

Beer the change[®]...

Brewery Vivant's 2017 Sustainability Report

The title of our report is our interpretation of the quote that has given us the most inspiration in our pursuit of operating sustainably, "Be the change you want to see in the world" by Mahatma Gandhi.

We made this report black in hopes you will avoid printing it. Please contact sustainability@breweryvivant.com for a printable version.

















March 17, 2017

As I'm pretty sure everyone has noticed, the craft beer industry has grown significantly in the last few years. To put it into perspective, when we opened our doors in 2010 we were around brewery #2,000. Today, the industry boasts over 6,000 craft brewers. We have felt this impact in many ways and 2017 was an interesting year because of that. You'll notice that our carbon footprint increased significantly this year. Much of the growth not attributed to increased sales was due to adding physical space like an office (no more private meetings in the car!) and a larger warehouse. You can feel the momentum building in this city when you look for a warehouse space and realize there is little to be found. But it's exciting to be a part of an industry and a city that are growing and we look forward to seeing what the next few years bring.

If you Beer The Change with us each year you will also notice that we have changed a few of our goals. After 3 years of growing our own produce for the kitchen we realized that some things are better left to the experts and farming is one of them. With that, we have given up the goal to grow 10% of our food and will instead focus even more on purchasing from local farmers. We have also decided to no longer track the 250 miles radius and instead only track our purchases from Michigan-based companies, whether that be supplies & services or agricultural inputs.

We create this report each year to hold ourselves accountable to our goals and to offer insight to others about what sustainability means to us. We also publish it to encourage you to challenge our thinking about these areas, so please send us your comments to sustainability@breweryvivant.com.

Cheers!

for Kins Olivet SIEDQ

Jason, Kris, Oliver, and Siena Spaulding Owners Brewery Vivant



Summary

For those of you with a short attention span, here is a summary of how we are doing towards all of our goals and other key sustainability statistics.

The % *Change* column shows the straight difference from 2016 to 2017.

The *Intensity Change* column shows the change normalized to account for our increase in revenues.

		2017	2016	% Change	Intensity Change
75% OF A	LL PURCHASES FROM MICHIGAN	62.2%	60.8%		1.4% 🕇
	50% OF FOOD FROM MICHIGAN	49.9%	47.9%		2.0% 🕇
25% C	OF BEER INPUTS FROM MICHIGAN	16.3%	7.7%		8.6% 1
	1% OF SALES TO LOCAL CHARITY	1.0%	1.0%		0.0% 🛊
25	0 EMPLOYEE VOLUNTEER HOURS	421	249	69.4% 🕇	
	ZERO SAFETY INCIDENTS	2	4	50.0% 🖡	



Summary

	2017	2016	% Change	Intensity Change	
ZERO WASTE TO LANDFILL					
Recycling (lbs)	35,633	30,488	16.9% 🛊	12.3%	
Compost (lbs)	702,056	702,0 6 6	0.0%	-3.9%	
Cattle Feed (lbs)	396,237	331,504	19.5%	14.9%	
Trash (lbs)	9,351	9,351	0.0%	-3.9% 🌗	
WATER TO BEER 3:1					
Ratio	N/A	N/A			
Water Usage (million gallons)	1.69	1.99	-15.2% 🖡	-18.5% ↓	
10% ONSITE RENEWABLE ELECTRICITY					
	11.6%	6.5%		5.1% 🕇	
ANNUAL REDUCTION IN CARBON FOOT	ANNUAL REDUCTION IN CARBON FOOTPRINT/SALES				
Electricity (kwh)	415,041	360,743	15.1% 🕇	10.6%	
Natural Gas (ccf)	39,488	34,016	16.1% †	11.6%	
Carbon Footprint (co2e)	740.7	607.1	11.4% †	7.1%	
Carbon Footprint (co2e) with offsets	702.1	455.7	54.1% 🕇	48.1%	





Salut!

/sa'loo/

French greeting and exclamation used to express friendly feelings towards one's companions before drinking. At Brewery Vivant, we champion living the *Bon Vivant* (good life) which includes good food, good drink, and good friends paired together to elevate the enjoyment of all. In 2017 this philosophy resonated with people in many ways.

Best

Top 10 GR Restaurant

In 2017 Grand Rapids Magazine's team of experts voted Brewery Vivant as one of the Top 10 Best Restaurants in the Grand Rapids area. We've always thought that when great beer and great food are paired together, it elevates the enjoyment of both. Our culinary team is enamored with food and their love comes through with skill and creativity. Whether enjoying the infamous Duck Confit Nachos, a truffle off the Chocolate Board, or one of the Thursday-Sunday weekend specials, our kitchen is giving 110%.



Winner

Bon Papa Good Food

Sourcing local wheat, water, and hops helped propel this small batch farmhouse IPA to the winner's circle in our first entry into the Good Food Awards. This is a national award given to food and beverage makers that not only make a tasty product but also one that is made sustainably with ingredients and processes. We were one of 14 breweries across the country to receive this recognition.





Salut!

Cover Brewer

Sustainability

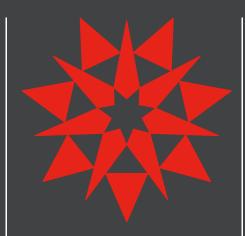
Brewery Vivant was recognized as leaders in the craft brewing industry this year making the cover of New Brewer. We've always tended to be early adopters and this innovative spirit was noticed in a big way by our industry's largest trade group. Kris also sits on the Sustainability sub-committee for the Brewer's Association. Helping to prove our theory, small can be big.





Bicycle Friendly Gold

We re-certified as a BFB in 2017 and upgraded from Silver to Gold status. Bicycle parking, our bicycle fix-station at the Pub, and our involvement with area bicycle events such as Spoke Folks' Celebration or the Farm Hand Fat Bike Race highlight this alternative transportation.



Higher Grains

B Corp is a global movement for those using business as a force for good. Fellow B Corp Higher Grounds Trading Co. roasts coffee in Traverse City, sourcing organic coffee via long term, mutually beneficial trade relationships. As sponsors of the Gazelle Girl Half Marathon, we collaborated on a beer to celebrate our shared B Corp values.



Best of the West

Revue Magazine's reader's choice poll named Brewery Vivant

- #1 Best Service
- #1 Best Desserts
- #2 Best Brewery, Ambiance
- #2 Best Burger, Best Fries
- #3 Best Chef: Chris Weimer



Salut!

One of our favorite things to do is support our staff members that are working on their own projects and pursuing dreams. We'd like to toast these three former and current staff that are building amazing, sustainable businesses in our community.

Studio

Heffrey

Long-time server and bartender, Jeffery "Heff" Hollingsworth began his own ceramics studio, Studio Heffrey, several years ago. Rather than focus on cranking out generic pieces for profit, Heff is much more focused on individual projects, mindfully crafted for friends and the surrounding community. We proudly support Heff's side project with its emphasis on beautiful, hand-made, personalized pottery as it wonderfully reflects the pub's goal of crafting an experience for each and every guest that comes through the double doors.



Chef

Progression

Though we hate to see anyone leave the Vivant family, we are proud to say that several from our kitchen have gone on to help shape the growing Grand Rapids restaurant scene, carrying with them our Vivant values. In 2017, Nick Dearth, former line-cook and cheese board extraordinaire, moved on up to hold the title of sous-chef at Blue Water Grill, where his creativity continues to shine. Similarly, Scottie Meeker, former 'grill guy', now heads up the kitchen at Flat Lander's BarStillery a few blocks from our Pub, where he shaped an entire menu redesign from scratch. Both kitchens are lucky to have such stellar chefs!

Discovery

MI Heritage

One day Brewer Josh Chilcote received a call from a friend about a a suspicious vine growing wild on his centennial (100+ year old) family farm. Josh identified the plant as indeed a hop, and went further to determine the breed. After dozens of tests, there appeared no match known growing in Michigan or even across the United States. Josh christened this hop MI Heritage, as it seems to have been growing wild for over 100 years. Along side his farmer friend, he helped get this hop varietal propagated at local farms across the state of Michigan and now we are brewing our signature farmhouse IPA, Hop Field, with this native hop.





People

Goals:

1% of sales to local charities

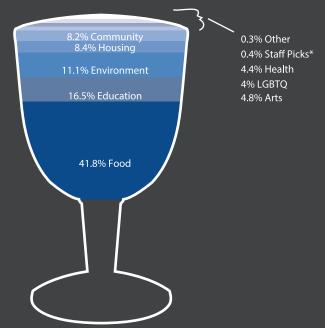
250 employee volunteer hours

0 safety incidents



Percent of sales donated

In 2017 we donated 1.02% of our sales to charity. Each year we've been getting more intentional about where we spend our money and time. Our biggest focus area is addressing hunger, which is aligned with our business, and unfortunately is a serious problem in West Michigan. A big part of our budget is our sponsorship of our neighborhood elementary school for Kids' Food Basket where over 13,000 sack suppers are delivered throughout the school year. Another big focus area is pre-k-12 education, especially if there is a nature-based component. The children are our future!



*We think it is important to support the causes our staff is passionate about even if they are outside of our usual criteria.



Volunteer Hours

Our staff kicked it into high gear this year and volunteered 421 hours with our community partners! We had 56 staff give time, talent, & treasure working on various farms, planting trees, assembling sack suppers, baking treats, and working on houses and buildings. Each year we offer staff 8 paid hours of volunteer time (16 hours for salaried employees). These staff gave above and beyond: Josh C, Ryan E, Liz, Sage, Natalie, Laurel, Kate SD, Nikki, Bates*, Katy VT*, Ward, & Lyndsey W.

*indicates top volunteer salary/hourly



Safety incidents

Our goal is 0 safety incidents. We had 2 recordable instances where an employee had to seek medical attention, though both were minor injuries with short-term impacts. Comparatively, the brewing and restaurant industry averages are 3.9 recordables per 100,000 hours worked (48 FTE's) and 1.5 recordables per 50 FTE's per year which is close to our size.



Benefit Nights at the Pub

Every-other-month we invited a local organization to the pub and shared 25% of our sales that day with that community partner.



Read. Write. Live.

Feb 27, 2017

The GLCL is a non-profit writer's association and community center focused on supporting local writers and emphasizing the importance of the literary arts. Through their seminars and outreach programs, they are bringing together writers of all backgrounds and skill levels in the Great Lakes region. 'Read. Write. Live.'



June 19, 2017

Well House provides safe, affordable housing to the Grand Rapids' homeless population by purchasing vacant, boarded-up houses and bringing them back to life.



October 2, 2017

Better Drinking Culture is a locally founded grassroots movement that hopes to reshape our culture's relationship with alcohol by encouraging more mindful drinking practices. 'Drink Better. Live Healthier.'

the grand rapids Red project

improving health - preventing HIV - reducing risk

April 10, 2017

The Grand Rapids Red Project is a safe place that works to prevent HIV/AIDS, Hepatitis C, and accidental drug overdose, as well as provide health resources to those looking to make better health choices related to sexual activity and drug use.

PLAINSONG FARM

August 14, 2017

Begun by our very own bartender Bethany Edwardson, Plainsong Farm is a Community Supported Agriculture (CSA) farm and non-profit ministry that has used only organic methods since its inception. Their 'Sow It Forward' program allows members of the community to donate a CSA share to a local food pantry partner, putting fresh, nutritious veggies into the hands of people who may otherwise not have access.



December 18, 2017

Slow Food West Michigan is a non-profit organization that promotes local food production and seeks to raise awareness of destructive fast-food, fast-life tendencies in an attempt to steer our culture toward a more environmentally sustainable and ethically-minded food system in the future.



People

531

Turnover Rate

Our overall turnover rate was 53.1% which is the highest it has been in 5 years. Of that 39.1% was voluntary turnover. This compares to the national average for the restaurant industry of 72.1% for overall and 52.6% for voluntary (a brewing industry figure could not be found). If we look at each unit of the business separately, the pub turnover rate was 61.5% (46.2% voluntary). The brewery turnover rate was 16.7% (8.3% voluntary).



Vivant Minimum Wage

Our minimum wage is equal to or above the 1 Adult Living Wage for Grand Rapids-Wyoming Metropolitan Area which was \$10.25 in 2017. Living wage is the estimated hourly wage for a 40-hour per week job required to support oneself given the local cost of living. This information is compiled in the MIT Living Wage Calculator.

Stars 🔯



"You can beer the change..." is a program inspired by our company sustainability goals that encourages our staff to live a more sustainable lifestyle. There are 14 goals focused on their environmental impact, their social/community commitment, and their personal and financial health. At 6 and 12 "stars" they get a financial incentive. By the end of the year we had 13 staff participate and earn a total of 111 stars.

Points

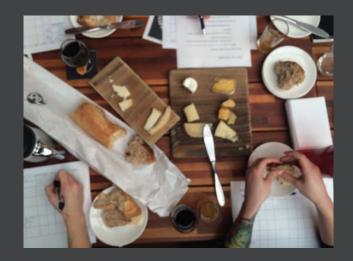
We had 6 teams competing for the most volunteer hours and stars over the year. This year's winner was The Bumble Bees which included Vanessa, Jason B, Josh C, Bethany, Jeff H, Zach, Kristen, Kellen, Kate SD, Bates, Jessie and Rebecca. In addition to bragging rights they won an assortment of goods from other B Corporations.



8 hours

L'ecole Vivant

We are devoted to crafting a unique experience for everyone who comes through our doors, from the adventure-seekers who crave a shock to the palate to the comfort-seekers who come to take it easy with a pint of our wonderfully familiar Farm Hand. For our servers, creating these experiences begins long before a guest walks through the chapel doors. Two four-hour days of L'Ecole Vivant, or 'Vivant School,' builds knowledge of farmhouse beers (history, styles, and flavor characteristics) and food (charcuterie, cheese, and pairing lessons) in order to provide a full, informed experience for every guest.



Awesome

Staff Benefits

Our goal at Vivant is to be the best employer of our kind in the region. We work towards this through offering many benefits that are often not found at restaurants and small breweries including a low cost and robust health care plan, 401(k), paid time off, wellness benefits, zero-interest emergency loans, life and disability insurance, bicycle helmet reimbursement, loaner bicycle program, and many additional perks.



Staff Surveys

Every spring we conduct an anonymous survey to check in with all of our staff. Our owners view it as their performance review from staff. The survey includes questions about job satisfaction, safety, benefits, sustainability and open ended questions about where we are and where we are headed. Two-thirds of our staff submitted the survey and of those, 93% of respondents were at least satisfied with their job and 71% were more than satisfied.





Goals:

Zero waste

Water to beer ratio of 3:1

10% on-site renewable electricity

Annual reduction of our carbon footprint



Waste to incinerator

Compared to 2016, our overall waste to landfill percent decreased 0.05% to 0.82%. If we take spent grain out of the calculation, we stayed at 1.3% of our waste going to the incinerator.

The numbers we use for compost, trash, and some recycling are estimates based on research studies. We hope to be able to collect actual weights in the future, if our waste-haulers add the necessary technology to provide this data.

	35,633	30,488
Pocycling (lbc)		
Recycling (lbs)		
	2017	2016
	396,237	331,504
Spent Grain (lbs)		
	2017	2016
	702,056	702,056
Compost (lbs)		
	2017	2016
	9,351	9,351
Trash (lbs)		
	2017	2016

35,633

Lbs Total Recycled

Our overall recycling numbers went up in 2017 as we increased the amount of brewery packaging waste that we are bringing to a local recycler. This is primarily made up of shrink wrap, plastic banding, and corrugated boxes. We also recycled 511 pounds of latex gloves that our brewers and kitchen staff use throughout the day through Kimberly Clark's Right Cycle Program. Google it!



Landfill diversion

We had a zero waste goal for our Wood Aged Beer Fest and contracted The High Five Program to help us out again. We ended up producing 3.4 yards of waste of which 0.25 (7.4%) was recycled, 3.0 (88.2%) was composted and 0.15 (4.4%) was sent to the landfill. Thank you for your mindfulness when attending our events!



An organizational carbon footprint measures the greenhouse gas emissions from all the activities across the organization, including energy used in buildings, industrial processes, and company vehicles.



Scope 1

Direct emissions that result from activities within your organization's control. This might include on-site fuel combustion, manufacturing and process emissions, refrigerant losses and company vehicles.



Scope 2

Indirect emissions from any electricity, heat or steam you purchase and use. Although you're not directly in control of the emissions, by using the energy you are indirectly responsible for the release of CO2.



Scope:

Any other indirect emissions from sources outside your direct control. Examples of scope 3 emissions include employee commuting and business travel, outsourced transportation, waste disposal and water consumption.

Source: Carbon Trust



48.1%

Increase in CO2 Footprint

Our carbon footprint went up significantly this year. The biggest impact was that we stopped purchasing certified green electricity from our utility for our main building since we added the 192-panel solar array. Without accounting for that, our carbon footprint was still up 7.1% which is mostly attributed to the impacts of growing the business such as a larger warehouse, additional company owned vehicles and a new office space.

We added a line in offsets this year to account for voter mandated renewable electricity. The 2008 Renewable Energy Standard requires Michigan electric providers to achieve a retail energy supply portfolio of 10%. In 2016 Michigan voters challenged providers to increase that to 15% by 2021. We wanted to include this to show that here in Michigan you are using some renewable electricity!



		10113 CO2
	Total Scope 1	264.9
	Brewery & Pub Natural Gas Admin Office Natural Gas Company Owned Vehicle 1 Company Owned Vehicle 2	210.9 4.9 4.1 4.4
	Company Owned Vehicle 3 Company Owned Vehicle 4 CO2 from Fermentation Purchased CO2	12.8 2.9 6.2 19.6
7		

Metric
Tons CO2e



Total Scope 2	344.3
Brewery & Pub Electric	294.9
Old Warehouse Electric	4.7
New Warehouse Electric	21.6
Off Site Warehouse Electric	14.3
Admin Office Electric	7.0
Wood Room Electric	1.8



Total Scope 3	131.5
Employee Car Travel	15.8
Employee Air Travel	3.8
Burger Beef	112.0

Total Emissions	740.7
Officate	207

Consumer's Energy 10% RPS Mandate	34.0
Green E-Purchases	4.7

Total Emissions w/Offsets 702.1

38%

Staff living within one mile of the brewery

71% of our staff live within 5 miles of the brewery, making it easy for them to walk, bus, or ride their bike to work and cutting down on their CO2 emissions. We intentionally picked this location in an urban neighborhood to take advantage of these alternative forms of transportation. We're on the bus line - #4, 5, 6, or 14!

38 % live with in one mile



71 % live within five miles



15%

Decrease

We brewed 17% more beer this year, but used 15% less water. This reduces our company water footprint from 13.0 gallons of water per gallon of beer produced to 9.4 gallons of water per gallon of beer produced. We are still unable to calculate our brewery specific water footprint but are putting technology in place to be able to accurately calculate and report on that next year.

11,500

Cans Saved

You bought 183,856 ounces of beer in growlers at Vivant, most often Big Red Coq. This is a 15% reduction from 2016 which we think may be because we have been canning more of our specialty beers. By choosing the reusable growler, you helped save almost 11,500 cans! If you think you'll drink this beer within 48 hours of opening, consider the growler!



Waste not

Want not

Every year we require staff to give us two ideas on ways to improve on our sustainability goals. Some of the ideas that have been implemented include better signage at waste bins about what to put where, reusable pallet straps when moving beer within the company, and asking our guests which condiments they want instead of assuming they want all of them. All of these ideas not only reduce waste but also lower our costs.



Drocess

Improvement

Throughout the course of the work week, we found we were shuttling kegs and cases of beer from our brewery to our warehouse only to be shuffled around internally or rebuilt for wholesaler orders. Each pallet was wrapped in plastic shrink wrap for a mile journey, only to be torn apart and re-wrapped in some other configuration. By investing in re-usable mesh wrappers for brewery/warehouse transport, we found that while we wrapped 50 more pallets of beer than 2016, we used the same amount of plastic shrink wrap. Savings!



Renewable Energy

We produced 54,523 kWh of electricty from the sun with our 192-panel solar array in 2017. This amounted to 11.6% of our overall electricty use and 12.0% of our usage at the brewery and pub. We often get questions from the admiring public about our array and are happy that our visible commitment to renewables has piqued their interest.





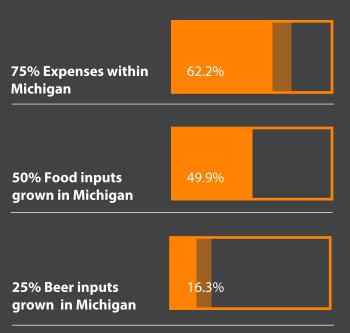
Profit

Goals:

Own vs Grown

Our goals around local purchasing are centered on two things. The "expenses" goals are intended to support locally owned businesses and impact every purchasing decision we make. The "inputs" goals support local agriculture and recognize the value in locally grown or harvested ingredients.

An example of this distinction is that we count the dollars we spend on the bread we purchase from local bakeries in our expenses goal, but since the flour is not from wheat grown and milled locally we do not count that bread as a local input.



Buying local: Pilot Malt House

Pilot Malt House has been devoted to locally grown Michigan grains since 2012. Connecting farmers to brewers, they strengthen the local craft beer community, reminding us that our passion for farmhouse brewing begins in the field. Since its inception in the rental garage, Vivant has partnered and grown with PMH. In 2017 we were honored to receive their milestone one-millionth pound of grain and with it brewed the Million Pound Grisette. In 2018 we are committing to brewing with at least one bag of malt from PMH in every batch!





Drofit

20.8

Cows consumed

We sold 18,727 burgers in 2017. That equals 20.8 cows consumed by our patrons. Thankfully we get a steady supply of local, humanely raised beef through our partnership with Wernette Cattle Company in Remus. We also get the cuts for our rotating steak frites from these noble beasts. Over the course of 2017, 396,237 pounds of spent grain went to a local cattle farmer. At 25 pounds of grain eaten per cow per day, we fed 43.4 cows putting us well over "cow neutral".

Cookin

Made from scratch

Our farmhouse inspired, from-scratch menu features the best locally-sourced and highest quality ingredients our chefs can find. Our Michigan-focused and seasonal menu starts with fresh ingredients and ends up being house-made sausages, rillettes, and pâtés, ice creams, sauces, desserts, sandwiches, salads, and soups. What we don't make from scratch here is made from scratch by local purveyors like Field & Fire or Nantucket Bakery.



Profit

127

Unique Beers Brewed

We brewed 127 unique and tasty styles of beer in 2017. We sold more Farm Hand pints than any other beer by nearly 7,500 pours making it far and away our flag ship beer. BRC and Triomphe claimed second and third, respectively.



8% of Pub pours are Farm Hand

A little more than one in four pints poured in distribution is Farm Hand (28%).



\$45,019

Total savings for our Monks

Our monks are our best customers. These community members choose to invest in us with their loyalty and dollars, so they get a personalized chalice, discounts on every beer they purchase and special benefits throughout the year. The club opens its membership each December, while current monks get the opportunity to renew in November.

5,105

29% Pub

Total barrels sold

We sold 1476 barrels or 29% of our beer in the pub and 3629 or 71% of our beer into distribution.

71% Distribution





Profit

3/4

Michigan Native Hops in Hop Field

2017 saw the birth of our newest mainstay beer, Hop Field! This bright, rustic Michigan farmhouse IPA is the result of nearly a year's worth of planning, experimenting, and perfecting by our brew team. Highlighting Michigan terroir, Hop Field features three unique, indigenous Michigan hops: Mackinac, Copper, and MI Heritage. With our commitment to brewing Hop Field year round, we hope to encourage local hop grower innovation, supporting it as an emerging part of Michigan's agricultural portfolio. Centennial is the fourth hop in Hop Field and in 2018 will be sourced exclusively from Michigan growers.



26

Pilots

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Every other week, we brewed on our new small-batch pilot system. This 3.5bbl brewhouse inspired all kinds of creativity for our brewers. Most notably, it allowed the team to experiment with a variety of hops to create our series of fresh juicy IPAs. They also were able to play around with some fun pet projects like the notorious smokey red ale, El Guapo!; a farmhouse-lager hybrid; and a collaboration with Siciliano's Market, a barrel aged golden ale, "No Whistling."

37.1%

Citra Hops

Once again we used more Citra hops that any other variety. Palisades, Centennial and Strissespalt were our other big hitters. Overall we used 22 different varieties of hops throughout the year including one from Crosby Hop Farm, a Certified B Corp grower in Oregon.





We would like to thank all of our amazing employees for taking our sustainability goals and programs seriously and working on them every day. We have made great strides this year and we are excited to see what next year brings!

Active employees on December 31, 2017:

Vanessa Aguilar, Emily Anderson, Kate Avery, Amanda Barnett, Jules Bass, Jason Blahnik, Jon Brander, Megan Buczkowski, Josh Chilcote, Brian Coalter, Ron Como, Mitchel Cook, Millie Cox, Jacob Derylo, Jeff Duba, Bethany Edwardson, Ryan Engemann, Liz English, Sage Gabriel, Hermidia Gramajo-Lopez, Chris Heckman, Chris Hoeksema, Allison Hoekstra, Jeff Hollingsworth, Andrew Hopewell, Hannah Jablonski, Adam Kochanski, Stephen Kolavo, Brian Kuszynski, Adam Lance, Stephanie LaVigne, Natalie Maloney, Zack Manning, Lauren Marchione, Holly Midcalf, Laurel Mills, Chris Mitus, Kristen Nunnelly, Giuseppe Piccione, Savanah Pond, Santos Puactecun, Jared Rader, Ryan Reichle, Kate Sartorius Derylo, Holly Seales, Noel Sexton, Nikki Shapow, Tristan Slates, Chris "Bates" Stoffel, Raelene Struckmeyer, Brooks Twist, Joel VanAbbema, Chris Vander Meer, Max Vandewater, Jessica Vannetten, Katy VanTol, Jacinto Villareal, Aaron Vince, Katy Waltz, Ward, Lyndsey White, Evan Zandstra

