

MICHIGAN BEER GUIDE

No Such Thing as a Hops Shortage

By Brad Probert



“First of all, I just want to clarify something - there’s no such thing as a hop shortage,” explained Ann George, Executive Director of The Hop Growers of America. Ann went on to explain that the misnomer of ‘shortage’ gets used when more accurately it should be described as “a disconnect between some brewers and their needs in the future.” In reality, there are instances of both true shortages and short-sighted plans. Contracts with hop growers have emerged as the norm to help address the forward planning aspect, but as any farmer will tell you, a crop is always at the mercy of Mother Nature. Whatever the reason, when the desired hops aren’t available, it’s up to the brewers to come up with solutions.

Severe volatility in the hop growing market over the past 30 years has led to a number of changes in how hops are managed as a commodity in the U.S. For the most part, hops are not simply grown by the farmer and then offered up in the open market. Due to the investment required of the grower (about \$8k/acre) and the volatility seen in the past market, banks largely do not provide agricultural loans to growers unless they have contracts in place with a brewer or hop broker. These contracts specify a price and amount of hops of a particular variety and cover from single to multiple years. In these contracts, some hop brokers budget for extra amounts beyond contracts they may have with breweries to make some amount of hops available for spot buys in the market. If hop growers have an above average yield at harvest, this will also provide surplus hops available to the market. If a brewer has a stellar year with big demand for their beers, they either need to have utilized accurate foresight to contract for that growth or they are at the mercy of what hop surplus may exist that year.

The bulk of the hops grown in the U.S. come from Washington State, and roughly 50% of their hop acreage is planted with proprietary varieties of hops. Proprietary varieties are developed with private funds and marketed to meet certain flavor characteristics in beer or have high levels of agricultural performance in the field (yield, disease immunity, water needs, etc.). Public varieties come from the US Department of Agriculture, or various state university programs. Proprietary varieties are controlled by the owner, and growers must pay a royalty to grow them. In addition to the royalty, the hop brand owner controls exactly how much a grower can plant. With these production controls in place, they ensure there are no surpluses and market demand helps justify the royalty premium farmers pay for the ability to grow these hops. Odds are, you probably know some hop varieties of both the public (Cascade, Centennial) and proprietary (Citra, Mosaic) type.

Like any other growing plant, hops are subject to natural causes affecting their yield. There are insect adversaries (there’s actually such a thing as a “hop aphid” that specifically feeds on juices in the hop cones), specific plant diseases, and of course overall weather conditions that hop growers have to contend with. In 2007 the hop market was challenged when a drought caused a major yield loss of the hop crop. This was after previous years of oversupply and stagnant prices led many farmers to pull out of hop production. With these factors squeezing the supply, major breweries were fed most of the available hops through their contracts and open market hop prices jumped 10-fold. While the shortfall in the US hop harvest was able to be backfilled with a good harvest in Europe, this jolt in the supply chain jump-started many farmers back into the hop growing business. It also pushed the process of hop contracts down to even the smaller brewers, not just the major breweries, with the norm in the industry now being a 3-5 year contract.

Although a brewer will have a contract in place for a certain variety of hop, seasonal variations create subtle differences in harvested hop product. At a recent hops and barley conference, Alec Mull, **Founders** VP of Brewing Operations, explained his process for selecting hop batches. He evaluates each sample presented to him and starts by eliminating the batches that he doesn’t like. He explains it’s easier for him to pick out ones he doesn’t like

rather than decide which ones are his favorite. Once he’s selected all of the batches he will use to fill their contract, they have the hops mixed or blended together. Alec explains, “I don’t want to be able to taste the difference and know whose hops are in the beer I’m drinking.” This blending helps larger brewers alleviate variations in particular hop characteristics from a given field or a certain harvest.

Eric Moore, **Deschutes** Lead Brewer, describes a time a few years ago when there was a big shortage in Amarillo hops due to a bad harvest and their contracted amounts were not able to be met. “We were left scrambling to find a solution or substitute that would mimic the flavor profile we were getting from the Amarillos. We used our pubs to do test batches with certain varieties to find one that would be a suitable match before deciding to use Brambling Cross along with what Amarillos we did get to match the flavor profile.”

At **Short’s Brewing**, in 2007 they experienced a shortfall in hops when their beer sales exceeded projections and they didn’t have sufficient contracts in place to cover all of their needs. The excessively priced hops available on the open market drove them toward some creative solutions. Tony Hansen, Short’s Head Brewer, explains what they did: “We did make a few hop substitutions, but spread it out in a way that made it unnoticeable to customers. Really, not having enough hops helped fuel our drive to become creative with experimental beers. We did develop a few new beers that were very lightly hopped, which at that time was very uncommon for us. However, the lightly hopped beers that were produced during that time are still very popular. We also have a very wide range of beer styles in our portfolio that don’t rely on hops as a showcase ingredient. So if times were tough and hops were limited, we could still produce some of our most popular beers.”

You may be able to name off your favorite hop variety (or top 3 if you’re an aficionado). But even with hops you know, it still comes down to the brewer to use that hop in just the right proportion, at the right time in the process, and in balance to everything going on with the beer. So whether there’s a ‘hop shortage,’ or just a failure to predict hop needs accurately, we still put our faith in the brewers to make their magic happen when we take that first drink. **MBG**