PCCMARKETS.COM

Dedicated since 1961 to informing and inspiring the PCC community through the co-op's vision of advancing the health and well-being of people, their neighborhoods and our planet.

Issue No. 574



SPRING 2023

The Pastry Project, page 3

Northwest garden heroes, page 5

Farmer Frog, page 13

S O U N D C O N S U M E R



A sense of place

In this issue of *Sound Consumer*, meet three farmers and producers who take Washington-grown agricultural products and transform them into foods and drinks that couldn't be made anywhere but here.

Articles by Rebekah Denn, photos by Meryl Schenker



FROM GRAPE TO GLASS, page 6:

Join PCC's "Wine Guys" as they design a private label red blend from Washington-grown grapes.



CIDER PIONEERS, page 8:

A third-generation farmer took a bet on gnarled, tannic heirloom fruits in "the greatest and most counterintuitive apple growing region in the continent."



SAY CHEESE, page 10:

On this small farmstead, where the milk travels a short walk from animals to creamery, cheesemaking is "a lot of a science and a little bit of magic."



SOUND CONSUMER Published bimonthly by PCC COMMUNITY MARKETS

3131 Elliott Avenue, Suite 500, Seattle, WA 98121 Phone 206-547-1222, Fax 206-545-7131

Copyright 2023: All rights reserved including the right to reproduce. Opinions expressed in the paper are the writer's own and do not necessarily reflect co-op policy.

EDITOR Rebekah Denn

SENIOR GRAPHIC PRODUCTION DESIGNER Mia Bjarnason

SENIOR DIRECTOR OF SUSTAINABILITY, ADVOCACY, AND STANDARDS Aimee Simpson

CHIEF EXECUTIVE OFFICER Krish Srinivasan

BOARD OF TRUSTEES

Cindy Bolton Laurae McIntyre Brad Brown Paul Davis Rodney Hines Megan Karch Kim Vu Ben Klasky

Angela Owen Donna Rasmusser Krish Srinivasan

PCC neighborhood locations

BALLARD

1451 NW 46th St. Seattle, WA 98107

BELLEYUE

11615 NE 4th St. Bellevue, WA 98004

BOTHELL

22621 Bothell Everett Highway Bothell, WA 98021

BURIEN

15840 First Ave. S. Burien, WA 98148

CENTRAL DISTRICT

2230 E. Union St. Seattle, WA 98122

COLUMBIA CITY 3610 S. Edmunds St.

Seattle, WA 98118

DOWNTOWN

1320 4th Ave. Seattle, WA 98101

EDMONDS

9803 Edmonds Wav Edmonds, WA 98020

FREMONT

600 N. 34th St. Seattle, WA 98103

GREEN LAKE

7504 Aurora Ave. N. Seattle, WA 98103

GREEN LAKE VILLAGE

450 NE 71st St. Seattle, WA 98115

ISSAQUAH

1810 12th Ave. NW Issaquah, WA 98027

KIRKLAND

430 Kirkland Way Kirkland, WA 98033

REDMOND

11435 Avondale Rd. NE Redmond, WA 98052

VIEW RIDGE

6514 40th Ave. NE Seattle, WA 98115

WEST SEATTLE

2749 California Ave. SW Seattle, WA 98116

FUTURE STORES

MADISON VALLEY

Visit pccmarkets.com for current store hours and more information.

[LETTERS to the editor]

Letters must be 250 words or less and include a name and hometown. Submission of letter grants automatic approval of publication to PCC, including name, in print and online. Submission does not guarantee publication. PCC reserves the right to edit content of submissions. Please email letters to editor@pccmarkets.com.

STORE WINE TASTINGS

Do I need to pre-register/pay a fee for the wine and beer tasting events held in stores? Thank you!

PCC replies: Great questions! There is no need to pre-register for wine tastings. These are free sampling events that we put on to provide an opportunity for education and connection in our stores. You will find the list of scheduled tasting times at pccmarkets.com/r/6336, though schedules can vary with holidays or special events so it never hurts to call the store ahead to confirm. You may also be interested in our special event with PCC's Wine Guys later this year; see page 7 for details.

CHOCOLATE CONCERNS

I'm writing because there have been recent reports of high levels of lead and cadmium being found in many namebrand chocolate bars, such as Dove, Trader Joe's, Theo's, Lily's, Lindt, etc. Has PCC tested its chocolate bar production in Bellingham for these toxic chemicals?

PCC replies: Thank you for contacting us about the recent Consumer Reports article on cadmium and lead levels in dark chocolate. We understand and share your concerns about heavy metal contamination in foods. PCC has been tracking and taking action on this issue where possible for many years. You can find an extensive set of questions and answers on the issue at pccmarkets.com/r/6337, but some highlights include:

Heavy metals occur naturally, especially in volcanic soils of Latin America. Since humans began using heavy metals in many industrial applications and consumer products, like leaded gasoline or heavy metal-based pesticides, they have been released into the environment in forms that can accumulate in water, soil, and air, thus leading to contaminated water, soil, and many different foods (e.g., rice, sweet potatoes, carrots, spinach and more). According to the Consumer Reports article, lead is the processing phase, whereas cadmium accumulates in the cacao trees from the soil.

K'UL, the producer of PCC Chocolate, tests every batch of cacao beans for heavy metals. In response to this report, K'UL has now run some tests on the finished product and are working with suppliers to minimize heavy metal levels, such as diversifying cocoa sourcing while maintaining its commitment to supporting local, fair-trade producers.

PCC also reached out to the brands we carry that tested higher in cadmium and lead than the baselines established by Consumer Reports. The overwhelming response from vendors was that they test for heavy metals regularly, at multiple stages during production, including in the final bar form, and those tests all fall below the recommended levels for heavy metal content. It is important to note that there is no universal alignment on what "recommended levels" are actually safe, so vendors may be assessing using different standards, such as Proposition 65 or the European

Union limits. Most vendors also noted they have and continue to make changes to minimize contamination, through sourcing or processing methods.

Consumer Reports makes several recommendations on how to reduce potential exposure to heavy metals when eating chocolate and we encourage you to check out the report to learn more. To highlight a few, they suggest consuming chocolate in moderation and choosing milk or dark chocolate with less cocoa content (under 70%). Don't give kids too much dark chocolate and try to minimize your consumption if pregnant. Lastly, eat a well-rounded diet as this cannot only help reduce exposure to heavy metals in chocolate, but all potential sources of heavy metals in food.

We will continue to assess the identified brands and products to determine the next best steps. We appreciate you taking the time

CAST-IRON COOKING

I was looking through the Sound Consumer and read about cast iron cooking (pccmarkets.com/r/6339). I use cast iron daily and have made a few one- pan creations myself. A current favorite is chicken enchiladas. We keep hens for eggs year-round but also raise meat birds in the summer. I make my filling in the pan and then sneak a layer of tortillas underneath. Top with another layer of tortillas, more sauce and cheese and I haven't had any complaints about this meal. So easy in one pan!

— John Baron

PCC replies: Thank you for reading our Sound Consumer article about cast iron cooking and Jackie Freeman's cookbook! Your meal idea sounds delightful.

WE LOVE WENDY WAHMAN

Wendy Wahman's illustrations are ADORABLE! I really enjoyed them and they drew my attention to the products they included (in the holiday *Sound Consumer*).

— Diana Kimball, PCC member

PCC replies: We couldn't agree more those illustrations made us smile, and we feel lucky that Wendy, who is also the author-illustrator of several children's books, is a regular contributor. (She's on page 5 of this issue.) Thank you for reading the Sound Consumer and supporting PCC.

ETHICS AND COMPANY **OWNERSHIP**

I'm wondering if you make decisions about the products you carry based on the company that owns the brand you are selling. For instance, you sell products by Nuun and by Garden of Life, which are both owned by Nestle. I would hope PCC is aware of Nestle's widely held reputation as being extremely unethical. An article on Nestle is on the "Ethical Consumer" site at pccmarkets.com/r/6338.

Thanks for all you do and looking forward to your response. — Heidi Ochsner

PCC replies: Thank you for writing us on the topic of Nestle's ownership of brands such as Nuun and Garden of Life. We share your concern about the many environmental and humanitarian issues throughout our food and consumer goods supply chain and do our best to address as many as we can.

Many of the brands we carry are owned by larger companies whose practices have been called into question. There are so many of these products these days that, if we stopped carrying all of them, our shelves would be pretty empty. While we continually monitor these kinds of issues, advocate for improvements, and evaluate our products with these issues in mind, on many of these products we have chosen to let consumers make their own decisions about these brands and vote with your dollars.

Additionally, many brands operate independently from their parent companies, so at PCC we typically evaluate the sustainability of a brand based upon their own practices and alignment with our product standards. Garden of Life, for example, is a mission-driven brand that has obtained numerous sustainability certifications, including USDA organic, Non-GMO Project verified, and the Marine Stewardship Council certification for sustainable seafood. The company has also committed to reducing its climate impact, achieving carbon neutrality in 2021. Business practices such as these, which benefit people and the planet, are ones that PCC wants to continue supporting.

We will be sure to share your concerns and recommendations with our Quality Standards Committee, as we always welcome input on issues like these. Again, thank you for taking the time to share your concerns.

SELLING MEAT

In response to the letter in the November-December 2022 Sound Consumer asking PCC to cut back on selling meat, I respectfully disagree.

I've tried a number of diets in my life, including veganism. Three years of eating a completely plant-based diet left me sick and mentally foggy, with aching teeth and mood and memory problems. All of these problems were resolved quickly when I added animal foods back into my diet.

Like many people I have concerns about the mistreatment of animals. For this reason, I buy meat only from small family farms where the animals are treated with attentive care and are slaughtered as painlessly as possible. I hope PCC will always keep offering such products.

Regarding animal farming operations destroying the Amazon, land being cleared to grow soy is a bigger issue. Small family farms like the ones PCC buys from are not the ones driving global warming.

If people want to eat vegan diets, I wish them well, but many people do better on

Take care,

PCC replies: Thank you for writing and sharing your perspective. We appreciate hearing different viewpoints from our community.

MAKING GREAT CAKE

I just wanted to let you know, recently I had fun making and sharing cake from a recipe I saved from one of your newsletters. The Finnish Buttermilk Cake is so yummy and easy to make! Thank you, PCC!

PCC replies: We're so glad to hear you enjoyed the recipe (online at pccmarkets.com/ r/6340)! If you are ever looking for specific topics, resources or recipes, please let us know. We love knowing what our customers are enjoying and what they are interested in trying next.

Breaking job barriers with "perfect" cookies

By Naomi Tomky, guest contributor

The "perfect chocolate chip cookie" is one of the earliest lessons at The Pastry Project. On the first day of the free 14-week training program, co-founder and culinary director Heather Hodge teaches the recipe and techniques to each four-person cohort. With milk and dark chocolate chips, a crispy outside and soft interior, and shards of flaky salt on top, the cookie lives up to the ambitious name. For many of the students, it's also their first big step toward a new career.

Some are single moms, practically kids themselves. Some recently came out of incarceration, others from rehab facilities. Some have never seen a kitchen scale. The only official enrollment requirement is that the applicant faced barriers to employment and education, something The Pastry Project purposefully leaves undefined. Unofficially, based on their early experiences, says Hodge's co-founder Emily Kim, they look for the main thing that their most successful candidates shared: "You do need to have a passion for baking and pastry."

As the brown sugar dough swirls in the big purple mixer at the Pioneer Square bakery, new trainees learn what it means to cream ingredients. "People are shocked at how long you're actually supposed to cream butter and sugar," says Kim. The same dough, sold ready to take-and-bake in colorful bags from PCC freezers, forms another facet of the social purpose corporation. The frozen dough, along with pastry subscriptions and fee-based cooking classes, support the central mission of the business: free training courses for people who want to work in bakeries or pastry kitchens, but lack experience or opportunity.

Hodge and Kim hatched the idea as a solution to a problem they faced at Molly Moon's Homemade Ice Cream, where they worked as, respectively, head chef and director of social impact and marketing. Kim worked with local nonprofits to hire people with barriers to employment. But she could only place most of them into front-of-house jobs like cashiering, where the company could quickly train people in the necessary skills. Kitchen jobs all required at least a baseline knowledge of pastry.

Local nonprofits, including Farestart and Project Feast, train people on the basic skills to start working on the savory side of restaurant and commercial kitchens, but no such program exists for sweets. That frustrated Kim-she didn't even have a recommendation of how applicants could gain those skills, other than costly culinary courses. "We just started talking about how that literally just didn't exist anywhere," recalls Kim. "So why not build one?"

Over a year, they created a curriculum, identified partnerships to build, and started planning. Kim lived in Pioneer Square and applied for a grant from the Alliance for Pioneer Square for a pilot program, which they ran out of a back prep kitchen at London Plane restaurant. Fourteen weeks later, they graduated their first students, including Hana Yohannes, who went on to open her own Central District bakery, Shikorina Pastries. In the four cohorts graduated since, Pastry Project alumni have worked in the kitchen for Meta's local office, Macrina, Molly Moon's, Hood Famous Bakeshop, Princi, and PCC.

After the success of the pilot, Kim and Hodge received a second grant, this one from Historic South Downtown, a state agency created to invest in Pioneer Square and the



Chinatown-International District. With this money, they took over the same kitchen as their own, updating it and customizing it to the unique needs of their company-and giving it a little flair, like the pastel mural that says, "I did good!" on one wall. By utilizing grants for the startup costs, the company was financially stable almost immediately and able to quickly focus funds

Each cohort meets one day a week, plus one Saturday a month, starting from that first day, when—in addition to making the perfect chocolate chip cookie—they learn safety, get their food handler's license, and learn how to read professional recipes. One week they practice quick breads, another laminated dough or pies and tarts. Guest speakers like Mi Kim of Raised Doughnuts or Jasmin Bell Smith of Bells Pastries come in, and the students take a field trip to Intrigue Chocolates or Lady Yum macarons. The course covers conversions so the students can trade ounces for sticks of butter, and teaches how to scale recipes up or down. But the day graduates say best prepared them for working in a professional environment are those Saturdays, during which they help prepare the "Goody Box" full of fresh seasonal pastries that subscribers pick up at the Pioneer Square kitchen. Two subscription products provide

ongoing funding for the program—the other is a monthly pastry kit for home bakers that ships ingredients and instructions for an original recipe, such as honey melonpan or sour cream upside down cake. Public classes (like holiday croquembouche) for pastry enthusiasts, private classes for corporate events, and a summertime soft-serve ice cream window bring in more money between cohort sessions. Sponsorships filled other holes in the budget.

The frozen dough joined the mix because Kim and Hodge hoped to avoid the unpredictability of sponsorships, grow the training program, and create a more scalable model. "We ate so many cookies," Kim says, as they translated their cookie recipes into something foolproof for people baking the dough at home. "Heather refused to half-ass it." They needed every detail on the bag and inside it to match their vision. In September, they began selling the dough. each ball hand-scooped by one of the four employees in the Pioneer Square kitchen.

With the addition of dough sales, their 2023 budget pencils out, now without the $need \ for \ sponsorship, \ and \ with \ a \ crucial \ new$ line item. The Pastry Project recruits its cohort from many nonprofit organizations. including the Elizabeth Gregory Home (for at-risk and houseless women) and the Ingersoll Gender Center, which provide some of the supports that students need outside of the kitchen, but not all of them. "We had a student that was having trouble getting to class because they needed new tires for their car," explains Kim. When a recent graduate looked to move into her first apartment from the Elizabeth Gregory Home, she says, "We would have wanted to give her some support around that." This year, they set aside money into a fund for exactly this type of issue, something they see as a necessity for working with the people they do.

It all feeds into two underlying points that The Pastry Project subtly makes: that everybody loves cookies, and that social impact can be sustainable. Their upcoming collaboration reflects both: they worked with Portland-based nut butter company Ground Up, which runs a similar training program, to develop a vegan, gluten-free cookie dough—inspired by requests from PCC customers.

Naomi Tomky (naomitomky.com), author of "The Pacific Northwest Seafood Cookbook," writes about food and travel.

Sample The Pastry Project

- Learn more about The Pastry Project and sample their cookies from 3 p.m. to 7 p.m. March 16 at the Issaquah PCC, March 17 at the West Seattle PCC, March 23 at the Redmond PCC, March 30 at the Edmonds PCC and March 31 at the Ballard PCC.
- Find cookie dough from The Pastry Project in the freezer case at Ballard, Bellevue, Bothell, Columbia City, Downtown, Edmonds, Fremont, Greenlake Aurora, Greenlake Village, Issaquah, Kirkland and Redmond PCC stores. They can be ordered on request at other stores.
- For more information on The Pastry Project and its Goody Box or Pastry Kit subscriptions see, thepastryproject.co.

PCC adds new partner discounts

From art to coffee to yoga, PCC members can take advantage of new discount offers from several local businesses partnering with the co-op. The Fifth Avenue Theatre, Fremont Health Club, Seattle Arts & Lectures, Wunderground Coffee and many more join longer-established partners such as BECU, Molly Moon's Homemade Ice Cream and Ridwell.

It's a logical connection, according to new partners like the National Nordic Museum. "As we say on our website, through the history we illuminate, the stories we tell, the connections we make, and the values we promote, we inspire our visitors to create a more vibrant, more just, more sustainable world—a hope that aligns beautifully with the work done by PCC and its mission," said Rosemary Jones, the museum's director of marketing. "We look forward to welcoming PCC's members to the museum."

At The Ark Lodge Cinema in Columbia City, a rare independently owned movie theater, the PCC partnership "was a great fit, as it helped prevent customers from sneaking in their outside food," said managing director Justin Pritchett.

Kidding! It's mutually beneficial, he added. "Both organizations rely on the support of their local communities and this partnership allows us to offer discounts as a way to express gratitude."

We invite you to use these membership benefits and support these local organizations. A complete list of partners with details of discounts or other benefits is online at pccmarkets.com/r/6342.



- ALL THE BEST PET CARE
- ARK LODGE CINEMAS
- ASCENT OUTDOORS
- AYA YOGA OASIS
- BAER WINERY
- BARRE3 BALLARD
- BASTYR CENTER FOR **NATURAL HEALTH**
- COMBAT ARTS **ACADEMY**

- FAIR TRADE WINDS
- F45 TRAINING BALLARD
- THE 5TH AVENUE THEATRE
- FLOW FITNESS
- FREMONT HEALTH **CLUB**
- HOUSE OF SMITH (21+ only)
- ISENHOWER CELLARS
- MAVEN YOGA

- MOMENTUM INDOOR CLIMBING - SODO
- NATIONAL NORDIC **MUSEUM**
- OXBOW FARM & **CONSERVATION CENTER**
- PAGE 2 BOOKS
- PHINNEY RIDGE YOGA
- SAN JUAN SELTZERY
- SEATTLE ARTS AND **LECTURES**

- SIFF
- TERRA BELLA FLOWERS
- THREE TREES BOOKS
- TITLE BOXING CLUB
- TONY'S COFFEE
- TRUFUSION BALLARD **BLOCKS**
- VITALITY PILATES
- WUNDERGROUND COFFEE

Growing for Good reaches new heights

Local hunger relief agencies are getting stable, long-term sources of farm-fresh produce as a partnership spurred by the COVID-19 pandemic moves into a new era.

Growing for Good, a partnership between PCC Community Markets, Harvest Against Hunger and Seattle Neighborhood Farmers Markets has secured three years of community funding for the program, which directly connects small farms with food banks. The commitment will fuel even greater impacts across Washington state.

"It is deeply inspiring that "with the collective power of our partners, and tremendous support from the co-op's staff, members and community, we will dedicate the next three years to grow this program while strengthening our relationships with local farms and food banks," said Rachel Tefft, senior manager of community food systems.

Over the next three years PCC will provide approximately \$300,000 in funds raised in its stores, specifically designated to support the purchase of local food from farmers by hunger relief agencies, plus an additional \$75,000 from the co-op. With that combined \$375,000 of funding, the program can continue to evolve from emergency response to more sustainable support.

Currently, 21 hunger-relief agencies use Growing for Good funds to buy produce directly from 16 small, local family farms. The program allows the agencies to choose diverse fresh produce that meets their clients' needs—to the point where a farm might plant vegetables that they wouldn't otherwise have grown—and gives the farmers upfront payments and predictable, guaranteed sales. More than 114,000 pounds of local produce—the majority of it certified organic—has been purchased through the

The alliance began in 2020 when Seattle's farmers markets and restaurants were shut down during the height of the COVID pandemic, leaving farmers without

Growing For Good has been funded by their usual sales outlets. At the same time, Hunger was also recently awarded a \$100,000 the community for the community since food insecurity increased significantly as grant from the King Conservation District it began in 2020, with a contribution of people lost jobs and school meal programs to continue supporting its King County were disrupted. Large food distributors Farmers Share program, a sister program prioritized retailers to ensure public food security, so even hunger relief organizations with financial resources were unable to purchase through their usual sources.

All participating farms remained in business throughout the pandemic. That was especially valuable given that many are already in categories that have faced extra challenges and barriers to farming in the Northwest: More than 65% of participating farms are owned and operated by farmers who identify as Black, Indigenous, and People of Color (BIPOC), many of whom are first- and second-generation farmers, bringing their family's farming traditions

According to David Bobanick, executive director of Harvest Against Hunger, the partnership "is a perfect example of how a community-based and-supported program can build and expand new approaches to help families and individuals facing food insecurity thrive."

To contribute to the program see pccmarkets.com/r/6369

In an added bonus, Harvest Against

that inspired the development of the Growing for Good partnership. Combined, these programs will continue to provide significant support for local farmers as well as thousands of pounds of fresh, healthy and local food for those who receive assistance from hunger relief programs throughout our greater Puget Sound region.

Bobanick noted the importance of continuing consistent funding for its farmto-community program work. "We've seen how strong ties between local growers and hunger relief partners will make healthy, nutrient dense and culturally familiar foods available to individuals and families across our region. We're also increasingly seeing the longer-term health and social benefits that regular and reliable access to such foods have on previously underserved communities." HAH Farm to Community Program Manager Maddie Price added that, given continued pressures of fuel and supply costs on food prices, "it's heartening to see continued committment for investing public funds in 'good food' that prioritizes the long-term health of people and the planet, as public goods."

Plant some unsung heroes of the Northwest garden

What are the best crops you might not be growing?

Every year around this time, Pacific Northwest gardeners shift into actionstarting seeds and potting up plants. The annual gardening cycle is oddly repetitive for something so life-giving, and it can be easy to slip into the rut of planting the same successful crops over and over. But variety is the spice of life, and that's doubly true in the garden and on your plate. It's always worth adding something new to the

To that end, Sound Consumer contributor Tara Austen Weaver reached out to Seattle Urban Farm Company. Founded in 2007, the Ballard-based business provides garden installations and maintenance, from larger, commercial-sized plots for restaurants and businesses, to backyard raised beds. Its team, which currently maintains 70 different gardens, has deep experience with what thrives in our climate. Here co-owner Hilary Dahl shares her (edited, condensed) picks for under-the-radar success stories. Consider giving one or two of them a home in your garden this year and you might find a new favorite.

Radicchio (Cichorium intybus)

I like to grow radicchio to add texture to lettuce mix. It grows really well here in the Pacific Northwest, but it's not something many people attempt—or they don't grow it well. It's a little finicky and really likes cold temperatures. If it gets above 77° F it goes into thermal dormancy and stops growing.

You can plant it in the spring but get it in early. Start the seed in January and transplant it out to the garden as soon as the ground can be worked (early March) or look for starts in a local nursery. Or do what I recommend and grow it as a fall crop, transplanting it out in September. It will grow slowly then but it's frost tolerant and will hang out all winter. It's one of the few crops you can actually harvest when it's covered in snow—you just have to remove the outer leaves.

My recommendation is to try to grow a few different varieties—there are so many microclimates in our Seattle backyards that we find some varieties do well and others do not. Suggested variety: Indigo or other to form tight heads.

Yacon (Smallanthus sonchifolius)

We've been growing Yacon for the past six or seven years—it's from the Andes and looks like a dahlia tuber. They're really big edible roots with a jicama or apple flavor, very juicy and crisp. You plant it in spring and in one year they grow into a large plant with prickly leaves and a daisy-like flower. It's super productive and low maintenance.

Yacon doesn't like wet soil, so we treat it like an annual and dig it up in winter and store it in the garage or somewhere like that. You want to plant it in full sun (6-8 hours) and well-draining soil. We like to pre-sprout the tubers in pots starting in April, then plant them out in May-at the same time you would plant dahlias or tomatoes.

The tubers make great snacks, very kid-friendly. I grate them into a slaw. You can also add them to sandwiches, or include in a salad with chipotle dressing, it's really delicious. Some people use it as a sugar substitute [yacon is considered



diabetic friendly] and some people juice it. And because vacon grows big, they work well in landscaping and don't need to be put in a raised bed.

Tip: Yacon produces large storage tubers for eating and smaller propagation tubers just under the soil surface, which can be saved to plant out the next spring.

Miner's Lettuce (Claytonia perfoliata)

Miner's lettuce is a native plant with small, edible, heart-shaped leaves. It's a succulent, cold-hardy green that grows in sweet little bunches and it readily self-seeds everywhere. So, if you have room in your garden to let something go, this is one of the crops I would recommend letting take over a little area. It's frost tolerant, super low maintenance, and comes up earlier than any other vegetable.

Miner's lettuce should be direct sown outside, not started inside. Its roots don't like to be transplanted. We sow seeds in late summer and let it overwinter, but it can be planted in early spring as well. We like to harvest it and mix it in with our salads—it's succulent and really holds up well. A lot of our restaurant clients like to grow Miner's lettuce—it's one of the first things you can harvest each spring.

Amaranth (Amaranthus)

Most people grow amaranth for the flowers, but it has beautiful, delicious leaves as well. Its growing needs are similar to spinach—you can direct sow in the spring and harvest on a cut-and-come-again basis [harvesting leaves while they are relatively

small and letting them regrow for another cutting]. It has about a 40-day life cycle, so you can get 2-3 cuttings in, then let it flower. You can save the seeds yourself, or let it reseed and it will come back the following season. This is good to plant in March-April and it won't go to seed until mid to late summer.

I really like the red leaf amaranth, which has green leaves but red veins. It has a real wow factor. It can be added to salad and sautéed with other baby greens. You pretty much treat it like spinach, but it has an earthy, minerally flavor; it has much more personality than spinach.

Dry Beans

This is one of my absolute favorite crops to champion—they're one of those crops that really do taste better than from the store or can. Beans are a relatively long seed crop, so they take a while, but it's so rewarding to be able to grow your own protein. We use them in soups all winter long.

They are so tasty and so beautiful—and if you grow pole beans on a trellis they take up almost no space, so it's a good way to maximize your production. [Note: beans come in bush or pole varieties—make sure to check the seed packet.]

Favorite high-yield varieties:

- · Calypso are really beautiful—they're black and white and we've renamed them "orca beans."
- · Borlotti bean (also called cranberry bean) is a pole bean, so it's good if
- · Taylor Horticulture—speckled beans with beautiful, red-streaked pods.

Get your garden growing

PCC sells organic seeds at all of its 16 stores and sells plant starts at all locations except the Central District and Downtown stores, though the selection varies by year and by location. If you do not see the seed variety you want on the shelves, it may be available online from our supplier, uprisingorganics. com. (Aspiring radicchio growers might also want to read Uprising's radicchio planting advice at pccmarkets.com/r/6343.) Yacon cultivars are available through Raintree Nursery in Morton, Wash., raintreenursery.com.

The Tilth Alliance also sells many less-common starts at its May Edible

Tromboncino squash (also called Zucchetta)

This is an Italian heirloom squash—it's a summer squash (like zucchini or pattypan) but you can let it grow to maturity and store it like a winter squash. The skin is soft, the seeds stay small. It's super tender, with a green, nutty taste when it's young, then later it's more like a butternut flavor.

Tromboncino is a vining squash. You can grow it vertical on a trellis, or let it sprawl. It has very few pest issues and it's extremely prolific. Start the seeds indoors early in the year or begin with nursery starts, as Tromboncino needs 70 days to reach maturity.

SPRING GARDENING CLASSES

Grow your best garden ever with PCC classes. Spring features include:

- · Oxbow Farm co-founder Sarah Cassidy will teach "Veggie Seeds and Starts: Choose the Best for Garden Success" on March 26 at the Edmonds PCC and April 1 at the Columbia City PCC. An online class will be offered March 20, see pccmarkets.com/r/6367.
- Cassidy will also teach a class on "Growing your Best Garden Ever" April 16 at the Bellevue PCC, April 23 at the Bothell PCC and May 6 at the Green Lake Village PCC. See more at pccmarkets.com/r/6345. An online version of "Growing Your Best Garden Ever" will be offered April 10, see more at pccmarkets.com/r/6346.

From grape to glass

By Rebekah Denn, photos by Meryl Schenker

Plenty of lush Merlot grapes still hung in clusters as Jeff Cox and Peter Boeger walked the Weinbau Vineyard near Mattawa, Wash. on a hot autumn harvest day. Specific grapes that were long-since picked, though, were the focus of their trip to Block 57 and Block 61.

The 460-acre property is one of six managed by Sagemoor Vineyards, a 50-year-old company growing grapes for some of the Northwest's finest winemakers. Labels throughout the varietals—chardonnay to cabernet franc to syrah—mark rows reserved for specific companies. Blocks 57 and 61 are booked for PCC. They'll go toward the private label wines Sagemoor is blending for the co-op, designed and developed with Cox and Boeger, the "Wine Guys" who oversee PCC's wine, beer and spirits.

"The whole idea was for them to be included and do it the way they would if (PCC) were a winery," said Kent Waliser, Sagemoor's director of operations.

Private label products used to be seen as dubious generics-cheaper, but anonymously sourced. PCC has always taken a different approach, choosing exceptional producers and highlighting their participation, such as K'UL for PCC chocolates and Hollingsworth Hemp Company for PCC botanical lotions.

Adding wines was trickier. It's one thing to approve and label what someone else has produced; quite another to design your own vision. And Cox, a merchandiser with PCC since 1999 and a Seattle Magazine Retail Wine Steward of the Year, has his own philosophy to prove in a bottle:

Forget wine's reputation as "sophisti-

"It's an agricultural thing, and people work their asses off (making it), and they get dirty. It's not some magical mystical luxury, it's hard work and lots of inspiration and know-how...

"You shouldn't have to spend a lot of money to drink well."

Knowing the source

Washington produces more wine than any other state except California—a stat that would have been mind-blowing in 1962 when a group of University of Washington professors incorporated Associated Vintners, later Columbia Winery, on a bet that our climate would support Europeanstyle wines. Even now, grapes are only its ninth-largest commodity crop, according to the Washington State Department of Agriculture (WSDA)—valued at \$308 million in 2020, the last year figures are available, compared with nearly \$2 billion for our

To a farmer, apples and grapes are even harder to compare than apples and oranges.



Just ask Waliser, a former board chairman of the Washington Wine Commission... and, earlier in his career, an apple grower for

On large farms with national distribution, "when you pick apples in the field and load the truck and the truck leaves—job done," he said. "You don't have to think about it anymore and the apples have no identity back to the farm. Nobody in New York is going to eat a Sagemoor apple and go "Wow, I want more Sagemoor apples."

With wine, buyers know the source. They can save the bottle for years, and enjoy it as it changes over time.

"The flavor doesn't go away. The wine doesn't go away. So you're going to be judged on grapes. Not just today, not just what you raise, but for years...

"You can't do that with apples and cherries. Every season is its own and then

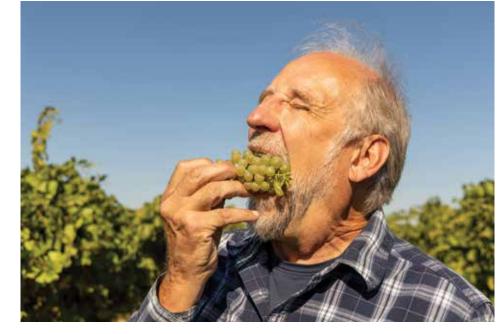
Growing grapes properly takes intense skilled management plus hard physical labor. On this day at Weinbau in the Wahluke Slope American Viticultural Areas (AVA), crews are shearing the sides and tops of leafy canopies. Each choice about where to cut might help the vine attain the proper leaf-to-fruit ratios, avoid sunburn on the fruit or make the hanging clusters easier

Vineyard manager Miguel Rodriguez calls the Weinbau vines festooned with purple and green "my babies." At this stage he's assessing grapes with a sugarmeasuring refractometer—plus his own eyes and palate—directing crews on tending the vines and advising winemakers when their chosen rows approach the target

ripeness for the characteristics they seek. It's mid-October when Cox and Boeger make this visit, but harvest is still in full swing—a month later than last year's calendar. That one had ended two weeks earlier than normal.

"I don't know what normal is now," Rodriguez said ruefully in the harsh sunlight, as the temperature climbed toward 80 degrees. What matters is keeping watch—and working with what he has.

"I spent so much time in thinking about how to get to this crop. It was a little tough for us to make it to where we are right now,



Cover: Miguel Rodriguez tending grapes at Weinbau. Top: Jeff Cox samples wines from the barrel. Bottom: Kent Waliser demo strates how to taste wine grapes straight from the vine

and we had to work really hard, but it's worth it in the end, you know.

Heat waves have been the recent challenge: "When the plants get to 90 degrees, they shut down... they're like humans, they stress, they feel the heat."

Decades of experience inform his decisions on how to plant or design a block of grapes; how to pare down clusters to concentrate their flavors; how to prune and when to pick. Sagemoor includes some of the Northwest's oldest vines—"historic" by wine standards—and Rodriguez has practically grown up with them, working with Sagemoor since 1979 and this property since 1986. (One of Sagemoor's wines is named after him, "Miguel The Man.") The decades-old rows tend to be less productive, he said, but "with the years, they produce better flavors."

That said, "Every year changes, and you have to manage the grapes to get quality, because if you don't pay attention to details you lose the bottle."

Rodriguez was awarded Grower of the Year in 2005 by the Washington Association of Wine Grape Growers. He remembers sitting in the back of the room and the surprise of hearing his name—the first Mexican person to win the honor, he said, and a rare vear when it wasn't given to a winery owner What he does is notable for its care and labor—and its humility, Cox said.

"You couldn't do it like Miguel does if you had this arrogance where you said, "Oh I know how to do this already....People who think they know everything already can't learn anything."

Laying down tracks

What goes into creating a wine? The answer depends on who's making it, and possibly the level of your cynicism.

Industrial releases come from "a person with a spreadsheet who's done a lot of research to show what flavors people might like," Cox said. "And then it's like, 'Well, let's make it, let's put it together like that." Consistency is the biggest goal: Big enterprises need the same taste, all the time.

"Authentic" wineries, to him, are different: Each year's vintage is related, with subtle but distinct differences.

At Sagemoor, for instance, "that fruit is assured (from Blocks 57 and 61). We can blend from something that isn't the same every year, but it has some continuity," he said.







Top (1): Maria Rodriguez, Miguel's wife, operates a forklift by the newly harvested grapes. Bottom (1): Rafael Tapia and Miguel Quintero processing grapes at the Morell Wine Collective. Right: Aryn Morell draws out samples of wines in progress.

"The real beauty of wine that's made authentically is that it captures a picture of a place at a moment in time.

Working with a winemaker, Boeger said, is like having someone know what's possible and guide you toward that point. "Some are better than others. And some are really, really good."

Last spring, Cox and Boeger got to taste the first pressings of the PCC grapes and other harvests at Sagemoor and shape the blend's direction, like a recipe developer—or a sound engineer. Even among the Merlot grape options, one was a little more perfumey, one a little more aromatic, another

"You determine the hallmarks of each one of those, and then from there you think, 'This might make a super base, something to build everything around.' And then, (for instance), this has really, really, great acidity in this note. You put the puzzle together,"

"It's like if you were in the studio mixing rough tracks to do an album. Yeah, I want a little bit less of that guitar there. And could you turn that vocal up? And let's go back and dub this in till you get that sound, or you find the thing that speaks the best."

Standing in the fields, munching into a cluster of the fruit, Waliser suggested another dimension: Space. Think about the maps showing the location of taste buds on the tongue, he said. One sample might have a big aromatic frontal "attack" (the first impression), then linger in the back, but "you think back going, 'I don't remember anything in the middle." Reviewing all the wines in that toolbox of options, they find one to fill that hole across the palate.

"Then you put the two pieces together and you've got this seamless flavor and

texture across your entire mouth—and it's still the same variety. That's what's crazy about it. Sometimes it's only that you add 4% of something, and it changes the entire thing. You can't predict it. But you know it and when you taste it and you feel it, it's there," Waliser said.

For Sagemoor, Waliser said, that's why it's fun to have the Wine Guys, as they're known at PCC, at the blending table. The collaboration is different than presenting a finished wine and hoping they like it, and they're able to see what the harvest has provided.

"You live with what that's created...We only engineer so much. We're not going to do additives or anything. It's just what we grow."

Gift in a glass

About 100 miles from the fields, on the outskirts of Washington's wine haven, Walla Walla, Aryn Morell grabbed a succession of wineglasses and set to work. The noted consultant, who created one of the toprated Northwest wines of 2021, is director of winemaking for all the wines Sagemoor produces under its own label.

Surrounded by oak barrels at different stages of fermentation and aging, Morell pipetted out sample after sample to talk about

tannins and spice, texture and longevity. "Okay, so this is block 57," he told Cox and Boeger. The rows produced 45 barrels, he said, and PCC likely won't need more than 10 for its 500 cases. That means they could select which specific barrels will be used for their blend-which makes a difference.

"The wood has character just like the grape does," Morell said.

"Inevitably, even though they (the barrels) are all from French oak, they're not all exactly the same. They could even be from the same tree, but they're from different sections of the tree. And that wood has chemistry just like (other) agricultural products."

explained some of what he was looking for: "First of all, you want it to taste like fruit. But you know how there's brightness, that little bit of tang? That's acidity. Without that you just kind of have flabby

jam..." he said of one sample. "You notice

how it kind of pings all the parts of your

mouth? That's resonance.' He loves Chablis, made from chardonnay in a region that's considered part of Burgundy. "The soil there is very calcareous, it's limestone, very, very chalky. And some of the vineyards there... there's so much complexity and literally resonance that when I drink a good one, I get a little shiver up my spine. It makes you resonate."

That's the sort of experience he'd like to share through the grapes around him.

"These things, when they're well grown and they're well made, in that glass of wine you can taste the place they came from. Not only can you taste the place, but just doing

that opens up your senses," Cox said. "You know how when you first started listening to music when you're a little kid and you hear very simple things? And the more you listen to music and the more you care about it, the more you get your antenna out and pay attention, you get to the point where you hear subtle things in texture, or you can tell how somebody plays piano by the tone of the piano?

"In everything in the world there are all those subtleties, and they make life richer and more diverse. It makes us smarter, and we have a better life that way. Those are all things I feel huge gratitude to have been able to discover via (wine).

"It's not something that we can preach about. If you give it to somebody in a glass they might notice it and they might not. But Tasting through Morell's selections, Cox when they notice it, it changes their life."

Taste the win

Meet the Wine Guys and taste PCC's private label blends at a gathering later this year See pccmarkets.com/ events for details.

Veneto, Italy.

These PCC wines are now available in all stores: PCC's Red Blend Weinbau Vineyards and Chardonnay Gamache Vineyards, both made with Sagemoor; Willamette Valley Pinot Noir made with Cooper Mountain Vineyards; and a Red Wine made with Kiona Vineyards and Winery. Other PCC private label wines planned for 2023 include a Le Rouge and Le Blanc from Castelbarry Cooperative Artisanale in Occitanie, France; Blanco and Tinto from Bodegas Pinuaga in Toledo, Spain; Bordeaux Blaye from Chateau Monconseil Gazin, and a Prosecco from Acinum in

6 PCC SOUND CONSUMER SPRING 2023 PCC SOUND CONSUMER | SPRING 2023 7

Creating a Northwest "cider culture"

By Rebekah Denn, photos by Meryl Schenker

From Craig Campbell's home on a high plateau, he looks down on windswept hills and orchards and a spiral of tall Lombardy poplars.

If the pattern looks oddly familiar, it's because the distinctive spiral is the logo of Tieton Cider Works, printed on every label at the company Craig and wife Sharon founded with fruit from their third-generation farm.

Harmony Orchards was originally planted by Campbell's grandfather in the 1920s after irrigation transformed the region into miraculously viable farmland. Adding water rights to the fertile basalt soil, plus long sunny days and cool nights, made the sagebrush steppes "the greatest and most counterintuitive apple growing region in the continent," author Rowan Jacobsen wrote in his book, "American Terroir," which featured the Campbell's 400-acre property.

The farm includes apricots and cherries, big Ambrosia apples and other varieties sold to markets or selected for brand-name baby food. In the last 15 years, it's also boasted Washington state's largest acreage of bittersharp and bittersweet apples, tannic Perry pears and other cider fruits. Tieton Cider produces more than a dozen varieties available in 34 states, from cans of dry USDA Organic hard apple cider to small-batch single-varietal bottles from heirloom trees.

A historic craft

Cider was an odd outlier in the U.S., barely a blip on the alcoholic beverage scene, when the Campbells began experimenting with the small, bitter apple varieties in the early 2000s.

"It is surprising because cider's been around since before Roman times," said Marcus Robert, head cidermaker at Tieton Cider Works. "There was a time in America where cider was the drink of the working class."

Campbell saw the possibilities of the old-new crop when a friend took a class at Cornell University and "started grafting trees to varieties I'd never heard of." Then Peter Mitchell, a cider expert from the United Kingdom, taught classes at Washington State University's extension in Mount Vernon and became their consultant.

"We accumulated like 40 different varieties, which for us—it's hard to get your head around it. We just planted them alphabetically because it's the only way we could make sense of it," Campbell said. They've since whittled those experiments down to five main apple varieties on the 55-acre cider acreage: Golden Russett, Ashmead's Kernel, Harrison, Porter's Perfection and red-fleshed Niedzwetzkyana. The cidery originally used only fruit from Harmony; it's now so big it also sources apples from other Washington farmers.

Campbell was no stranger to tradition—or history—when he started experimenting with cider; he grew up working on the farm and his grandfather planted some of the grand trees still standing. But he appreciates new ideas, and knows farmers need to evolve and adjust with science and climate and popular demand. A big evolution came as demand for apples plummeted in 1989 with concerns about the chemical alar.







Top: Craig Campbell and Marcus Robert at Harmony Orchards. **Bottom (I)** cans of Tieton cider rolling down the production line in Yakima. **Bottom (r)** These apples are easier to maintain and pick than apples grown on tall, branching trees.

Campbell embraced organic production then and became one of the first large organic farmers in Washington state. (The cider orchard became certified organic this year; he believes it's the only such one in the state.) Growing "dessert apples" that are eaten off the tree in other plots, along with apricots and cherries and pears, he planted diverse new varieties along with classics. His cider apples are densely planted on spindles that look like espaliered fences, producing fruit more efficiently that's easier to pick.

Research every day

The cider bet was a win.

When Sharon Campbell co-founded the Northwest Cider Association in 2010, there were only about 10 cider producers in the Northwest and 75 nationwide, said Emily Ritchie, the association's executive director. Now there are more than a thousand nationwide, including all 50 states, with a mind-boggling 200 in the Northwest, she

said. Seattle now boasts dedicated cider tasting rooms (including Capitol Cider, billed as the nation's largest), just as it has beer pubs and wine bars.

"People understand apples, 70% of all the apples grown in the U.S. are grown in the 100-mile radius between Yakima, Wenatchee and the Tri Cities. So it just makes sense that we're more of a cider culture here," Robert said.

Robert, a fourth-generation farmer in the region, came to cider from winemaking. He was stunned to find how few science-based resources were available on cidermaking when Tieton began—the apples, the strains of yeasts, the temperatures, the fermentation times.

"In cider you only have five different components that make its taste that you're working with. You have water, sugar, alcohol, acid and one phenol that makes apples smell like apples..." he said.

"We did a lot of research in the first five years or so. We do research every day."

In the neat, densely grown rows at Harmony Orchards, it's easy to differentiate the big, sweet eating apples destined for the grocery store from the clusters of small cider apples. Harvest crews speedily yet delicately filled bags and bins with bright, even-colored, smooth-skinned fruit.

Different priorities rule with the gnarled cider crop. "We're not looking for the most perfect apple on the outside," Robert said. The yellowish fruits they assessed that day had a sugar content around 15%. They held off harvesting for a few days when they would be slightly sweeter, aiming for a relatively high alcohol content around 8% in their destined cider. It takes "about a jillion" to fill the basket, Campbell noted, but size is not the issue. "We're more concerned about the internals, the sugars," said Robert.

Flavors are also measured with different criteria. The sweet, crisp Ambrosia apples at Harmony pack a heavenly crunch right off the tree; some of the cider fruits are not even snackable, like the Perry pear. "That'd

be something that would knock you over... your mouth is just cotton. You can't even move it. They make great pear cider but it's a vicious little pear," Campbell said.

The cider was produced in tiny Tieton the first few years of business, with fruit pressed outdoors "whether it was 10 degrees out or 110 degrees out," Robert said. As the business grew, they first planned to build a larger facility in Tieton, but the town couldn't support infrastructure like the added sewage and electric power. Ultimately the cidery expanded about 20 miles east, to a renovated Yakima warehouse in 2014, with an adjacent tasting room. They don't need to heat the press pad in the morning to get it going or rush to finish the day's work before it freezes over.

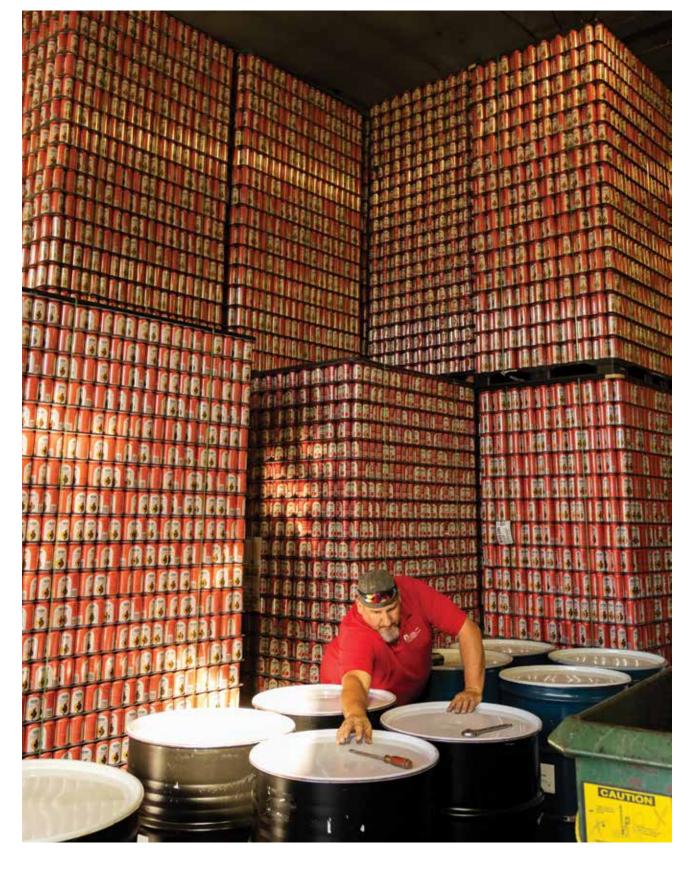
Workers drove 900-pound bins of apples around the Yakima facility on one autumn day, an ongoing process where damaged fruits were picked out and the remainders metered out for cleaning, grinding and pressing in a seemingly never-ending tumble. Pomace, the solid pulp left over, is sold to a nearby cattle farm where it's mixed with silage for animal feed. The juice is stored in tanks, fermented with yeast, blended and ultimately bottled on site. Before every run of the organic cider, the entire production line is thoroughly cleaned, a time-consuming and carefully monitored process. Stacked cases of apricot and cherry cider towered high over the busy production floor as freshly filled cans of hard apple cider zig-zagged down the line.

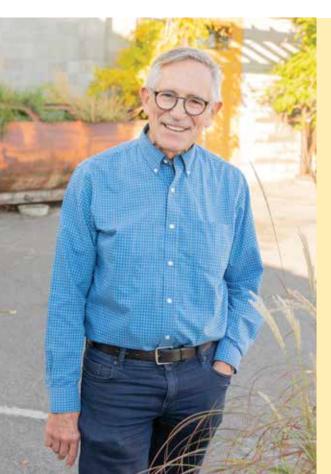
Of the 1,000 or so Tieton batches produced each year, Robert estimates he personally tastes 95%. Formulas for each have been developed over the years, but sampling ensures that they're consistent—and the options for balancing out tannins and sugars with other apple varieties constantly vary.

"We're not making cider one time a year, we're making cider every day," Robert said.

"Each one of these warehouses around here are packing something different every week, sometimes every day. We have to go see what's available" for the end product they want. Honeycrisps, for instance, are great eating apples but poor headliners for cider. Their relatively low acid levels, when fermented alone, make for a tepid cider he likens to "alcoholic water." Ashmead's Kernel, "a high aroma, intensely flavored apple" usually gets blended with other juices, but Tieton also bottles it alone for a tart, semidry heirloom variety it describes as "a peardrop character up front followed by deep Madeira and honey qualities to finish."

Roberts' goal as a cider maker is similar to the ones he has as a winemaker: Something "very drinkable" and "not overwhelming," something people can enjoy either with food or on its own, something worthy of the fruit and time. Something, he said, where people might say, "That was good, I'll have another."





Making Mighty Tieton

Sustainability isn't just about food or soil or packaging. Sometimes it means a way of life—or a city limit.

That's the story of tiny Tieton, population around 1,500, a former orchard town 20 miles west of Yakima. As the farming industry changed in the late 20th century and fruit-packing plants consolidated and closed, Tieton's downtown had become a relative ghost town.

Changes were spearheaded—or, technically, pricked—in 2005 when Ed Marquand, a Seattle publisher of fine arts books, ran over a goathead thorn on a bike ride nearby. He repaired his punctured tires in Tieton and was enraptured by the old-fashioned town square. Before long he'd moved his publishing business to Tieton and invited in creative colleagues. One abandoned apple packing warehouse now hosts artist studios and other creative endeavors (including musician Trimpin's studio). Another warehouse was converted into condominiums (Marquand and his husband live in one). Looking for other opportunities to create solid work for local residents, Marquand

founded a typographic mosaics studio—the only one in the country, he said. It produced mosaics for the town in the style of old apple-packing labels, and has since moved on to major commissions for Sound Transit stations in King County. He's now on the City Council, and an integral part of what he dubbed Mighty Tieton. The organization has encouraged local businesses, including Tieton Cider Works and the Tieton Farm and Creamery (see page 10), both of whose products are carried at PCC stores.

People talk about Tieton as an arts town, and it does attract artists. But "I'm interested in kind of adaptive reuse of the old buildings, because that keeps the character of the town intact. And then I'm interested in creating enterprises that create jobs for locals," Marquand said.

It's not at all strange to him, though, that it took an artist rather than a businessman to see the strength of the town. "Artist types, they're not usually given credit for being able to solve economic problems. But in fact, if you can get by as a creative person, for a couple of decades, and support yourself, and have a life, you have to be really pretty financially nimble and resourceful."

Farmstead creamery has "a little bit of magic"

By Rebekah Denn, photos by Meryl Schenker

TIETON—Phoebe. Rheba, Bianca, Calypso fans of Tieton Farm and Creamery know their favorite cheeses by name.

At this 21-acre farm west of Yakima it gets even more personal. Owners Ruth and Lori Babcock know the animals who produced the milk and who loaned their names to the cheese. The roughly 30 goats and 40 sheep deserve their headline status without them there's no creamery—but they don't work alone

The Babcocks, of course, are the vision and labor behind the small farm, which produces award-winning cheese sold at PCC stores and farmers markets. Both had earlier careers in tech, with experience between them in business, accounting and software engineering. In the last 20 years they've added expertise in animals, vegetables, soil and milk-and how both people and processes work together.

Lori is head cheesemaker, while Ruth oversees the animals and vegetables along with a farm manager.

The farm "is a little bit of everything, it's not a lot of one or two things," Ruth said. That includes chickens and their eggs, pigs and a few beef cows, spinach and squash and other crops for Yakima customers.

Lori is a former chair of the PCC Board of Trustees, serving in the late 1990s and early 2000s, and it's no surprise the farm operates with sustainable practices.

"It's not a mono-process... it's the way it's always been done," Ruth said. (Though not the way most farms operate now.) The farm had been an apple orchard, but had not been in production for seven years, so they could make organic products from the start.

It is solar powered. Animals eat non-GMO, locally sourced feed—including whey from cheesemaking for the pigs—and graze on pastures maintained without herbicides or pesticides, moving regularly from patch to patch.

"After the pigs are there it grows the lushest, greenest grass vou've seen in vour life," says Lori, pointing to one field.

"Pigs are nature's rototiller."

It takes a few minutes to walk from the grazing animals to the sterile cheesemaking facility where Lori carries steel cans of warm milk inside or wraps rounds of soft cheese at the window. Production is highly seasonal—"We only milk once a day when the babies are being fed," Lori said—and the percentages of goat milk and sheep milk in their cheeses varies along with the season. "They peak at different times. But that's part of why it's OK to be small, then I can manage those changes."

That's part of what it means, Lori says, to be a true farmstead. "Here are the animals. We don't have thousands of them," she said, gesturing around her. "The milk belongs to me, it doesn't belong to Darigold (dairy co-operative). It doesn't travel far to where it's made.'

Lori had culinary training years ago and also was introduced to cheesemaking while living in France for two years. Returning to the U.S., she took cheesemaking courses at Washington State University, an approach she recalls as heavy on chemistry but less







(Top) Ruth and Lori Babcock have created a rare farmstead creamery on 21 acres in Tieton, WA. (Bottom I) Lori makes Tieton's award-winning cheese. (Bottom r) Ruth oversees the animals and vegetables

focused on character. The creamery came cheeses she wants to eat, from spreadable Bianca to fresh-brined feta, aged Romanostyle wheels and an Epoisse washed with pear brandy. Turning passion into business involved a lot of experimentation and development—and respect for her muses, the Kathadin and Fresian sheep and the French Alpine and Nubian goats.

The Nubians "give you the milk that's the milk of the gods," she said, though she has a weakness for the "heh heh" bleat of the French Alpines.

Both cows and goats are often chosen in large operations for productivity and predictability: "milk strains for your industrial milk... low butterfat, low flavor, blah blah boring cheese." She got to select instead for "really interesting milk."

She might like a few dairy cows to join their herds one day, along with the handful of beef cattle they raise now. That would require a larger milking facility, though, and another addition to their daily responsibilities. Why even consider it?

"Mozzarella," Lori said with a dreamy

creamery cheeses winning honors like the People's Choice award at the Washington Artisan Cheesemakers Festival.

I think this is the most amazing thing on planet Earth

Courtney Johnson, executive director of the Washington State Cheesemakers Association and a former PCC cheesemonger, wrote on her "PhCheese" blog in 2017 that Tieton's Black Pearl was the best cheese she ate that year, extolling the "wondrous cloud" of its silky center and the mushroomy rind. "It is the type of cheese that you take a bite of, ponder, and then say, "Oh god."

The markets, PCC, and a few restaurants like Seattle's Lark and La Medusa are

The results have been outsized, with currently their main outlets. People ask cheese, but they're reluctant. "Shipping perishables, that's a really tough thing to do for the environment. We're talking Styrofoam, ice gel packs, resources that are not even recyclable."

The couple have endured natural disasters and economic stresses over the vears, including the Great Recession and the time a nursing mother sheep kicked over a heat lamp and the building caught fire. "We didn't even lose that sheep or that baby. Wool's an amazing thing," said Ruth. But they lost financial ground that took years to recoup.

There are still challenges and hard work—and redeeming factors. Seeing the milk coming inside in the morning, still warm in the cans, "I think this is the most amazing thing on planet Earth," Lori said. Coaxing it into cheese takes her senses as well as her hands. The moments when the curds form are almost elemental.

It's "a lot of science and a little bit of magic," she said. She controls the time and the temperature and the environment. But "I don't control the milk."

Roles and responsibilities of the PCC Board of Trustees

With the PCC Board of Trustees election coming up (see below for details), we asked Trustee Ben Klasky, chair of the Board's Governance and Membership Committee (GMC), which oversees the annual election, to share insights into the Board's role and responsibilities and what the Board looks for in trustee candidates. This is an updated version of a discussion from 2021.

Q: What are the key responsibilities of the members of the PCC Board of Trustees?

A: The responsibility of each PCC trustee is to provide direction and oversight to PCC's leadership team in its management of PCC's business. The Board's oversight encompasses a varied and broad range of business considerations, but each trustee's performance of that responsibility is subject to two foundational duties each trustee owes to PCC and its members by law: the duty of loyalty and the duty of care (these are called "fiduciary duties"). The duty of loyalty requires trustees to act in good faith in a manner that the trustees believe is in the best interests of PCC and its members, and to maintain the confidentiality of information discussed by the Board. The duty of care requires trustees to make decisions only after careful study, discussion and debate, and imposes on each trustee the obligation to truly understand the issues deliberated by the Board. It is this duty of care that makes it imperative that the Board recruit seasoned business people with a diverse set of skills who are able to understand the complexities of PCC's financials and business operations, analyze the challenges the co-op faces, and provide thoughtful and meaningful oversight and advice to PCC's leadership team.

Q: Can you tell us more about the primary work of the Board?

A: Absolutely. The Board ensures that the co-op has a talented, dedicated leadership team, and that starts with recruiting, hiring, supporting, and evaluating the CEO, which is overseen by the Management **Development and Compensation Committee** (MDCC), one of the Board's three standing committees. The Board and its three standing committees (the MDCC, the GMC and the Audit and Finance Committee (AFC)) also oversee annual financial planning and budgeting; establish strategic goals working with the Leadership Team; and assure that the co-op is operating in accordance with its mission, vision and values. The Board provides oversight on topics that range from risk management to social and environmental goals, staff compensation and benefits to merchandising strategies, and new store locations to membership programs.

Q: How is the Board's work different than that of PCC's Leadership Team (LT)?

A: The board, on behalf of membership, oversees and advises the LT on big decisions about the operation of PCC and the achievement of established goals. We are not involved in everyday co-op operations, which are run by the LT and co-op employees—this includes store-level staffing decisions, marketing plans and the pricing

Q: What is a typical "day-in-the-life" of a

A: The trustee role is not a full-time job, so our PCC-related work comes in concentrated periods, usually around board and committee meetings. The Board and each of its committees usually meet four to five times a year, sometimes more, depending on the workload and challenges facing the co-op. Our Board obligations include being fully prepared for meetings by reviewing materials prepared by the LT on PCC's challenges and goals; fully participating in discussions and decision-making during regular and special board and committee meetings and an annual planning retreat; and participating in task forces that handle specific issues from time to time. The Board Chair and the chairs of the committees spend additional time on leadership duties, including working with members of the LT to determine key priorities and set agendas of topics for consideration. The board and committee meetings focus on topics like the co-op's financial performance, achievement of strategic goals, potential new store oppor-

and culture, social and environmental efforts, and succession of both the LT and the Board. We also study and adopt best practices in board governance from both the for-profit and the nonprofit sectors, and we spend time on our own personal development, which includes doing evaluations of the full Board and of each trustee

Q: What are some examples of decisions the Board makes on behalf of the co-op?

Krish Srinivasan as the co-op's CEO, approving PCC's strategic plan, and setting the organization-wide budget for 2023.

Q: How do you recruit candidates for the Board, and what are the criteria for eligibility?

A: Recruiting qualified, experienced, and diverse people with mature judgment to sit on the PCC Board is part of our responsibility to membership...and it takes planning, persistence and diligence. How we recruit candidates has evolved over time as the operations of PCC have become more complex and the grocery industry in the Seattle metro area has become more competitive. The Board and LT annually evaluate the current expertise on the Board and any particular skill sets that may be needed in light of the strategic plan for the co-op, and we also look for breadth of experience in life and work. This year, the Board and LT have identified a need for Board members with executive-level experience in grocery operations, supply chain management, development and oversight of e-commerce systems, and equity and inclusion in food systems. Recruiting highly qualified candidates who can provide experience in the identified skill sets is a vital area of focus for us.

To be eligible for the PCC Board, a person must be over 21 and a member of the co-op, meet the other criteria established in the PCC Bylaws, including the limit on the number of employees who can sit on the Board at any time, meet the eligibility criteria adopted by the board, and have the time and genuine interest to perform the

A: Some recent examples include hiring

PCC CUSTOMER SERVICE STARS



FRANKIE SEWARD Clerk, Burien PCC

Whether she's cashiering, working dairy, receiving orders, or learning point of sale, Frankie has supported Burien PCC for 10 years with a collaborative spirit and positive attitude. Her willingness to help extends to her customers as she always makes sure they feel welcome in the store. When it comes to her favorite products, Frankie highly recommends Huney Jun kombucha and Majestic Garlic dip. Outside of work, she loves to crochet, garden in her abundant yard to support pollinator species, and go for walks with her fiancé and two dogs. She also recently bought 10 acres of land and has started caring for it by planting more trees. Thank you, Frankie, for your years of service and for assisting our shoppers with a smile!



JIMMY HUYNH Front End Clerk, Redmond PCC

Having grown up shopping at

PCC, Jimmy was excited to bring his years of customer service experience to our Redmond store team. He exudes positivity and kindness, which allows him to quickly make connections with coworkers and shoppers alike. If a customer leaves his check stand with a smile on their face, Jimmy knows he has done his job. He also enjoys the access he has at work to all his favorite foods, like PCC's ready-to-eat pizza! His go-to slice is classic pepperoni topped with fresh jalapeño slices from the produce department. Another product Jimmy recommends is Sky Valley Sriracha Sauce—he's a big fan of all things spicy. When not working at PCC, you'll find Jimmy spending time with his family, friends or partner, grabbing sushi, or exercising at his local gym. Jimmy, thank you for making PCC such a welcoming place for all customers!

[PCC BOARD OF TRUSTEES]

2023 elections are coming

Voting opens April 10

Members, do we have your current email? To receive your link to this year's ballot for the election of trustees to the PCC Board of Trustees (and to receive member-only offers and giveaways throughout the year), we need your email address! Concerned about receiving too many notifications? Members can elect only to receive member communications at pccmarkets.com/r/6358. PCC does not sell or share your emails for other purposes.

On March 1, the Notice of Annual Meeting for the 2023 election of trustees to the PCC Board of Trustees will be available online at pccmarkets.com. This year, online voting for trustees

will be open from April 10 through April 19. The telephonic annual meeting of members will be held on

Members have asked us what the "record date" is—under Washington law, the Board must establish a date to determine which members are eligible to vote in the upcoming election. Remember, under the PCC Bylaws. only members who are Active (meaning you have used your membership within 12 months of the record date) are eligible to vote in the election. This year, the record date is March 1, 2023 and only members who are Active members on that date are eligible to vote in the 2023 election.

To make sure you don't miss an email with your unique link to the online ballot and election reminders. we recommend adding pccvoting@

electionservicescorp.com to your email contact list. (Election Services Corp. is the independent third party that oversees our online election and will send you your unique ballot.)

Now is also a good time to update your contact information or correct your email address if needed at pccmarkets.com/addresschange. Remember, election details will be on the PCC website, pccmarkets.com, on



Fulfilling dreams with the United **Indians of All Tribes Foundation**

In legends, the Daybreak Star is a living plant, the blossoming "herb of understanding" that shines rays of light from soil to heavens.

In Discovery Park, its namesake building is home to United Indians of All Tribes Foundation (UIATF), a nonprofit organization providing social, cultural, and educational services for Indigenous people in the Puget Sound region. The 20acre property includes walking trails, tall trees favored by nesting eagles and visiting woodpeckers, and—befitting the center's name and purpose—a garden.

UIATF, a PCC partner since 2019, was founded in 1970 when members of various tribes occupied Ft. Lawton, an Army base that was being decommissioned. Led by the late Bernie Whitebear, members fulfilled the peaceful occupation's goal of creating a cultural home (Daybreak Star) and services on 20 acres of the former military land, opening in 1977. The foundation's many programs now include an outdoor preschool, support services for Elders, home visits for families, homelessness prevention assistance, and a traditional medicine program.

In 2003 a carefully selected collection of plants and trees were planted on a slim horseshoe of land near the Daybreak Star building, named in honor of Whitebear, the renowned founder. Unfortunately, over the years, the plantings have become overgrown. Plans this year include helping clear the Bernie Whitebear Memorial Garden and restoring it as a hands-on resource, as a "shining spectacle" of the natural world, as executive director Mike Tulee put it. (See box for how to help.)

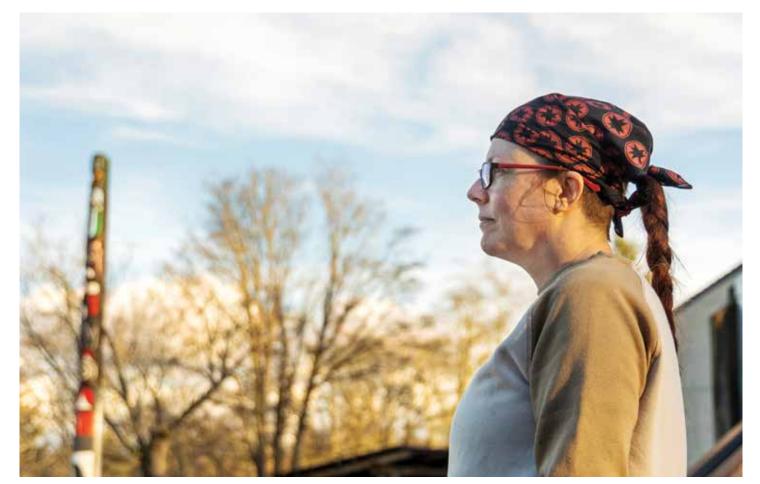
"Part of the original vision of (Whitebear's) was educating people as they came in-not just on traditional names, but what purposes they serve, for people who come into our cultural arena and may not have an understanding of what we're all about."

A dreamcatcher built into a wooden bulletin board marks the garden's boundary. where some of the original plantings still made their presence known despite en croaching blackberries and other invaders.

"In the garden exist rose hips that are totally harvestable," said Sherry Steele, the foundation's official accountant and unofficial all-around project manager, pulling a few of the cherry-sized fruits from the vines. A sign marked where the kinnikinnick shrub (also known as bearberry) once stood, but has since disappeared. Thankfully, there are fresher plantings on a new garden area near the center's front doors.

Uniquely, kinnikinnick is used for ceremonial smoke for such tribes as the Peoria (Steele's Tribe), similar to how tribal members in the Southwest might use sage. "We'll use a mixture of pine and kinnikinnick to make a smudging to clean the air. You can burn it on its own, or you can mix it with rose hips and other local plants. You can also make a tea from it," she said.

Each labeled vine or branch has its own story: Red cedar boughs are often hung over doorways as a symbol of welcoming and good energy, Steele said, while the bark can







(Top) Sherry Steele, accountant at the United Indians of All Tribes Foundation, has also overseen projects that include landscaping two garden areas by the Daybreak Star center with culturally relevant plants. (Bottom I) Steele plucks rose hips at the Bernie Whitebear Memorial Garden. (Bottom r) Maintenance and new plantings are planned for the garden, where signs identify plants in common and botanical names as well as Native names, usually in Lushootseed. Photos by Meryl Schenker

be medicinal. Oceanspray, puffing out clusters of white flowers in the summertime, has disinfectant properties and can be used to make soaps and shampoo. Serviceberries, salmonberries, elderberries and stinging nettle are all marked among the garden's nine zones in an educational map. The gar- Union, and an internet radio station that signs also reflect Native names (usually in Lushootseed) along with common and botanical names. Some 90 species of culturally important plants were marked for the original garden, with some used for crafts and fiber, some for food, some for medicine and ritual, all part of Whitebear's vision of revitalizing traditional knowledge.

It's hard to overstate Whitebear's legacy, whether it was supporting tribal members living in the Puget Sound region or in making their history and presence visible to non-Natives, too. A pivotal figure in the national battle to protect treaty fishing rights for Native people, he was also the first executive director of the Seattle Indian Health Board and served on the board of the National Museum of the American Indian.

"Our programs, services and even the garden are designed to provide past, present and future educational and cultural tools for all to learn about and enjoy and preserve," Tulee said. A restored, replanted garden is one more facet in an array of services both on land and off for the Native people

in all walks of life here. The foundation also sponsors an annual Seafair powwow that's open to all, a youth transition home in Greenwood, a canoe carving house, part of the Northwest Native Canoe Center, recently breaking ground in South Lake

Additionally, a replanted garden would be a step toward another greater goal: Food

"If you go to a reservation, all around the outside will be fast food. There is usually not a grocery store at all," Steele said. United Indians works to provide nutritious food for tribal members as an important foundational goal. But an important step beyond that is to help provide culturally relevant and nutritious foods.

Two garden areas by the Daybreak Star doors have already been landscaped with meaningful plants, and the Whitebear garden will hopefully soon follow. Within the park, near Daybreak Star, by planned affordable housing that United Indians will help develop, Steele pictures even more possibilities: "to have things that people could touch and see and feel and know are real." Adding beehives for honey, for instance, is "one of my little dreams," she said.

They've already fulfilled so many, but there's room for more to come.

Join the campaign

PCC's spring fundraising campaign will benefit United Indians of All Tribes Foundation, one of its many nonprofit community partners. Learn more about the organization at unitedindians.org and join in by:

- Interested in helping maintain the Bernie Whitebear Memorial Garden? Sign up for that or other volunteer opportunities with the United Indians of All Tribes Foundation at pccmarkets.com/r/6360
- PCC has partnered with United Indians of All Tribes Foundation on a tote bag by Pacific Northwest-based Indigenous artist Heather Johnston. The tote will be available at all PCC stores and a portion of proceeds will go to the foundation.
- PCC's spring fundraising campaign at all stores from April 5 through May 31 will benefit United Indians of All Tribes Foundation. Donations can be made at the register or online at pccmarkets.com/r/6382.

A conversation with Farmer Frog

PCC's mission is to ensure that good food nourishes the communities it serves, while cultivating vibrant, local, organic food systems. We're proud to partner with organizations throughout the region and share their stories. One is Farmer Frog, which originated with a single school garden and now supports a dizzying array of programs statewide aimed at solving hunger. Sound Consumer contributor Tara Austen Weaver spoke recently with co-founder Zsofia Pasztor about the nonprofit's work.

Q: How did Farmer Frog get started?

A: In winter of 2009, teachers at our kid's school in South Everett asked if we could help them build raised beds and grow some produce, because there were a lot of families that lost their homes in the Great Recession and they were camping out in the parking lot. There was this area in the back—you could barely see it because it was covered in blackberries and Scotch broom. I said, "Sure, we'll feed the community from here." We started in January of 2010, clearing almost 20,000 pounds of blackberry vines, and by July we were feeding over 700 families.

Then came more requests and more requests-and it was hard, because we had our business, we were doing high-end landscape installations. But we met Will Allen [founder of Growing Power, an acclaimed urban farming program in Wisconsin] and I ended up training with him for six months in 2013. He told us to become a nonprofit, so Farmer Frog was born. Frogs are sentimental to our family, but they are also the canary in the coal mine. So, it reflects on our food growing and environmental stewardship ethics.

Q: How has the program evolved from those

A: Over the years, we realized that teachers need a lot of support for food gardens. The U.S. has always grown our own food—all of the tribal nations cultivated their own food before colonization, and a lot of the colonizers were farmers as well. But our society is losing that knowledge and understanding. We can build a school garden, but it won't be used unless the teachers feel comfortable using that space. So, we started a program for teachers (offering) externships and STEM continuing education. Before COVID we were supporting about 25,000 families in several dozen schools.

Q: How has the pandemic impacted Farmer

A: In March (2020), when everything shut down, we started getting calls from our volunteers. Everyone was in isolation, but our volunteers knew what was growing in the gardens and asked if they could receive some of those vegetables. So, we started harvesting out of the farm we have in Woodinville and at the school sites that were accessible. Out of that came a delivery project that is still going on today, for folks who are in isolation and otherwise need support, and it's absolutely free. We normally go through 150-200 boxes a week. These became lifelines for the families who are in isolation due to some really hard health situations.

(Later) we got a call from people who were going out to Othello to get some potatoes and wanted to know if we could loan them some of our farm crates—this was 2020 and the farmers couldn't move the produce. We got in just shy of 20,000 pounds of potatoes and onions and within a few hours they had all found homes. The next week I asked for more, and before you know it, we were going through millions of pounds of produce.

Another nonprofit, EastWest Food Rescue, was born out of the effort as well. Farmer Frog and our sister nonprofit, the National Tribal Emergency Management Council,







Photos by Meryl Schenker. (Top) Mandy Luttinen works with the animals at Farmer Frog's Woodinville farm. Bottom (I) Zsofia Pasztor with son and site manager Bence Pasztor. (r) Farmer Frog directly distributes 200,000 to 300,000 pounds of food per week from three refrigerated trailers.

have moved over 160 million pounds of food and supplies since then. Over the years we've become sister organizations and now we support about 3 million people in 36 states.

Q: How has that changed your mission or how you operate?

A: We are doing our best to support every community with food that is appropriate for that community. We've learned a lot, but our goal is to have a fresh food economy that really helps and solves hunger in the long run.

Unfortunately, the USDA stopped doing food boxes in 2021 [USDA authorized free food boxes from May 2020 to April 2021, as a way to support families in need and farmers who had lost markets due to pandemic shutdowns]. Here in Washington, the Washington State Department of Agriculture picked it up and there is the We Feed WA program that is now running

We are one of the contractors under the We Feed WA program, but there is not enough funding and the need is growing. We see new organizations coming in every week at our distribution facility in Snohomish. And the organizations that normally pick up for 300 people now need food for 500. These

Q: How has the organization grown as you've been doing this work?

A: We are a team of 35 people now; we have an admin department that tracks and accounts for everything. We have our distribution team and our farm team growing a lot of food, and we partner with a lot of other farmers and food processing companies and facilities. And we're funded by grants and donations and our contract with We Feed WA.

We don't have a warehouse; we operate

out of three refrigerated trailers. We go through 200,000-300,000 pounds of food every week, and there is not a speck of it left over. Our food comes from all different sources: We buy food, we glean food, we grow food, we rescue food, we get donations. We have a seven-acre permaculture farm in Woodinville and we grow food there, and we have a little bit of livestock too.

Q: What have you learned from the past few years of addressing food needs?

A: We really do need all of us in this together. We are not going solve hunger unless we provide food sovereignty. And that has to do with the community and supporting their solutions, instead of dictating what their choices are. Food support and pre-made food boxes are really important now, but they will only help with today—and people will be back next week and this will never end.

We need livable wages, and we need culturally relevant food that people want to eat. We have so many grant applications that ask: "How are you going to make your program sustainable?" But I don't want to make food assistance sustainable. I want to

Q: How can people get involved in supporting

A: We are always looking for more drivers on our Saturday delivery routes. People drive their own vehicles and can get anywhere from three to 26 boxes to deliver, depending on what they want. People who grow food and have excess can bring it in—from fruit trees, for example, And in summer and early fall, people can help us harvest. Obviously, we always take donations through our website. Every little bit matters. For more information see farmerfrog.org.

PCC garden history

PCC is celebrating its 70th anniversary this year. It was founded as a 15-family food buying club led by John Affolter in 1953, and officially became the Puget Consumers Co-op in 1961.

Partnering with Farmer Frog makes sense for many reasons, including a shared commitment to community and local foods. But it's also in line with the coop's long history of supporting community gardens, most notably when PCC helped found Se-

attle's P-Patch program in 1973. When an old truck farm in Wedgwood was threatened by development, PCC member Darlyn Rundberg suggested the co-op administer garden plots on the land. "That would save it from Suburbia and preserve it for community gardening in the future," wrote Randy Lee, PCC's manager at the time and longtime chief financial officer, in the predecessor

The rest is history. The nationally lauded program, now overseen by Seattle's Department of Neighborhoods, includes 91 P-Patches across the city. For the full story see pccmarkets.com/r/6359.

to the Sound Consumer.

[SUSTAINABILITY REPORT] ———

Tons of success from plastic film recycling

A local pilot program collecting plastic film for recycling brought in some 25 tons of material and showed encouraging ways to reduce waste in landfills.

The 5-month program that ended in May placed drop-off bins for "film packaging" such as plastic bread bags or dry cleaning bags at 10 independent grocers in the region, including the Bothell and Edmonds PCC stores. Such plastics can't go in municipal curbside bins for recycling because they get tangled in equipment at recycling facilities and have to be removed by hand.

Material from the bins was collected, sorted (with contaminants removed) and baled before being sent for recycling, according to the program report. Audits after shipping showed about 94% of each bale was useful plastic, "an especially high success rate," the report said.

The pilot program "confirms that the people of King County want to reduce waste and will recycle more when companies make it convenient," said Adrian Tan, Policy and Markets development manager at the King County Solid Waste Division, in a press release. "It also identifies effective strategies that could significantly cut the amount of plastic film packaging that ends up buried in our landfill each year."

The materials collected were recycled into resin or reusable pellets. About 71% was clear film and 23% was colored film, according to the report. The pilot was directed by Return-It, a nonprofit recycling organization, and funded through the American Chemistry Council's Wrap Recycling Action Program.

While the pilot project has ended, other options remain for plastic film recycling. Note that not all plastic film is recyclable and not all locations accept every type. King County residents can also recycle plastic film at the Bow Lake Recycling Center/Transfer Station with proof they live or do business within King County's service area, which excludes the cities of Seattle and Milton.

Puget Sound residents can also recycle certain types of plastic film through Ridwell, a Seattle startup making it easy for residents to recycle materials that aren't typically accepted in curbside recycling. Its mission aligns with PCC's waste-reduction goals, and PCC members get an exclusive 10% off any Ridwell membership at pccmarkets.com/r/6342.

The benefits of eating seaweed (in moderation)

By Erin Cazel, guest contributor

Consumption of seaweed is on the rise in the United States. Perhaps you have enjoyed seaweed wrapped around sushi rolls, as furikake sprinkled over poke bowls (or as popcorn seasoning!), or in seaweed snack packs.

International seaweed production has increased a thousand-fold since the 1950s, according to the U.S. Department of Agriculture—much of it gathered from the wild—and although Europe and Asia are larger producers, seaweed farming is the fastest-growing sector of aquaculture in the U.S. As seaweed becomes more common in diets here, scientific research is revealing the unique health benefits of its consumption—and exposing potential drawbacks.

Marine veggies

The foods mentioned above all feature a species of Pacific seaweed called laver, often called by its Japanese name, nori, or gim in Korean. This is just one of thousands of edible types of seaweed harvested and consumed for millennia by coastal communities around the world, from East Asia to the United Kingdom.

Seaweed is the common term referring to the broad categories of red, brown, and green macroalgae. These large, plant-like structures grow predominantly in saltwater environments and are as beautifully varied in their appearance and nutrient composition as our land plants.

Though we often think about the

human health benefits of consuming vegetables, it's helpful to recall that the nutrients they contain are there to support plant growth and function. Fibers provide structure. Starch stores energy. Vitamin C provides antioxidant protection against UV light exposure. Green leafy plants are rich in magnesium—the central atom of the chlorophyll molecule, which is responsible for the process of photosynthesis. Each species of plant has unique physiological needs, which helps to explain the range of nutrient profiles among the plant kingdom. In addition, the axiom "you are what you eat" applies just as much to plants as it does for us. Plants' ability to incorporate minerals into their structure is constrained by which minerals are available in their environment. Nutrient profiles of seaweeds differ from that of land plants because they are nded by and built to thrive in very different environments.

lodine accumulation

More than any other nutrient, iodine exemplifies this pattern. Iodine is easily washed out of agricultural soils, which is why most of the earth's iodine is found in the ocean and why land plants rarely contain it, unless grown in coastal areas where soil iodine content is replenished by ocean mists. The concentration of iodine in the ocean is dilute: a liter of seawater contains roughly the iodine mass of a single grain of Morton's salt. However, seaweeds accumulate iodine from ocean water, making

them a potent source of this micronutrient.

The amount of iodine accumulation varies widely depending on the species of seaweed, location, and even the point in the season in which it is harvested. Brown seaweeds such as kombu are the highest accumulators, with one species (horsetail kelp) concentrating iodine at levels between 30,000-50,000 times greater than the surrounding ocean water. Red



seaweeds such as nori and dulse are midrange accumulators, while green seaweeds such as wakame and sea lettuce have the lowest levels of iodine. Researchers postulate that iodine might provide antimicrobial functions in seaweed, just as it does in our doctors' offices (that orange-y swab of betadine disinfectant on your skin before an injection: iodine-based) and in dairy farms (sterilization of milking equipment and cow teats inadvertently makes dairy products a source of iodine).

In humans, iodine is an essential mineral required in trace amounts to produce thyroid hormones, our metabolic regulators. It's been added to table salt in the U.S. since the 1920s. Not enough iodine and your metabolic processes slow, leading to symptoms such as sluggishness, weight gain, thinning hair, difficulties learning, and painful swelling of the thyroid gland (called goiter). Deficiencies while pregnant or breastfeeding can have devastating impacts on the growth and development of the baby. For individuals who prefer sea salt rather than iodized for home cooking, particularly vegans, seaweed may be a viable whole-food source of iodine to ensure adequate amounts. But a "more is more" philosophy doesn't hold water when it comes to iodine. Too-high levels of this micronutrient can result in the same symptoms as iodine deficiency.

Seaweeds' ability to accumulate minerals has a downside, too. Heavy metals such as lead, cadmium, silver, arsenic, and aluminum are found in trace amounts in the ocean and can concentrate in seaweeds. Just how much is hard to assess, and there are no federal regulations governing how much seaweed is recommended in a daily diet. As with iodine, accumulation of heavy metals depends on the species of seaweed, time of harvest and the surrounding marine environment. There is a positive scenario for this ability, too: ecological researchers suggest certain seaweeds have tremendous potential to sustainably clean up marine regions polluted by heavy traffic or industry. (Seaweeds cultivated for this purpose, needless to say, would not be

meant for human consumption.)

Ecologists aren't the only researchers
with eyes fixed on the unlocked algal

potential waving in the ocean expanses. Compounds unique to seaweeds already have medical, pharmaceutical, industrial, agricultural, food science, and cosmetic applications, and research into seaweeds continues to grow at a rate that rivals the most prolific species of kelp (up to 18 inches a day). Iodine may receive most of the attention, but the unique array of phytochemicals present in seaweeds functions together like instruments in a symphony, their collective impact far greater than the sum of the solitary components.

Erin Cazel is pursuing a master's degree in nutrition at Bastyr University.

Eating seaweed

If you're curious about including seaweeds in your meals, there are many ways to add it to dishes you're already preparing rather than creating an entirely new repertoire. For example, place a strip of kombu into dried beans or grains while cooking for enhanced mineral content and improved digestibility. Layer silky wakame into a cucumber salad. Sprinkle deep purple threads of arame over roasted winter squash to create a dish as visually stunning as it is nutritionally rich.

Even a few teaspoons of edible seaweed weekly will go a long way toward harvesting its nutritional benefits. When eating seaweed keep in mind the Recommended Daily Allowance (RDA) for iodine:

Adults: 150 micrograms
Pregnancy: 220 micrograms
Lactation: 290 micrograms
Tolerable Upper Intake Limit
(adult): 1,100 micrograms

Source: nih.gov





[NEWS BITES]

Food and farming center

An agricultural dream in Snohomish County is inching closer to reality, due to dollars earmarked for community projects in Snohomish County included in the \$1.7 trillion federal budget passed by Congress and signed by President Joe Biden. There's \$750,000 coming for the proposed Snohomish County Food and Farming Center at McCollum Park in Everett, envisioned as a processing and distribution center for ag products, a commercial kitchen for farmers and an indoor farmers market. The federal aid, which supplements roughly \$7 million of local and state dollars, comes with critical decisions on operators and building design on the horizon. (*Heraldnet.com*)

Lobster sustainability

A major seafood guide announced it no longer considers Maine's famed lobsters sustainable, given that whales on the brink of extinction are dying after becoming entangled in fishing gear. The decision to revoke the Marine Stewardship Council's recognizable blue label is a blow to a business already feeling an economic pinch amid low lobster prices, high fuel costs and questions about its environmental practices. Conservationists have launched an aggressive campaign to do more to protect critically endangered right whales in the North Atlantic, whose numbers continue to decline. (WashingtonPost.com)

(Editor's note: The Monterey Bay Aquarium's Seafood Watch program had earlier assigned a "red" rating to the lobster for similar concerns.)

Using online recipes

According to a new report from New York City-based commerce advertising platform Chicory, 89% of consumers say they use digital recipes and 43% say they are using digital recipes more often. They aren't just scrolling at home or work: Up to 75% of consumers look for recipes on their mobile device while they are at the grocery store. Organic search based on keyword is the most popular way that consumers find recipes online, followed by food blogs and websites and social media platforms Pinterest, Facebook and TikTok. (*ProgressiveGrocer.com*)

Edible winter peas

The first winter pea cultivars specifically developed to be used whole or as an ingredient in human food have been released by the U.S. Department of Agriculture (USDA)'s Agricultural Research Service. Winter or autumn-sown peas (Pisum sativum)—also called "black peas" or "field peas"—are annual legumes with excellent nitrogen-fixing abilities. Currently, winter peas are mostly grown in the Pacific Northwest as a cover crop to add nitrogen to farmers' fields, for domestic animal feed and to attract deer and other game species. (ars.usda.gov)

Vashon farmland preserved

King County has bought 110 acres of Vashon's Misty Isle Farms, culminating a decade of work by islanders and others to protect at least part of the sprawling estate of the late Thomas Stewart. The purchased properties, all on the western half of the estate, include the rolling pasture that was long the site of a beloved local event, the Vashon Sheepdog Classic, which drew thousands annually and raised funds for local nonprofits. Woods to the west of the pasture, fronting SW 220th Street, are included, as are a total of 50 acres that have for three decades been part of King County's Farmland Preservation Program, designed to preserve working farms and a rural way of life in King County. (VashonBeachcomber.com)

Pesticides and arthritis

Exposure to a commonly used pesticide could put people at higher risk of developing rheumatoid arthritis, according to a new study. The findings, published in the journal Environmental Science and Pollution Research, looked at potential links between the disease and a class of chemicals known as pyrethroids, which are found in many commercial products used to control insects. including household bug killers, pet sprays and shampoos. The research team, which was led by scientists from Anhui Medical University in Hefei, China, concluded that levels of pyrethroid indicators in the urine of those who had self-reported a rheumatoid arthritis diagnosis were "significantly higher" than those who had not reported the diagnosis. (TheNewLede.org)

King County solar power

Grants from the Washington State Department of Commerce will fuel a ned expansion of King County's solai power generation capacity. Totaling nearly \$135,000, the grant funding will result in 200 kilowatts of total solar power generation capacity at the Solid Waste Division's Shoreline and Bow Lake recycling and transfer stations. This announcement follows action earlier last year by the Solid Waste Division to install a new solar panel array at the Vashon Recycling and Transfer station that will generate about 172,000 kilowatt hours of electricity per year—enough to meet the annual needs of the transfer station, or about two dozen single-family homes. (KingCountyGreen.com)

Meatpacking grants

The Biden administration is awarding an additional \$9.6 million in grants and loans to expand meat processing across the country, as the government tries to diversify the industry beyond four companies that have long dominated it. The effort to expand meat processing capacity comes after COVID-19 infections among workers in large meat processing facilities

decimated meat production during much of 2020, contributing to higher food prices. The projects, funded by the USDA, vary from a \$44,000 grant to a Virginia-based farm to support the processing of pasture-raised chickens, beef cattle and hogs for direct-to-consumer sales, as well as a \$4.95 million loan to an Amarillo, Texas-based meatpacker to create a new processing facility for local producers and expand retail offerings. (*Reuters.com*)

Stink bug surge

The amount of invasive brown marmorated stink bugs this year tops anything seen in Oregon for at least five years and poses a serious threat to Oregon crops and garden plants, according to Oregon State University Extension Service's orchard crop specialist. Nik Wiman, an associate professor in the College of Agricultural Sciences, said fruit and vegetable crops in the Willamette Valley have been affected. The insect feeds on at least 170 plants, particularly vegetables, pears, apples and hazelnuts, but also ornamentals. (*Oregonlive.com*)

Antarctic conservation

A study published in the journal PLOS Biology found that unless more intensive conservation efforts are undertaken by the global community, population declines will continue for approximately 65% of terrestrial species and seabirds that call Antarctica home. Despite protections from the Protocol on Environmental Protection to the Antarctic Treaty, which has been in effect since 1998, emperor penguins are at particularly high risk of population decline, followed by a species of nematode worm, Adélie penguins, and other seabirds. Authors of the study write that conservation of Antarctic species is key for developing new technologies or medicines, and for protecting the continent itself, which provides "essential ecosystem services" like regulating the global climate.

Vegan WIC foods

(TheNewLede.org)

Millions of women and children might soon gain access to more vegan milk, yogurt and other dairy-free products. The USDA recently proposed to add additional dairyfree products to the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), an assistance program that supports the well-being of millions of mothers and children across the country by providing access to food aimed to fill in nutritional gaps. Under the proposed updates through its Food and Nutrition Service, the USDA wants to give WIC users more options to dairy and eggs, which includes different sizes of the animal-derived versions but also substitutes such as soy yogurt and vegan cheese or lactose-free dairy and tofu instead of eggs. (VegNews.com)

Washington watersheds

A new report prepared for the Washington State Department of Ecology suggests climate change will continue to alter Washington's rivers, potentially making some watersheds uninhabitable for salmon and steelhead by the end of the century. The report led by Washington State University researcher Jonathan Yoder and University of Washington researcher Crystal Raymond projects widespread increases in river flows in the winter, declines in the summer and rising stream temperatures. Researchers analyzed existing studies, and used new data sets from the River Management Joint Operating Committee and the NorWeST modeling project to predict future streamflows and temperatures. (SeattleTimes.com)

Vaccine for bees

The world's first vaccine for honeybees has been approved for use by the U.S. government, raising hopes of a new weapon against diseases that routinely ravage colonies that are relied upon for food pollination. The USDA has granted a conditional license for a vaccine created by Dalan Animal Health, a U.S. biotech company, to help protect honeybees from American foulbrood disease. The vaccine, which will initially be available to commercial beekeepers, aims to curb foulbrood, a serious disease caused by the bacterium Paenibacillus larvae that can weaken and kill hives. (*TheGuardian.com*)

Deere tractor repair

Tractor maker John Deere has agreed to give its U.S. customers the right to fix their own equipment. Previously, farmers were only allowed to use authorized parts and service facilities rather than cheaper independent repair options. Deere and Co. is one of the world's largest makers of farming equipment. (BBC.com)

Bristol Bay protection

The Conservation Fund and Bristol Bay Heritage Land Trust announced the permanent protection of over 44,000 acres of vital land and water habitat on Iliamna Lake that is essential to the health and vitality of Alaska's Bristol Bay region the largest wild salmon fishery in the world. A successful \$20 million, 18-month fundraising effort—with half of the funding provided by The Wyss Foundation, Patagonia's Holdfast Collective and Alaska Venture Fund—enabled The Conservation Fund's purchase of three conservation easements on land owned by the Pedro Bay Corporation, Located in the heart of Bristol Bay in the northeastern end of Iliamna Lake, the easements protect critical habitat for millions of wild salmon and maintain subsistence uses, traditional activities and cultural resources important to the Pedro Bay Corporation and its Alaska Native shareholders. (*Alaska-Native-News.com*)

Spring at PCC brings asparagus, rhubarb and other delightful harvests. We want to celebrate the season by bringing the youngest members of our PCC community together for a coloring competition! Participants 12 and younger are invited to color in the sheet below, or to print out a sheet online at pccmarkets. com/r/6368. Completed entries are due back to your local PCC by the **end of the day on April 30**.

Staff will vote for a winner in each age category. A selection of winners will be displayed at the stores and printed in the *Sound Consumer*.

