


# HEART <sup>OF</sup> THE VALLEY HOMEBREWERS



CORVALLIS/ALBANY OREGON  
WILLAMETTE VALLEY

Hello HOTV!

Please enjoy this edition of the August 2015 HOTV Newsletter.

## **Presidents Corner**



Carrie is on vacation but if she were here I am sure she would say:

Volunteer for September Fest!

Brew a beer for September Fest HOTV booth. The club will reimburse you for the ingredients.

## **Secretary's Corner**

### **Louis and Karen Party with the Bros at Mt Angel Abbey**



Karen raising a glass with head brewer Father Martin.

#### **Mt Angle Festival**

On July 11, Louis and I attended the Mt Angle Festival at the Benedictine Abby in Mt Angle. It was a marvelous affair with food, wine, and Benedictine Brewery beers. In addition to their pale ale, there were tastings of the French style farmhouse ale, dark ale, and strong dark ale the brothers are working on perfecting. Benedictine Abbeys from Switzerland, Japan, India, Mexico, and Italy sent their favorite recipes and local chefs prepared the dishes. A dozen local vineyards sent their fine wines. The Brothers played their favorite games like badminton and Bocce with the guests while a string quartet played music. Best of all, the event was a sellout (over 600) so hopefully the Brothers will do it again next year!

## HOTV Summer Picnic!

The annual HOTV summer picnic was August 8 at Avery Park. I was unable to attend but I have it on good authority that a good time was had by all.



Fishing for Beer

## September Fest 2015

**BLOCK 15 BREWING CO. PRESENTS**



Enjoy Willamette Valley's best craft beer & cider among the trees of Avery Park with live music, food and friends at the Valley Homebrewers' 8th Annual Septemberfest!

**Benefitting Linn Benton Food Share**

**Sat, Sept 12th**  
1:00pm – 9:00pm  
Avery Park, Corvallis

**\$15 = Pint Glass + 4 Beer Tokens**  
Additional tokens 4 for \$5

**New location... Avery Park!!!**

- Live music with Beaver Country Hot Air Band, Parish Gap & more •
- Why drive when you can walk, bike, ride CTS or use our free shuttle? •
- Designated Drivers \$3 & the root beer is on us •
- No minors over the age of 10 years, please •
- Sorry, no furry friends •

More information + free shuttle map available at [Septemberfest.org](http://Septemberfest.org)



The September Fest planning committee has been meeting regularly to take care of event details. Volunteers are needed; the sign up schedule will be posted soon. This year's Festival will be a no waste event !

Septemberfest volunteer registration is now live! A big change from previous years, volunteers can now serve without having a OLCC servers license. All that is required is for you attend one of the short (~45 minutes) orientations we'll be putting on. Our goal this year is to have all volunteer servers so we don't have to hire any!! Lastly it's always tough filing the last shifts so please give that some consideration.

Here's the link, and tell your friends: <http://www.signupgenius.com/go/10c054ba4ad23a4f58-septemberfest2>

# SEPTEMBERFEST 2015

- Septembeerfest Pint Glass
- 4 Beverage Tokens

## **General Volunteer Guidelines**

- Know when your Volunteer Shift is and make plans to attend.
- Pickup your Volunteer Packet during pickup and familiarize yourself with the shift you will be covering.
- Do not consume alcoholic beverages during your Volunteer Shift. Our liability insurance policy specifically forbids it. Any Volunteer found to be consuming alcoholic beverages during their Volunteer Shift will be asked to leave.
- Imbibe responsibly and encourage others to do the same and to make good transportation decisions.
- Have Fun!

## **Monthly Meetings**

The June monthly meeting was held on the 17<sup>th</sup> at Louis and Karen's place.

The meeting was called to order by President Carrie Reeves at 7:35 PM

Patrick gave an update on treasurers' report \;

Ben gave a report on the impending Pub Crawl;

Barry is planning a litter pick up in late July and he will try to find out why the signs are missing.

Some club members went to the National Homebrew Competition in San Diego

3000 people huge numbers of beers;

Lots of Fun!

Randy Scoby took a gold medal at competition;

New club members

Rob Lawrence – returning to club after 7 year hiatus;

Joe Grubly – always wanted to brew so has decided to start;

Civil War Brewing

Bring entries to July club meeting for judging or get to Corvallis Brewing Supply by July 12. Judging will not be by BJCP style guide. Beers will be judged by all club members at meeting on certain attributes; each person will pick their top 3.

Summer Picnic is August 8 at Avery Park

Will be a pre picnic golf tournament.

The meeting was adjourned at 8 PM

## **July Monthly Meeting**

The meeting was held at Patrick's house.

Business was addressed very quickly so the Civil War beer could be judged.

Patrick gave a September Fest update;

Carrie reported on the picnic;

Barry found out HOTV has not been permitted to clean up Hwy 20 since 2010. He working on getting a new permit for the club;

Volunteers were chosen to judge the Civil War Brewoff entries;  
And the winner is...Armand Schoppy for his Cascadian Dark Ale!

The Board voted to appoint Dan Rickli as the new Vice President to replace Ben Potter. Thanks you Dan for stepping up to take over for Ben.

**There is no meeting in August**

## Upcoming Local Beer Competitions

**08/23/2015**

Washington State Fair  
Puyallup, WA

Contact: Peggy Watson  
Phone: (253) 841-5134

Entry Fee: \$3.50  
Entry Deadline: **08/15/2015**

**09/13/2015**

Rocktoberfest Homebrew Competition  
Redmond, OR

Contact: Sean Neary  
Phone: (541) 316-1588

Entry Fee: \$6  
Entry Deadline: **09/12/2015**

**09/20/2015**

Kirkland Oktobrewfest  
Kirkland, WA

Contact: Kevin Schmidt  
Phone: (425) 802-6673

Entry Fee: \$15 includes ticket to Kirkland Oktoberfest  
Entry Deadline: **09/13/2015**

**10/24/2015**

14th Annual Oregon Brew Crew Fall Classic (no web site)  
Portland, OR

Contact: Jamie Koty  
Phone: (503) 680-4137

Entry Fee: \$7  
Entry Deadline: 10/16/2015

For a full list of all the upcoming competitions in the known Universe see:  
[http://www.bjcp.org/apps/comp\\_schedule/competition\\_schedule.php](http://www.bjcp.org/apps/comp_schedule/competition_schedule.php)

## Upcoming and on Going Beer Events

### Hopped Up Friday Nights at Deluxe Brewing

635 NE Water Ave.

Albany OR

<http://www.sinisterdeluxe.com/>

Our favorite time of year is here and it's looking to be a beautiful sunny Summer season! Join us on our patio and in the brewstillery for a fun time with friends & car enthusiasts as the Hot Rods and Classics come rolling through the Deluxe lot.



## **Bend Brewfest**

12:00pm to 11:00pm

Les Schwab Amphitheater

344 SW Shevlin Hixon Drive

Bend **Website:** <http://bendbrewfest.com/>

Admission to the Brewfest is FREE!

THURSDAY, FRIDAY AND SATURDAY, AUGUST 13, 14, 15.

AND NEW THIS YEAR!! SUNDAY, AUGUST 16. NOON TO 8 P.M.

**A one-time purchase of a souvenir mug is required for tasting. Mugs are \$15 and include 5 tasting tokens.**

**NO PETS ALLOWED.**

**7pm - 11pm the Bend Brewfest is 21+ only.**

## **Rogue Farms Summer Concert Series**

3590 Wigrich Rd. ([map](#))

Independence OR

**Website:** <https://www.facebook.com/RogueFarmsHopyard/timeline>

**Every Sunday, June - August**

Our summer concert series is in full swing. Kick up your feet and join us for a beer among the vines at Rogue Farms. All concerts are free and all ages are welcome. Drive, bike, run or float to the farm, and bring your best four legged friend!

Click [here](#) to learn more or call [503-838-9813](tel:503-838-9813).

## **Beer News**

**HOTV club member Scott Bruslind is opening a brewery in Lebanon!**

### **Lebanon brewery to open downtown**

#### **About the owners**

##### **Matt Cowart**

Cowart bought his first home brew kit in 2004, and has been making beer and developing his own recipes ever since.

He has been running Cowart Landscape Co. since 2001, and started brewing beer as a hobby. A few years ago, he decided that his love for great beer should be shared.

##### **Scott Bruslind**

Bruslin is the owner of Analysis Laboratories, which has served breweries worldwide for 18 years. His lab specializes in providing breweries with the specific information they need to maintain a level of quality and consistency. He has specifically worked toward making the benefits of his lab's services available and beneficial to small breweries and brewpubs.

Matt Cowart plans to create his first brew for retail sales this month.

Cowart, started home brewing in 2004, and is in the process of opening Conversion Brewing. Once that beer is ready to drink, they plan on opening up shop.

Cowart is opening the business with Scott Bruslind, who owns a lab in Lacombe that tests beer for quality assurance.

Cowart said they decided to name brewery Conversion Brewing because, he would convert his friends to craft beer who drank lighter American-style lagers.

“As I started introducing my friends, who drank that light fizzy yellow stuff, to craft brew, they’d go buy a 30-pack of whatever brand they drank” Cowart said. “They’d call me up and say ‘man I hate you.’”

That was because they discovered they enjoyed craft brews, and couldn't drink the cheap stuff, Cowart said.

“I said ‘you’ve been converted,’” Cowart said.

## Crowdfunding campaign

While the owners have enough money to open a brewery, they need to raise money so they can serve food. Matt's wife, Rachelle Cowart has started a campaign on CrowdBrewed.com, a crowdfunding website specifically for breweries. Matt's wife who is leading the effort to raise funds.

“We have a page on their website to raise money primarily for a pizza oven,” Rachelle Cowart said.

The original plan was to start the brewery, then about a year or two later add food to the operation; however to do so would require the place to be 21 and older only. Serving pizza will be their main food item.

As the owners have started talking to city officials, and citizens around town they decided to pursue getting food option sooner.

“They would really like it if we opened with food to begin with,” Cowart said. “Everybody would like it to be an establishment where they can bring in their families.”

## Atmosphere

The owners have decorated the inside of the building with reclaimed barn wood and they recently installed a hardwood floor.

They have stripped the entire building replaced the plumbing and stripped the flooring to bare dirt.

About the only thing they kept were the ceiling tiles, which they painted black.

“I think it’s going to turn out very nice, and feel very welcoming,” Matt said. “I’m looking forward to sharing the beer that I make on a much larger scale than I have.”

Matt also is looking forward to working more inside as he has spent the last 15 years working outside as a contractor.

“I’m also looking forward to interacting with our community,” Matt said. “We’ve got a great little community here.”

The location was once even a feed store and Matt found grains that had fallen through the cracks of the floor.

“For me I’m excited because this is an extension of home,” Rachelle said. “I want the people to come in to become like family, and create an atmosphere that’s comfortable for all walks of life.”

At their home, Matt brewed 180 gallons of beer last year.

“That doesn’t sound like a lot, but when you’re brewing it 10 gallons at a time, that’s a lot of beer to go through,” Matt said. “We did a lot of different styles and some experiments to see what people in our community look for in beer.”

Belgians, English beers including English-style IPA will be on tap when the brewery opens.

Cowart said that English-style IPAs aren’t generally done that while around the area as most people tend to opt to create American-style IPAs.

For more information about Conversion Brewing, visit <http://www.conversionbrewingcompany.com/> or visit <https://www.facebook.com/Conversionbrewing?fref=ts>.

To make a donation on the CrowdBrewed site, visit <https://crowdbrewed.com/rewards/campaigns/conversion-brewing-co/>.

## **Beer boom: Craft industry continues to expand in mid-valley**

The craft beer industry just continues to boom in the Mid-Valley.

Bob Van Vleet has opened a second growler shop north of the Oregon State University campus. Block 15 unveils its second food and beer emporium Tuesday at the Corvallis Industrial Park. Nectar Creek keeps winning awards and 2 Towns Cider is being sold farther and farther from home. Even the Jackson's mini-mart in North Albany has eight taps.

It is a good time to be making beer and cider and mead here.

Here is a snapshot of expansions, successes and awards from the craft industry in Corvallis and Albany.

### **Dam Growlers**

Van Vleet, who runs University Hero and 5th Street Growlers, has added a second growler shop, Dam Growlers, inside the Beaver Hut, a new take-out breakfast and burger joint in the Pinion Property Management building at Northwest 16th and Monroe Avenue.

The location, just a stone’s throw from OSU, is designed to bring in campus-related business.

“We wanted to be available for students and faculty to walk and get their growlers filled,” Van Vleet said.

Van Vleet has 20 taps at Dam Growlers, 10 fewer than he has downtown.

“It’s the same basic selection,” he said. “Maybe a few more mainstream and popular beers. We have a few more harder to get and less well-known brands at 5th Street.”

Top sellers since the new growler shop opened July 6 are the Bad Apple from 2 Towns, the Green Flash Double IPA, the Boneyard RPM and the Citrus Mistress from Hop Valley.

Like many craft beer outlets, the linkage between beverage and food offerings is emphasized.



"We think they are mutually beneficial," Van Vleet said. "People buying a growler might buy a (University Hero) sandwich and vice versa. Our sandwich revenue outpaces the beer, and the same thing is happening here, but we're still new. Growlers with the Beaver Hut will (also) be mutually beneficial."

Marena Ward, who has spent 35 years in the restaurant business, is in charge of the Beaver Hut. She makes her own biscuits, gravy, chili, soups and sauces.

"It's all home-style cooking," she said. "And our cookies are homemade."

Specialties include a chicken and waffle sandwich and the Maws Scrambled, a concoction of hash browns, ham, bacon, onions, green peppers and tomatoes topped with cheese and gravy.

"Everything but the kitchen sink," said Ward, whose initials (MAW) gave the dish its name.

Burgers are as low as \$3.

"There isn't a burger you can get in town for this price," Van Vleet said.

The outlet only serves takeout customers presently, but Van Vleet said he is working with the city and the Oregon Liquor Control Commission on permits for sidewalk tables and possible inside seating.

Dam Growlers and the Beaver Hut are open until 9 p.m. seven days a week, with Ward and Van Vleet planning to stay open until 2 a.m. Thursday through Sunday once school resumes in September.

## **Block 15**

Block 15 also is expanding, with its new taproom at the Corvallis Industrial Park opening at noon Tuesday.

Nick Arzner of Block 15 said the new facility will seat 40 and have tasters, pints and growlers as well as a patio with views of Marys Peak.

The bakery and kitchen will turn out five to six sandwiches, a bier pretzel and bread, meat and cheese boards.

The new facility also features more room to brew.

"We have six batches of beer in tank and are excited to almost be caught up on beer production," Arzner said. "We will self-distribute our beer the next month or two while we find the right partner for distribution."

In the fall Arzner plans to release a Hop Experience Ale in 16-ounce cans.

## **2 Towns**

The Corvallis-area cidemakers, like Block 15, also are producing in the Airport Industrial Park.

Founder Aaron Sarnoff-Wood said the company "continues to fill more of the available space in that location with additional equipment and tanks."

Sarnoff-Wood also noted he and his staff are "exploring options for future expansion either in the existing building or new construction."

In addition, 2 Towns has added tap room seating, a barrel program expansion and apple pressing at its original Highway 34 location east of Corvallis.

This year 2 Towns has added Idaho, Alaska, Hawaii, Nevada and Illinois to its distribution network and was named cidery of the year at the U.S. Open Beer Championships in Oxford, Ohio.

## **Mazama**

Kathy Tobin, owner of the Belgian-style alehouse on Highway 34 (in the same complex with Nectar Creek and 2 Towns), said Mazama is “adding more fermenters in the brewery, which will almost double our production capacity.”

Mazama also is getting into cans, with the Wizard Island Wit and Mosaic Eruption IPA available locally in six-packs of 12-ounce cans. Distribution channels include the Willamette Valley, Central Oregon, Idaho, Southern Washington and Japan.

## **Nectar Creek**

Nick Lorenz, co-founder of the meadery on Highway 34, also is in an expansive mode. Nectar Creek has new distribution channels in Washington, Idaho, parts of California and Minnesota. To meet the demand, Nectar Creek has added a new fermentation tank.

Nectar Creek also took home a batch of hardware from the prestigious Mazer Cup international mead competition, sweeping the Session Mead category and winning gold for a blueberry and black currant mead that was aged in pinot noir barrels.

## **Deluxe**

The Albany brewery and distillery has unveiled its first spirit, Howard's Hopped Up Gin, which is available in the tasting room. Next month it will be available in restaurants and Oregon Liquor Control Commission stores. Cooking away in barrels is a Grappa, which be the next spirits release.

Expansion is in the works here as well. Co-founder and marketing director Jamie Howard noted that Deluxe has added another primary fermenter that will double capacity, particularly of the Wild Beaver, an amber lager that is Deluxe's best seller.

Deluxe also specializes in event tie-ins to its menu, with Hopped Up Friday night summer cruise-ins that include food trucks.

## **Beer: 30**

The growler shop on Southeast Third Street just celebrated its second anniversary and held a beach-themed party in June.

The shop features 30 rotating taps (thus the name) and uses a Pegas growler fill system that owner Debbie Edwards said ensures longer shelf life.

“I had a growler in my refrigerator at the coast that had been filled at Beer: 30 last summer,” she said. “I opened it earlier this month and it still poured with carbonation and a ¾-inch head of foam.”

Beer: 30 does not have a kitchen, but it serves peanuts and Chex Mix and encourages customers to grab takeout at the Burrito Heaven next door.

"I think that most of our customers come for the beer selection and a nice spot to enjoy the company of others," Edwards said.

## BEER FACTS

Here is a look at some numbers associated with the craft beer industry in Oregon:

- Oregonians bought 585,000 barrels of beer produced in 2014, a 14.3 percent increase over 2013.
- Oregon continues to lead the U.S. in the percentage of dollars spent on craft beer.
- Oregon companies filled 1.641 million barrels of beer in 2014, a 16.9 percent increase from the previous year.
- The industry added 800 jobs in 2014 and totals 7,400 statewide.
- Oregon produced 13 percent of the U.S. hop harvest. The 8.2 million pounds of hops sold for \$35.7 million.

*Source: [OregonCraftBeer.org](http://OregonCraftBeer.org)*

## CARS IN NEW ZEALAND ARE RUNNING ON BEER-'FLAVORED' GASOLINE

DIESEL? PETROL? IPA?

By [Mary Beth Griggs](#)

Generally, beer and moving cars don't work well together. But in a few places, companies are recycling the detritus of the beermaking process into a clean gasoline additive that allows cars to get from A to B without using as much of the precious fossil fuel.

The latest venture comes from New Zealand where for a short time, motorists can fill up their cars with beer. Or, more precisely, a substance that comes from beer. One of the leftovers of the brewing process is a slurry of yeast that didn't get used in the fermentation process. This yeast can be re-used to create more alcohol (aka ethanol), which can then get distilled and refined into an ethanol version that is of a high enough quality to put in your gas tank. (Don't pour your drink into the gas tank. It won't power your car. And you will have wasted a drink.)

Using ethanol to power cars isn't new. In the United States, some corn is grown exclusively for the purpose of being turned into the biofuel. Brazil, taking a slightly greener approach, has been recycling sugarcane waste to create ethanol for years. And on the beer front, Molson Coors, a brewing company giant, has been making ethanol from beer since 1996, and in 2008 all cars at the Democratic National Convention in Denver ran on their version of the beer-based biofuel.

Their blend had one advantage over the Brewtroleum being made in New Zealand. While the New Zealand blend was 90 percent gasoline and 10 percent beer-derived ethanol, the blend created for

the 2008 convention was 85 percent ethanol and 15 percent gasoline. The reason for the lower percentage? Many cars still can't run on such high proportions of ethanol to gasoline. Using the wrong fuel can cause problems in engines particularly small ones like chainsaws or lawn mowers.

Brewtroleum is only available for a limited time and the people who came up with this idea only started thinking about it in February of this year. If all goes well, they might extend the lifetime of the product. Creating a cleaner fuel from leftover beer reduces waste, and reduces gasoline usage. We can all drink to that.

### **Party badger found passed out surrounded by beer bottles on beach in Poland**



**This booze-sipping badger is recovering in an animal shelter after a really heavy night.**

The female animal was found passed out on a beach in Poland after downing one too many.

She's been able to sleep off her hangover at a local shelter Dzika Ostoja, who are keeping concerned animal lovers up to date with her progress via Facebook.

The shelter joked: 'Oh youth, oh summer holidays.'

### **NC State scientists say the next big thing for beer could be bugs**

Bugs and beer: most of us probably don't see a connection beyond shooing flies away from our pint glasses. But for a group of N.C. State University scientists, bugs may hold the secret to making new, surprising and delicious beers.

That's because yeasts – the single-celled fungi responsible for converting sugar to alcohol in fermented foods like beer and wine – are likely to be found on arthropods like bees, wasps, hornets and beetles, said Anne Madden, a part-time post-doctoral researcher at N.C. State.

If these yeasts could be isolated from bugs and successfully cultivated in the lab, she and NCSU professors Rob Dunn and John Sheppard mused, maybe they could be used to brew new kinds of beer.

Most commercial beer, including craft brews, is made using different strains of two species of yeast, Madden said. Because yeast can contribute significantly to the flavor of beer – as much as 50 percent by some estimates – a new species could mean new flavors for the increasingly crowded beer marketplace.

“There’s definitely a market for new yeast and especially these kinds of indigenous strains,” said Alex Smith, head brewer at Raleigh Brewing Company. Smith mentioned a North Carolina start-up called SouthYeast that harvests wild yeasts from nature.

“Especially as the market becomes more competitive, you have to do more to stand out,” he said.

The craft brewing industry in North Carolina is booming. According to the Brewers Association, there were 59 breweries in the state in 2011; in 2014, there were 101. The N.C. Craft Brewers Guild now puts that number at 132.

### Turning to bugs

To find new yeasts, the NCSU researchers first looked at wasps. Wasps have long been known to carry yeasts on their bodies, even providing a winter refuge for the tiny fungi when there are no fruit for them to live on.

It took a couple of months, but Madden and her colleagues successfully isolated and grew a number of species of yeast they found on wasp bodies. Their next challenge was to see if any of these species could be used in brewing beer.

Not all yeasts have the right metabolism to make beer, Madden said. Some are intolerant of the sugars in beer, or die when the alcohol level of their environment surpasses 1 or 2 percent.

The team ran biochemical and genetic tests to help them decide which species to work with, but their choice also resulted from guesswork, Madden said.

Even if the yeast was the right kind to produce beer, it wouldn’t necessarily have made great tasting beer.

Wild yeasts often produce funky flavors, like “horse blanket,” Madden said. “It’s not just about finding the wild yeast but about finding the right wild yeast.”

### The right yeast

So the scientists were surprised to find that the very first batch of beer that Sheppard made in his food science lab – an ESB or extra special bitter – from the very first yeast they isolated was drinkable, although very sour. Experimenting with other recipes for styles like ambers and blondes they found that this same species of yeast was capable of producing honey, apple, floral, and subtle sour notes.

“What’s really exciting is that it’s oftentimes the same chemical produced by those fruits that are being produced by the yeast,” Madden said. “So our body is not taking in these flavors as apple-like, but as ‘Wow, this is apple.’”

That means brewers can get those flavors without adding ingredients to beer, which many purists feel should be made with just malted barley, hops, yeast and water.

What may be particularly relevant to brewers is the new yeast's ability to produce sour notes. Sour beer on the market today gets its tang from harmless bacteria, like those used to make yogurt. Those bacteria can easily spread into other barrels and turn those beers sour, which makes many breweries hesitant to make sours at all.

Working with wild yeast can also be challenging. Although the beer is brewed in the same way as beer made with conventional yeasts, the new yeast must be "domesticated," or acclimatized to the brewing environment, to be used reliably in brewing. The standard yeasts used today have been bred for generations for brewing purposes, making them almost like "livestock," said Smith of Raleigh Brewing Company.

The NCSU team debuted its wasp-derived beer at the World Beer Festival in Raleigh last year, and then poured their follow-up, a beer brewed from bumblebee yeast and named "Bumblebeer," at the 2014 Wake County Brewers Expo.

Sheppard still has bottles of the team's beer in his lab's fridge, handy for curious visitors who want to sip wild beer among the beakers and tanks of a half laboratory – half brewery.

Right now that's one of the few places beer enthusiasts can try the new brews, but that may not be true for long.

#### Microbial terroir

Smith said that there is a growing acceptance of microbes such as bacteria and unconventional yeasts in our food.

"People are embracing kombucha and probiotic yogurt," he said. Both those products use bacteria, or a combination of bacteria and yeast, to produce special flavors and textures. Cheese, chocolate, and bread are all products of fermentation – which does not necessarily produce alcohol – as well.

People are beginning to understand that not all bacteria are germs, and that many can even be good for you, said Madden.

In fact, we've relied on the flavoring power of microbes for a long time, whether we realized it or not, Madden said. Part of the "terroir" of a wine or the distinctness of a certain cheese is likely coming from the microbes in its unique environment.

Bacteria and yeast may be acceptable, but many would draw the line at drinking beer with actual bits of bugs in it.

"One of the questions is are there ground up bugs in the beer," Madden said. "And there are not."

The team removes the yeast from the insect and then grows it in the lab.

"If you have a bug allergy, there's no concerns," she said. "You can still drink the beer."



## TASTING DIVERSITY

Aside from the potential commercial implications of their discovery, researcher Anne Madden hopes to use the unique beer to make a point about the astonishing diversity of life.

It's easy to get people to connect with vanishing species in the rainforest because you can show beautiful photographs of those animals, she said.

"With microbes, they're not enigmatic or charismatic in terms of having cute eyeballs or fluffy coats," Madden said. "So it provides a little bit of an extra hurdle to get people to engage with them."

Drinking beers made with different kinds of yeast is one way for people to interact with lifeforms they can't see or touch, she said.