden that could fit well here. The garden plan has spring-planted crops followed by an August planting that takes it into fall. I have copied it on the next page. Ignore the variety names. Most, though not all, are gone. Also ignore the costs and returns as they are quite dated. But I think the idea and design is worth a look for a person with only a small space but some nice soil. It can also inspire any gardener.

A Nutritious Garden for Limited Space

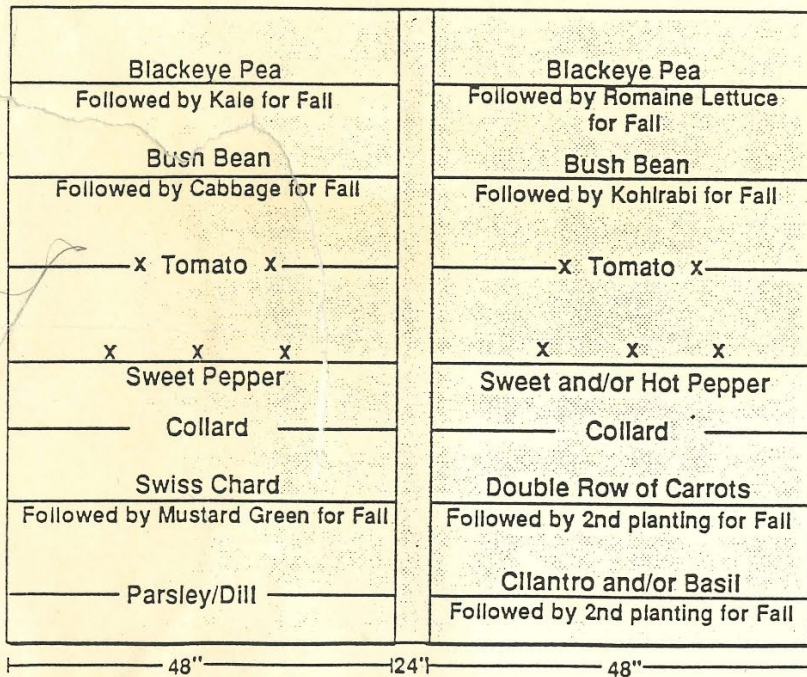
Starting a vegetable garden in May means planning for summer harvest. The same space can produce tasty food well into the autumn months. No matter how large a garden you have, getting the biggest value from the space is important. Value can be measured in many ways including *nutritious value*.

Here is a plan for a 10' x 10' garden—practical enough for even the tightest urban locations. Each square inch is planned for maximum Vitamin A, Vitamin C, and fiber, often found low in the American diet. The protein in Blackeye Pea and beans is a good substitute for animal sources of protein, which are often high in fat.

The herbs and hot peppers enhance the flavor of prepared dishes, helping to reduce the use of table salt.

The garden will yield from late June well into October or November. As with any vegetable garden, it requires at least 6 hours of sunlight and fertile, well drained soil with adequate organic matter. Water conservation techniques and normal pest control should be standard procedures.

The garden can be planted in the ground or in a raised bed. We recommend planting during the third week in May and reseeding where indicated on August 1 for a Fall Harvest. Thirteen out of the 18 suggested varieties may be grown from seed sown directly in the garden. The five transplant varieties are readily available in local metropolitan markets. The total retail cost for seed, transplants, fertilizer and organic matter used in the 100 square feet is estimated at \$20 and should yield about \$85 worth of vitamins, protein, fiber and flavor.



(Not to Scale)

Varieties recommended for Maximum Nutrition

- | | |
|-----------------------------|---------------------------|
| 'California' Blackeye Pea | 'Blue Knight' Kale |
| 'Jumbo' Bush Beans | 'Romaine' Lettuce |
| 'Savoy' Cabbage | 'Greenwave' Mustard Green |
| 'Nantes' Carrots | 'Plain Leaf' Parsley* |
| Cilantro Herb | 'Lady Bell' Sweet Pepper* |
| 'Heavi-Crop' Collard Greens | 'Maxibelle' Hot Pepper* |
| Dill Herb | 'Rhubarb' Swiss Chard |
| 'Grand Duke' Kohlrabi | 'Jetstar' Tomato* |
| | 'Early Girl' Tomato* |

* Transplants

- 15" SOURCE OF VITAMIN A
- Carrot
- Collards
- Kale
- 20" Mustard Green
- Romaine Lettuce
- Swiss Chard
- 20" SOURCE OF VITAMIN C
- Cabbage
- Collards
- Kale
- 20" Kohlrabi
- Mustard Greens
- Sweet Pepper
- 12" Tomato
- SOURCE OF FIBER
- 12" All
- SOURCE OF PROTEIN
- 6" Blackeye Pea
- 6" ALTERNATIVES TO TABLE SALT
- 6" Cilantro, Basil, Dill, Hot Pepper, Parsley

Experienced gardeners will notice the absence of some old favorites like summer squash, cucumber, corn, beets, onion, and eggplant. While these are fun to grow, they do not produce as much nutritious produce as the varieties included. A few nutritious vegetables, like winter squash and broccoli, are missing merely because of space limitations.

For more detailed information on the varieties selected write, *Nutritious Garden*, Cornell Cooperative Extension, 15 E. 26th St., 5th Fl., New York, NY 10010.

Acknowledgements: John Ameroso, Roger Kline, Ruth Lowenberg, Charles Mazza, Lisa Miller, Phyllis Pottinger, Nilda Tirado, Philson Warner of the Cornell Cooperative Extension Staff for their gardening and nutrition perspectives in this design.

Classic French herb lore

So far, this newsletter is bending in a culinary direction. This piece started with a question about what were the “*Herbes de Provence*”. I had some ideas but since the French have strong ideas about these things, knew that there had to be an actual formula. There is! Here is the official composition of *Herbes de Provence*:

19% Thyme leaves (dried)
27% Rosemary “
27% Savory “
27% Oregano “

And while it doesn't say so, I believe it is by crushed volume, not weight.

It is not uncommon to add marjoram and lavender in smaller volumes. But that is not official! *Herbes de Provence* are used whenever any food (roasted, stewed, raw, etc.) needs a bit of a flavor boost.



This then led me to the debate about *Fines herbes*. These are fresh herbs added to an omelet or other quickly cooked food like fish. Originally, it seems to have been mainly parsley, finely chopped by knives (never in a mechanical chopper!) but the cooking giants of France in the late 1800s declared that parsley was not enough. The true *Fines Herbes* had to be parsley, chives and a little chervil and a little tarragon, **all fresh**. Drying these herbs destroys most of their flavor.

All these herbs grow well here. We are not a Mediterranean climate for nothing! Another

good thing is that all of these, with the exception of parsley and possibly chervil, are not eaten by most deer.

Storing garden produce

The wonderful sunny days in September gave a great boost to our gardens. As October starts and the weather pattern turns wetter and cooler, gardeners spend time getting produce stored for the winter.

Many vegetables will last for some months if stored properly. Advice common to all fruits and vegetables is to only try to store produce that is in good condition (“one rotten apple can spoil the box”). In addition, check periodically to see if sprouting or rot has developed after initial storage. Finally, freeze or can produce where that makes sense.

Onions and garlic: The hard, pungent onions store the best. If they are still in the ground, dig them now and bring them under cover to cure. Remove the roots. Some gardeners keep the tops on for awhile as the onions dry. The onion tops should be removed when the bulbs are bagged for final storage unless you are braiding them.

Onions and garlic both need to be stored in dry conditions. Most outbuildings have too much moisture in the fall/winter and in those conditions, onions and garlic will start to sprout. You will have better luck inside storing them in a warm, dry room than a cool but moist location. If you can get onion mesh bags for storage, so much the better but they will store well in paper bags. Some air circulation is important. Sweet onions should be eaten right away as they have very poor storage ability. Sort onions and garlic often to remove those that sprout or decay. A well-cured pungent onion should last at least four months with proper storage. Garlic

can last until late spring. Don't store either with fruit as that encourages sprouting.

Winter squash: Those wonderful winter squash are also easy to store. **Harvest them before a frost.** When rainy weather sets in, squash are done growing and will only rot if left outside. Butternut and Hubbard squash store for six months or more if well cured. Acorn squash are best used within four months of harvest.



Clip the squash from the vine leaving a stem end. Wash the dirt from the squash and let them cure in a warm room on a counter or table for a week. Check for any signs of rot. Then put them into a dry room on a shelf or a shallow box. Best storage temperature is about sixty degrees. Check periodically for decay.

Potatoes: Potatoes are hard to store. They need cold and moist storage. We have the moist but don't get enough cold weather for long-term storage. The best storage system I have seen is placing the potatoes in five-gallon buckets or small garbage cans with sawdust surrounding the spuds. They could be kept in an unheated outbuilding. Don't store diseased potatoes, check often for sprouts and eat your spuds quickly. Some varieties store better than others but few people have much luck holding potatoes past late January. If you do, please tell me your secret.

Other root crops: Carrots and parsnips develop better flavor if left in the ground until a frost. However, if the meadow mice find them, all you will have are carrot stubs with cute little teeth marks. In addition, if you had problems with the carrot rust fly, their tunnels will decay faster if the roots are left

in the ground. They are best stored like potatoes in buckets with sawdust. Don't store with fruit. The ethylene they give off can cause sprouting and bitter flavors.

Lime the garden this fall

If you haven't added lime to your garden for several years, do so this fall. It takes lime about six months to fully react with the soil before you get the benefits. And the benefits are substantial: more calcium, magnesium, phosphorus, and potassium available to your plants. A good lime rate is 100-150#s of lime per 1000 square feet in the vegetable garden. Lime at 50#s if you grow a lot of potatoes (lime stimulates potato scab) or sulfur dust your potatoes at planting.

Cover crops

Garden cover crops should be planted as soon as possible. Hairy vetch has been getting a lot of publicity back east. There, they grow the vetch over the winter and then chemically kill it in the late spring with a non-residual herbicide. Tomatoes and bro-



coli (and many other vegetables) are transplanted through the killed cover crop. The vetch provides nitrogen as the soil warms up and the vegetation left on the surface slows the weeds. You can also till the cover crop in.

Other cover crops include winter wheat and oats, winter rye, common vetch, and crimson clover and Austrian winter peas. All should be planted as soon as possible. In some cases, it pays to cover the seed with row cover to keep birds from eating the seed. Picture: Crimson clover

October Garden Hints from Oregon State University Extension Service

Planning

- If needed, improve soil drainage needs of lawns before rain begins.
- Make notes of things to change/add for next year's garden.

Maintenance and Clean Up

- Recycle disease-free plant material and kitchen vegetable and fruit scraps into compost. Don't compost diseased plants unless you are using the "hot compost" method (120° to 150°F).
- Drain irrigation systems.
- Use newspaper or cardboard covered by mulch to discourage winter and spring annual weeds or remove a lawn area for conversion to garden beds. Work in the paper and mulch as organic matter once the lawn grass has died.
- Clean and paint greenhouses and cold frames for plant storage and winter growth.
- Harvest sunflower heads; use seed for birdseed or roast for personal use.
- Dig and store potatoes; keep in darkness, moderate humidity, temperature about 40°F. Discard unused potatoes if they sprout. Don't use as seed potatoes for next year.
- Harvest and immediately dry filberts and walnuts; dry at 95° to 100°F.
- Ripen green tomatoes indoors. Check often and discard rotting fruit.
- Harvest and store apples; keep at about 40°F, moderate humidity for best storage.
- Place mulch over roots of roses, azaleas, rhododendrons and berries for winter protection. If field mice are an issue, trap where you mulch.
- Trim or stake bushy herbaceous perennials to prevent wind damage.
- To suppress future pest problems, clean up annual flower beds by removing diseased plant materials, overwintering areas for insect pests; mulch with manure or garden compost to feed the soil and suppress weeds.
- Cover asparagus and rhubarb beds with a mulch of manure or compost.

- Clean, sharpen and oil tools and equipment before storing for winter.
- Store garden supplies and fertilizers in a safe, dry place out of reach of children.
- Prune out dead fruiting canes in raspberry
- Train and prune primocanes of raspberry
- Harvest squash and pumpkins; keep in dry area at 55° to 60°F.
- If necessary (as indicated by soil test results) and if weather permits, spade organic material and lime into garden soil.

Planting/Propagation

- Dig and divide rhubarb. (Should be done about every 4 years.)
- Plant garlic for harvesting next summer.
- Propagate chrysanthemums, fuchsias, geraniums by stem cuttings.
- Save seeds from the vegetable and flower garden. Dry, date, label, and store in a cool and dry location.
- Plant ground covers and shrubs.
- Dig and store geraniums, tuberous begonias, dahlias, gladiolas.
- Pot and store tulips and daffodils to force into early bloom, indoors, in December & January.

Pest Monitoring and Management

- Monitor landscape plants for problems. Don't treat unless a problem is identified.
- Remove and dispose of windfall apples that might be harboring apple maggot or codling moth larvae.
- Rake and destroy diseased leaves (apple, cherry, rose, etc.).
- Spray apple and stone fruit trees at leaf fall to prevent various fungal and bacterial diseases.
- Control lawn weeds while they are small. Hand weeding and weeding tools are particularly effective at this stage.
- If moles are a problem, consider traps.

Houseplants and Indoor Gardening

- Early October: Reduce water, place in cool area (50-55°F) and increase time in shade or darkness (12-14 hours) to force Christmas cactus to bloom in late December.
- Place hanging pots of fuchsias where they won't freeze. Don't cut back until spring.
- Check/treat houseplants for disease and insects before bringing indoors.

The natural landscape

Skunks in your landscape (and under your house)

There aren't many people that like skunks but I happen, generally, to be one of them. In Columbia County, we have mainly striped skunks.

I have found them to be relatively calm unless provoked by a dog, coyote, raccoon, or a human.



However, it is not good if skunks have a den under your house. Two skunks can get into a tussle, as can skunks and their other enemies. The results are all too predictable. Skunk spray is powerful and impossible to remove from insulation. The insulation must go. Sometimes, harder surfaces can be sprayed with a skunk smell neutralizing mixture. I will give one mixture below. But spraying de-skunking concoctions under a house is a bit risky to you so be careful.

You should try to exclude skunks from that space. Check your foundation for openings and tighten them up. If skunks start to dig under your foundation (hard to do) or under manufactured home's skirting (much easier), you can watch when they go out to forage in the middle of the night and quickly put down some tight-mesh metal fencing to force them to leave. Warn your neighbors what you are doing at 2 am. Sometimes after the fact exclusion works and sometimes it does not. Don't do this when the skunk babies are still underneath.

At some point in the late summer, skunks usually leave. That is the time to batten down everything.

People have tried all manner of repellents to get skunks out from under houses. Ammonia-based cleaning products and various clothes insect repellents (moth balls) with, at best, mixed results. Use in crawl spaces will subject the humans inside the house to potentially toxic fumes. Given their poor record, they probably shouldn't be used.

Skunks are omnivorous (they like fruit, insects, meat, etc.) and do most of their foraging at night. Skunks do some good. They will dig up little patches of lawn looking for crane fly grubs (so will raccoons). They will also dig out ground-nesting yellow jackets and eat the immature larva. They give birth to 3-6 little ones in the spring or early summer.

If your dog or cat gets tagged with skunk spray, here is a formula that will help reduce the smell:

1 quart of hydrogen peroxide
¼ cup baking soda
1-2 teaspoons liquid dishwashing soap.

Mix together and work into the fur **being careful to avoid the eyes**. Then wash the mix off. You will need double or triple this recipe for a big furry dog. I know this works. Our dear departed (after 17 years) beagle once had a two-hour encounter with a skunk (both survived just fine). It is a long story but, by actual count, the skunk managed to "stand and deliver" at least 40 times. And the beagle barked about 50 times **a minute** for almost two hours. He was very quiet the next day.

Farm and livestock notes

Hot food trends for small farmers

If you are raising products for direct sale to consumers or restaurants, you need to stay current on some of the trends in the food industry. These trends are not something you can usually build a farm around (trends and preferences evolve over time) but may help you to develop niche markets and new customers. So what does the restaurant industry like right now? Here are some thoughts:

- There is a lot of experimentation in both mixed drink recipes (cocktail nation in PDX needs more specialized ingredients) and in the development of new alcoholic vermouths, gins, tonics, bitters, and whiskeys. Interesting syrups and extracts can also play in this landscape.
- Speaking of bitter, many restaurant dishes are incorporating an edge of bitterness derived from vegetables, herbs, and other botanicals like bitter melon, chicory, rhubarb, and certain eggplant types/preparations.
- And speaking of rhubarb, it is a hot ingredient in cooking. Chefs are using rhubarb in savory as well as sweet dishes, pairing its acidity, interesting flavors, and slightly bitter edge with meats of all types. Wines and other products are being created with rhubarb.
- Mixed salad greens are more complex than ever. Excellent growers can supply upwards of 40 different salad materials in a variety of combinations.
- Some of the significant Thai, Middle Eastern, and Indian flavors are still going strong including ginger, cardamom, cumin, nutmeg, cloves, etc.
- Not quite so hot peppers with a complex flavor profile are also gaining favor. There

is a lot of room for innovation and experimentation here with pepper genetics being quite diverse.

- Finally, when you're hot, you're smokin! Figuring out how to add a smoky flavor to your products and/or ingredients may



open some doors if the pairing works. Experiment. You probably would need to check with Oregon Department of Agriculture to see that your preparation of the product is done in a correct manner and location. Smoked paprika peppers from Europe and chipotle peppers from Mexico

have been the culinary “gateway drugs”.

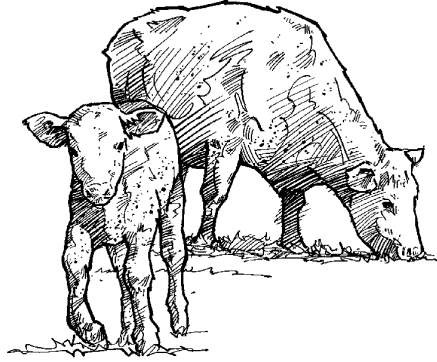
Organic blueberry production

Recent OSU work has led to the following conclusions based on a 10+ year research trial:

- Independent of your weed control method (sawdust vs. weed mat), bed planting increased yield almost 30%.
- Plants under weed mat required more 50% more water than sawdust mulched beds.
- Sawdust beds required 300 more hours of labor per acre for weed control (439 vs 109).
- Organic herbicides became less effective as the trial progressed due to weed shifts to more grass and perennial broadleaf competition that the organic products controlled poorly at best. Hand weeding had to be brought in.
- Fertilizing blueberries is complex under mats with fish emulsion being the most common material used. Feather meal added to the bed at planting gave improved early growth in comparison to fish emulsion.

Crunch time?

The high cost of animal feed is meeting with high prices for beef and sheep but low return for milk. The beef herd is way down nationally and locally. Grass hay is very costly. Alfalfa is proportionately higher. For beef cattle, you need to pencil out what the 125-150 day fall and winter feeding period will cost you at 35#/day per head. This figure accounts for some waste but does not take into account the cost of additional protein that will be required during the last trimester of pregnancy and the first several months of lactation if your only hay is grass hay. The numbers are about the same for horses being worked, less for those that aren't.



I am concerned that high beef prices may send consumers to other meats at a faster pace than it has been lately. That could start driving feeder beef prices down while feeding costs remain high.

Cattle disease issues in the fall

The recognition and treatment of Bovine Respiratory Disease Complex (BRDC) is vital to the economic well-being of the stocker cattle producer. This disease is also known as shipping fever, or simply pneumonia. BRDC is a very complex, multifactorial disease that involves several instigating factors.

These factors include marketing, weaning, shipping, mixing cattle from multiple sources, weather, nutrition, and the respiratory viruses (IBR, BVD, PI3, BRSV). All of these causes can result in a calf developing pneumonia. These calves usually develop a bacterial pneumonia most often caused by *Pasteurella*

Haemolytica, *Pasteurella Multicida* and *Haemophilus Somnus* are also known to cause pneumonia.

Calves most often become sick following stressful situations such as weaning or marketing. The clinical signs are usually seen 7-21 days after the calves are bought, but can occur anywhere from 2-30 days after purchase. Less frequently, calves that have not been marketed or weaned can develop pneumonia, usually related to weather changes or other stressors.

The most common and earliest recognizable clinical sign of pneumonia is depression. Calves exhibiting depression will have drooping ears, an extended head, a bowed back and/or often isolate themselves from other cattle. As these calves get progressively sicker, they will go off feed and will exhibit an increased respiratory rate. Increased lung sounds can be heard with the aid of a stethoscope. A thermometer is another useful tool in the diagnosis of pneumonia. Most sick calves will have a fever of 104°-108°F. However, temperatures can be falsely elevated in the afternoon due to increased outside temperatures. In order to obtain the most accurate temperature reading for an animal that is suspected to be sick, the calf's temperature should be taken before 10:00 am.

Talk to your veterinarian about prevention and treatment options. All of the treatment recommendations will need to be discussed with your veterinarian in light of the recent antibiotic purchase and use rule changes.

Adapted from a piece by Currin and Whittier, College of Veterinary Medicine at Virginia Tech University



Oregon State University

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Return Service Requested

Oregon Native Edible Truffles: Hot off the press! Oregon provides ideal growing conditions for truffles. There are hundreds of native truffle species in Oregon, but only four are considered gourmet edible truffles. Learn more about these aromatic, highly sought-after fungi used as culinary delicacies in many dishes. <https://extension.oregonstate.edu/catalog/pub/em-9369-oregon-native-edible-truffles>

Understanding Soil Health and Biota for Farm and Garden. Like sunlight, water and air, soils are the foundation of life on Earth. Learn how soils link plants, the atmosphere, agriculture, food security, health, the economy and the environment. <https://extension.oregonstate.edu/catalog/pub/em-9409-understanding-soil-health-biota-farms-gardens>

Developing Quality Christmas Trees in the Pacific Northwest. Each Christmas tree species requires special skill and specific knowledge to be grown successfully. This publication outlines how trees grow and the culturing practices necessary to develop the size, shape, and density of true fir, Douglas-fir, pine, and spruce Christmas trees so that they are marketable. <https://extension.oregonstate.edu/sites/default/files/documents/pnw684.pdf>

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