

September 2018



(Robert Kocher/Flickr)

The Enemy of My Enemy: Harnessing the Power of Wasps

2018 has been a stinging season for gardeners. When a round, papery wasp nest sprouted on a wooden fence near Tammi Arrak's zucchini in Southeast Portland, she weighed her respect for nature and ecology education against her childhood memory of a horrifying wasp attack. With a two-year-old at home and another child expected this fall, Arrak and her husband didn't want to take chances. One night in July, her

husband vacuumed the nest and its inhabitants into a shop vac filled with soapy water. No one was stung, but "within a week, my bok choy was trash. It was eaten," said Arrak, who suspects cabbage moths. "All the leaves were just holes, huge holes." (Badly chewed bok choy July 2018. Photo by Tammi Arrak)

Arrak's tradeoff was faced by many Northwest gardeners this year. The warm, dry spring boosted the numbers of yellow jackets, paper wasps and bald-faced hornets seeking protein and sugar for their young. The hot rainless summer concentrated insects in irrigated gardens, rather than the toasted landscape



around them. For many people, that meant a summer of misery - local fire departments responded to at least three major blazes that went out of control in August and September when desperate homeowners near West Linn and Silverton tried to burn out the nests with gasoline. But wasps "eat aphids, they eat caterpillars, they eat a lot of insects that we would consider pests in the garden," said Oregon State University Professor Gail Langellotto, the statewide master gardener program coordinator. "You have to balance the good they do with the nuisance they are causing."

Portland Community Garden Technician Mikael Brust, an experienced gardener, agrees. "When we can co-exist, I'd rather do that," he said. When that's not possible – when wasps are aggressively defending nests and keeping gardeners out of the plots they've paid for – Brust gets out his pitchfork.

He approaches early in the morning when the wasps are calm, bringing the only spray approved under Portland Community Gardens' organic rules. He sinks the pitchfork into the ground, pops the papery nest to the surface and runs. After the angry

wasps calm down, he comes back at the exposed nest with the spray. He had to do that five times this summer at community gardens across the city including Fulton, Everett and Lents. Despite his precautions and heavy clothing, he's been stung on the ear, neck and back -12 times on one memorable day. "They hurt," he said. With another warm, dry winter in the forecast, "I'm going to get a bee suit next year."

Before next year rolls around, there are a few things community gardeners can do to take advantage of their predatory partner while keeping their nests at a distance. It helps, Brust and Langellotto said, to understand the wasp life cycle. Colonies can have thousands of members in July and August when they are driving gardeners crazy, but as the weather cools the old queen and colony workers die. Only young fertilized wasp queens shelter in the nest or another protected area. They emerge in the spring to found new colonies, chewing wood fiber to a pulp for their papery building material. At first, the queen will build and defend a small nest and forage to feed her young, but as the colony grows, workers take charge of building, fighting and feeding the larvae. Early in the season, they look for protein for young workers, Langellotto says, but as the weeks pass, they'll also crave sugar for the new generation of queens. They are most aggressive when protecting the nest, rather than when they are foraging. With that in mind, gardeners can take action all year long to keep their nests away from the garden and summer stings to a minimum.

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- Guard against rodents. In the spring, rodent holes attract young yellow jacket queens looking for a protected nest site. Throughout the growing season, make sure to keep up with the harvest and remove food that could tempt burrowing rats and mice. Report signs of rodents to your garden manager or the community garden office.
- Remove ground debris before spring arrives and work the soil. Debris piles and untouched areas can attract nesting queens. This season, Brust found nests among old wooden pallets, underneath a pile of burlap and under old ground cloth near a plot edged by grass. In his own garden, Brust will often bury used burlap under a busy path.



- If foraging workers are too aggressive in the spring and summer, consider traps with sugary bait such as soda or a protein bait such as tuna fish. The traps kill individual workers, rather than the entire colony. Several online sites offer directions for homemade traps made out of plastic bottles. Some commercial wasp traps at hardware and garden store include natural pheromone baits. Put traps where people are not. (A West Hills wasp trap with four days' catch. July 2018 photo by Gail Langellotto)
- During the active season, try gardening near dusk or dawn, Langellotto said. It's harder for wasps to hunt in cooler temperatures and low light.
- In the garden, wear long, sturdy clothing and closed toe shoes. The wasps that have relatively short stingers yellow jackets and paper wasps have a more difficult time stinging through clothes and shoes.

 Langellotto spent part of a master gardener picnic in Portland this summer with an ice cube on her toe; she

was wearing Birkenstocks and yellow jacket wound up under her foot.

Langellotto says that for people who aren't allergic to stings, it is important not to paint every wasp with the same scary brush. Paper wasps aren't as aggressive as other wasps and rarely cause much trouble. Yellow jackets are more aggressive, but the pain of their stings is manageable, she said. Bald-faced hornets are the most aggressive; they have a long stinger that can penetrate jeans and the sting itself is extremely painful. "They are one of the few that make me fearful," she said.

Arrak now wishes she'd left the nest on her fence. The wasps in it rarely bothered people; after that nest was gone, more aggressive ones started visiting . "Our wasps wouldn't come over to the patio and get in our space. The new wasps would come into our coffee cups," she said. "It seems like it was correlated with the fact that we got rid of the home team. They looked the same ... but the other wasps, they weren't as chill."

Next year, "if we have a home team, I'm going to let them be."

Fall Updates 2018



(Photo by Greg Raisman/Flickr)

- -Apple Tasting Time! Friends of Portland Community Gardens will again be part of the annual Portland Nursery Apple Tasting, which takes place over two weekends in October. Last year more than 50,000 people attended the festival, which grew out of an employee-only tasting of apple varieties. Now in its fourth decade, the event allows people to taste and buy more than 50 varieties of apples and pears. There will also be live music, free cider, kids' activities and apple desserts. On Saturdays and Sundays, Friends volunteers sell T-shirts, cards and other items to help support community gardens and gardeners. The festival is Oct. 12-14 and Oct. 19-21 at Portland Nursery, 5050 SE Stark St.
- -Cover cropping: Fall-sown cover crops are one way to keep down weeds, attract beneficial insects and add nutrients to the soil. Many Portland gardeners recommend crimson clover for its good looks and ability to capture nitrogen for the garden. Other standbys include Austrian peas, buckwheat, vetch and rye. Portland Nursery is offering a class on fava beans an edible cover crop at 1 p.m. Sunday Sept. 30 at 9000 SE Division. A helpful guide to managing garden cover crops in our climate can be found here: http://cru.cahe.wsu.edu/CEPublications/FS111E/FS111E.pdf
- Mason Bee Workshop and Annual Meeting: Friends' annual meeting will feature a workshop with mason bee expert Stephen Anderson, using cocoons from his own garden to demonstrate how to nurture the gentle pollinator. The meeting will also review Friends' work on behalf of community gardens. The annual meeting is 6 p.m. Oct. 28 in the Commons at Taborspace, 5441 SE Belmont St.

- **Join us.** Join Friends or volunteer to become part of its board. For more information, contact Leslie Pohl-Kosbau at sharedgardens11@gmail.com and Michael Wade at wade.michael@comcast.net. Follow Friends on Facebook, check out the website or attend the next meeting at 7 p.m. Thursday Sept. 27 at Mt. Tabor Yard, 6437 SE Division.



Fall sunshine at Mount Tabor Community Garden in Northeast Portland

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Friends of Portland Community Gardens