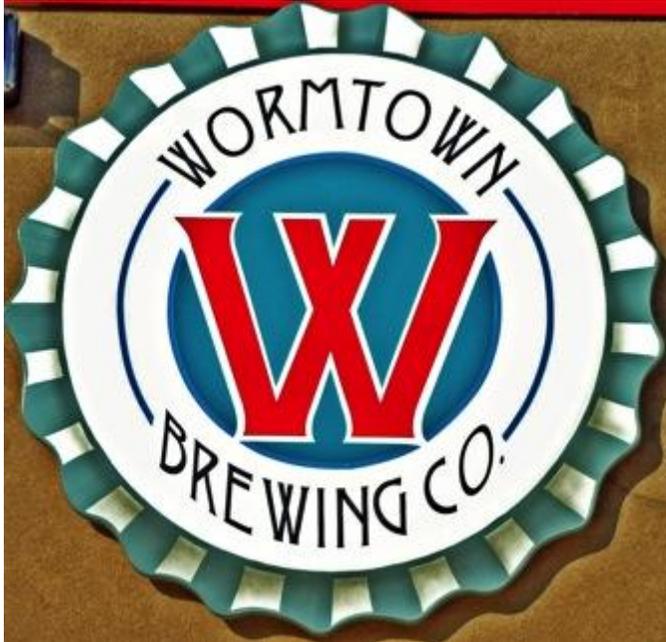


Case Study: Wormtown Brewery and Local Ingredients

“A Piece of Mass in Every Glass”



As the local craft beer industry grows, there are more opportunities for connecting breweries with local farmers. The story of Ben Roesch from Worcester’s Wormtown Brewery shows the challenges that exist in the market and his successes in sourcing local ingredients.

Background

Since day one, Wormtown has strived to brew every batch of beer with at least one local ingredient. They’ve released an annual estate beer, a rare brew made solely with Massachusetts grown ingredients, and total output has increased threefold since opening year. The success of Wormtown’s local sourcing strategy can be attributed to Ben’s passion behind the brewery’s motto: “A Piece of Mass in Every Glass.”

A Massachusetts native, Roesch grew up next to the Wachusett Reservoir System. His inclination towards the natural sciences led him to study forestry at the University of Massachusetts-Amherst, where he started his first home-brewing operation. His academic pursuits led him on class trips to local farms, where he purchased local honey and maple syrup, and used them in his stovetop brewed batches. His first job out of school was at Land’s Sake, a non-profit organization with a mission to manage land sustainably and preserve open space. Roesch was responsible for clearing trails, developing sustainable logging initiatives and operating a sugar shack. He developed connections with farmers and became a true

locavore. His career focus shifted after a weekend job in a homebrew supply store. Soon afterwards, he became an assistant brewer at Cambridge Brewing Company (CBC) under Will Meyers, a veteran at sourcing local ingredients. Roesch described the process of sourcing local at this time as a “closed group of people and ingredients,” one that was far from accessible to most craft breweries. At CBC, Roesch continued to strengthen his relationships with growers. He also worked at Wachusett Brewery and Nashoba Winery, but with a vision to start his own brewery focused on using local ingredients.

Wormtown Brewery

In March, 2010, Wormtown Brewery opened for business in Worcester, alongside Peppercorn’s Grille, an attached restaurant and bar featuring all of the brewery’s offerings. From the start, Wormtown used as many local ingredients as possible in the brews, lending to the motto “A Piece of Mass in Every Glass.” In order to fulfill this promise, Roesch worked closely with growers with customized solutions to meet the needs of both parties.



Photo by Phil Marquis

Mass Whole Beers

Roesch has successfully created a special estate brew made from ingredients sourced solely from Massachusetts. This is a rare feat, yet he has brewed Mass Whole Ale at least once a year since opening his brewery. By basing a recipe based on the availability of ingredients, Ben has been able to create a yearly estate brew.



In his first year, he brewed an ESB (extra special bitter), in his second, a hops session, and the latest is a Hefeweizen. In creating a Mass Whole beer, Roesch ensures he has the right volume and variety of necessary local ingredients. Knowing well in advance the volume and varieties of malt he would be able to source, he was able to cater the beer style to the availability of ingredients. The Mass Whole Hefeweizen is a low bitter beer typically heavy in unmalted wheat in proportion to malted barley.

Sourcing local: first steps

Roesch needed to develop relationships with area suppliers who could meet his specific ingredient criteria. Seasonality, price, quality and volume are all important. Maple syrup and honey are abundant in the New England area however Roesch needed a wholesale supplier.

Blueberries

Finding a blueberry supplier proved to be more difficult. Roesch needed the fruit in a semi-processed form. He needed blueberries that were quickly frozen after harvest to best preserve the flavor, but also to break the cell wall. This process allows whole blueberries to be used in the fermenting process without any crushing or maceration. Roesch found a farmer with the capability to freeze the freshly harvested berries and package them in the exact weight needed for the brewing process.

Pumpkins

Local pumpkins have been the most difficult ingredients to source locally. Finding a long-term partnership has been an ongoing process. Although pumpkins are in abundance in New England, all brewers need to source them at an earlier date than their traditional harvesting season. As first-to-market strategy is becoming more popular, many brewers are seeking pumpkins as early as late July/early August, while the standard harvesting season is three to four weeks later. Processing local

pumpkins can also be costly since they must be washed, de-stemmed, scooped, and cut into small, dime-sized pieces. With little access to industrial equipment, Roesch worked with the attached restaurant's kitchen staff to handle the processing. Roesch also worked with a grower in western Massachusetts that had processing capacity for 300 pounds of pumpkins in ten minutes. The farmer also was making regular deliveries to Worcester area schools, and could include a delivery to Wormtown on the route. A limited supply of pumpkins and other market competition can mean that none go to Wormtown.

Malted grain

With the opening of Valley Malt in 2011, Roesch was able to use local ingredients in *every* batch of beer. The local malster is dedicated to sourcing local barley, wheat, rye and oats, malting it and supplying it to local breweries. Valley Malt works closely with many state and regional small breweries to fine tune the precise malting specifications requested by a brewer. Andrea and Christian Stanley, owners of Valley Malt, saw demand for local malted grains rise and have expanded their operation.



Photo credit: valleymalt.com

Distribution

Changing market forces have created challenges for brewers. With few barriers to entry and a growing customer base, the craft beer industry has grown rapidly, creating strong competition. The result is a highly segmented supply side, which has made distributors reluctant to add new brews to their catalogue or to access favorable shelf space. Craft brewing is an industry of tight margins.



A selection of Wormtown's brews on tap. Photo by Phil Marquis.

Roesch has made it a priority to forge strong connections with his distributors. With new market entrants, distributors have endless brands of beers they can potentially sell, thus brewers must do everything they can to maximize the attractiveness of the brew. Roesch encourages his distributors to pre-sell his beers. Often, the impressive pre-sale figures compel distributors to fully commit to selling a certain brew. Roesch also uses targeted marketing. He has found that many restaurants in Western Massachusetts feature farm-to-table menus and are enthusiastic about serving a beer brewed with local ingredients.

Challenges *Weather's effect on ingredients*

All growers encounter challenges to production based on disease, pests and weather conditions. The weather is a game changer relating to the quality of the plant and

the amount that is available for harvest, but cannot be controlled. A local hops farmer who planned on supplying Roesch had Hurricane Irene blow by at the exact time of harvesting. Attempts were made to salvage the crop by uprooting the entire vine and picking the cones from the plant indoors, but most of the harvest had spoiled. Product can be late due to a cold season, or have changes due to too much or little moisture.

Ingredient quality

Roesch cannot use partially green pumpkins, which can lead to a weaker pumpkin taste in the final product. Locally crushed malt in the past has required frequent adjustments on the grain mill to make sure the malt is crushed properly. Any locally sourced ingredient needs to meet the brewers specifications.

Supply chain management

While large suppliers are able to take advantage of industrial equipment and supply chain networks, small breweries sourcing local need to spend time and resources finding an appropriate supplier and making logistical arrangements. The lack of a local supply chain infrastructure and network can be time consuming and expensive for brewers. Roesch recommends an accurate, up-to date and detailed local farm guide for brewers to find suppliers. As the time, effort and money needed to source local ingredients goes down, brewing with local ingredients becomes much more attractive. Roesch says the essence of the problem is brewers “not having the time or the ability to make these connections.”

Costs

Local ingredients often cost more than an ingredient sourced from a larger supplier. Massachusetts farmers have one of the highest land costs in the United States, and need prices to reflect what works for a sustainable business. Brewers often cannot pass the cost to the consumer, who expects a specific price point. Transportation costs are typically higher as well. Since locally sourced ingredient shipments are typically smaller, shipping costs may not be competitive. These challenges require a strong commitment from brewers to use local ingredients.



Photo by Phil Marquis

Looking forward

Roesch's hope for the future is that it will become easier to form partnerships with local farmers and to be able to source ingredients that meet his specifications for quality and prices. His pioneering work towards these goals continues, as does his passion for brewing with local ingredients sourced in Massachusetts.