# 12 tips to keep veggie diseases at bay



**Gardening** Carol Savonen Guest columnist

Here are some steps you can take when sowing and growing your young vegetable plants to help keep plant diseases at bay.

**Start with super clean pots.** Be sure to scrub away all visible residue from former use. Or use new containers.

Then, sanitize your containers. Soak scrubbed pots, flats and trays in a solution of one part chlorine bleach to 10 parts water for a half hour. This will kill any remaining plant disease microorganisms that could weaken or kill your tender young seedlings. It is good to clean your trowels with the bleach solution as well.

Sow seeds in weed-free and disease-free seed starting and transplanting mixes. A good seed-starting medium must be fine and uniform, yet well-aerated, loose and free of pests, diseases and weed seeds. It also should be low in fertility and total soluble salts, yet capable of holding and moving moisture by capillary action. Look for these media at your local garden store. Below, I describe how to make your own.

Don't use your garden soil to start seeds indoors. Typical backyard soil is commonly too dense, full of weed seeds and is not pasteurized, causing seedling diseases and death. And native soil does not often drain as well as seedling mixes. It can develop a crust that prevents seedlings from pushing through the soil.

**Recipe for homemade seedling mix:** Here's a recipe for a good basic pasteurized soil for growing vegetable seedlings: Mix one-third (by volume) pasteurized (see below) soil or finished compost, one-third sand, vermiculite or perlite, and one-third peat moss. Other recipes abound, but that one is simple and straightforward and has worked for many Master Gardeners.

**To pasteurize compost:** Put the slightly moist compost in a heat-resistant container or pan. Cover with a lid or foil. Place in a 250-degree oven for at least a half-hour. Use a candy or meat thermometer to ensure that the mix reaches a temperature of 180 degrees for a full half-hour. Avoid overheating it, as the structure of the soil may be damaged, rendering it useless as a seedling soil ingredient.

Follow recommended planting instructions on seed package. Whether starting seeds indoors or out, follow the instructions on the seed package accordingly. After planting seeds indoors, moisten the soil before sowing your seeds. Then until germination, take care not to wash the seeds loose. I use a spray bottle to water soil surface before seeds germinate, then I transition to watering from the bottom as the seedlings develop a root system.

Good air circulation is crucial once seeds grow multiple sets of leaves. I run a fan once my seeds develop true leaves. Not only does this discourage plant diseases, moving air also makes for stronger plants. Be sure to remove any covering you had over your seedstarting containers once the seeds germinate.

Use bottom heat. A heat mat under your seedling pots will help seeds germinate faster, avoiding rot. If you are starting cold season seedlings such as broccoli or onions, move them off the heat and grow them in a sunny window or right below cool shop lights. Keep warm season seedlings (e.g. peppers and eggplants) on heat until they grow multiple leaves.

Water judiciously. Once germination occurs, water from the bottom if you can. Try to keep the surface soil dry for as long as you can. Avoid frequent overhead watering as it keeps surface soil too moist, which promotes fungal growth. If seedlings are in flats or in cold frames, give them as much air and light as possible. The drier the soil, the greater light, and the better the air drainage, the less danger that disease will become a problem.

**Don't forget to fertilize.** Vegetables grown in containers need regular fertilization. A soluble, all-purpose fertilizer that can be mixed in water is the easiest



To prevent diseases from harming your vegetables be sure to start with super clean pots. GETTY IMAGES

type to use with container plants. Fertilize every three to four days with a solution that is half the strength of the recommended mixing ratio.

**Too much fuss?** All this horticultural hygiene prevents diseases, including the seedling-killing disease called "damping off." This fungal disease attacks tender seedlings right after germination, when they are quite vulnerable. An infected seedling stem becomes discolored, begins to shrink, then the seedling topples over.

Carol Savonen is a naturalist and writer. She is an associate professor emeritus at OSU and tends a large garden in the Coast Range Hills west of Philomath with her husband and dogs. She can be reached at Carol.Savonen@oregonstate.edu or c/o: EESC, 422 Kerr Admin. Bldg., OSU, Corvallis, OR 97331.

## **Reminiscing about trout, my favorite Butts**



**Fishing** Henry Miller Guest columnist

I've got a confession to make. This time of year, I really miss seeing my favorite Butts.

For the sake of clarity, not to mention probity, let me be slightly more specific.

I miss the annual visits to the Statesman Journal office by Sally and Larry Butts of Salem.

Sally worked at the AAA office on Mission Street until she retired longer ago than I can remember. I used to go there to pick up maps (remember those? Pre-GPS? Ask your grandparents).

And, confession time, admittedly I picked up more of those Oregon-onthe-front, Washington-on-the-back road maps than probably was permissible.

The thick sheaf would go back to the office to be distributed among those at the Statesman who were similarly terminally misguided.

There were several reporters and editors along with myself who required several copies because of being origami-impaired and who ended up turning the large, multi-fold cartography into grotesquely disfigured wads of paper.

# We do this for you.

There is a dedication at work at the *Statesman Journal*. To uncover the truth. To tell the real story. To give you the facts, clearly and completely. And what we do has never been more important. Crane? Swan? Three-vehicle pileup? Anyway, after professing, although confessing might be a more appropriate verb, to being a fan of the weekly outdoors column, Sally was more than willing to hand over about a dozen maps a year.

So we came to a sort of an entente cordiale.

I would swap the maps in exchange for giving the Buttses printouts of the annual trout-stocking schedules for the Willamette Valley.

I used to laboriously cut-and-paste the reams of text from the Oregon Department of Fish and Wildlife website and edit the whole thing into a weekly format that ran in the fishing report on the outdoors page.

So it was no biggie to print it out en masse for Sally and Larry, who were avid anglers but apparently computerchallenged.

This ritual went on even after maps became irrelevant and after Sally retired, because what are fans for?

During the past decade, the visits to the Statesman office petered out.

To make a long story longer, the reason for the reminiscence is because the Oregon Department of Fish and Wildlife recently released the online version of



Walter Wirth Lake gets a delivery of about 2,350 trout. HENRY MILLER/SPECIAL TO THE STATESMAN JOURNAL

#### ing-report/willamette-zone

An interactive map for department stocking sites throughout Oregon is at the top of the page.

Highlights for the first full week in March include 750 rainbow trout, including 50 larger fish, from Desert Springs at St. Louis Ponds west of Gervais.

The gate to the ponds off St. Louis Road (turn south on Tesch just east of the railroad tracks) opened for the spring/summer recreation season on March 1.

Inside the Salem city limits, Walter Wirth Lake at Cascades Gateway Park off Turner Road just south of Walmart

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It's actually two versions because the U.S. Army Corps of Engineers has contracted with a private firm, Desert Springs Trout Farm near Summer Lake, to stock a slew of Willamette Valley locations this season.

The schedules for Desert Springs are online at http:// www.nwp.usace.army.mil/Missions/ Environmental-Stewardship/Fish/

The Fish and Wildlife schedule for the Willamette Zone is at https:// myodfw.com/recreation-report/fishand Walling Pond off 16th Street north of McGilchrist also are stocked.

The Wirth delivery is 2,350 trout, 150 of those larger fish, while Walling is scheduled to get 750, 150 of those larger trout.

In the interests of this walk down memory lane, let's just say this column is for my all-time favorite pair of Butts. Miss you.

Henry Miller is a retired Statesman Journal outdoor columnist and writer. He can be reached via email at Henry-MillerSJ@gmail.com

## Seniors

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jeopardy.

"That thought went through my head," Roth said.

Even Wold had his doubts.

But Silverton's fifth-year coach also recognized that the potential for growth was there.

"In June if you would have asked me what we have there were some, 'uh oh's, this is not looking good,' Wold said. "But we also really liked the girls and their heart and personality and how coachable they were."

In Roth and McCarty, the Foxes had two senior wings who knew what it took to win at the highest level. They experienced immediate success at Silverton as the Foxes placed fourth in the state tournament their freshman season.

That was by followed by a 28-0 campaign and the school's first state championship since 1994. Last season Silverton finished 21-5.

The long-time teammates and friends feel blessed to have another chance to play at Gill Coliseum in search of a state championship.

"It's really special because we've grown to be best friends. It means a lot to both of us," said McCarty, whose dad, Jamie McCarty, is head coach of the Silverton boys team that entered the postseason ranked No. 1.

Sophomore wing Ellie Schmitz said



Brooke McCarty has been a started for the Silverton girls basketball team ever since her freshman year. MOLLY J. SMITH/STATESMAN JOURNAL

Roth and McCarty helped instill confidence, and teammates have followed their lead.

"They have done so much. They build our team up," Schmidt said. "They're like the heart of the team."

They credit Wold for much of Silverton's success.

"It's not just us. It doesn't just happen because we show up," Roth said. "It's our coach that teaches us. ... I think a lot goes to him and just trusting him."

Silverton lost two of its four games

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