

Interview with Jim Solberg of Indie Hops

Fittingly, the inspiration for Indie Hops, the newest hop merchant in the business, was germinated over a beer. In September 2008, two friends—Roger Worthington and Jim Solberg—were sipping pints at the Hopworks Urban Brewery in Portland, OR. Roger, a successful attorney, told Jim that he was frustrated at his failure to produce a tangible product. He loved beer and he loved hops, and had decided he wanted to be in the hop business. And he wanted Jim, a veteran Nike executive, to come on board to lead the venture. After another pint or two, Jim agreed, and he set about researching hops. Jim says his research led him to three conclusions:

- (1) There was not one U.S. hop merchant 100% dedicated to craft brewers.
- (2) Oregon's Willamette Valley is the best terroir for aroma hops in America.
- (3) the Willamette Valley did not possess the infrastructure for processing, storing and distributing hops.

Less than two years later, Indie Hops—a hop merchant that is 100% dedicated to craft brewers—is up and running, and the company is working to build the hop infrastructure in the Willamette Valley. In the interview that follows, we talk to Mr. Solberg about this new venture.

Modern Brewery Age: Why was this the right time to start Indie Hops?

Jim Solberg: I guess you could say it was a confluence of events.

First, we saw an opportunity in the marketplace. The direction of the industrial brewing world, with respect to hops, is heading further away from what craft brewers need and want. And the vast majority of the hop industry is following the big brewers.

The trend for the macrobrewers is away from variety and toward higher alpha acid, even from breeding hops. They are looking for the highest percentage and the highest yield. Even the large brewers in Europe, where quality has been number one for centuries, are starting to skimp on their ingredients.

For years, the craft brewers could count on great trickle-down from the activities of the macrobrewers, but that is no longer the case. At the same time, the craft market is growing so much, and is continuing to grow. And craft brewers prize hops with outstanding aroma and flavor, pure aroma



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hops or dual-purpose hops.

The macrobrewer's trends are impacting the hop growers. We're from Oregon, a climate suitable for growing fine aroma hops. There are many century-old farms here, that have been growing great aroma hops all these years, and have the skills to coax the best oil profiles from the hops. When Anheuser-Busch sold to InBev, a lot of things changed.

Anheuser-Busch during the Busch age used whole hops, believing that further processing reduced character of the hops. A-B used a lot of Willamettes, that was the signature aroma hop in Budweiser, and 80%

of their Willamettes came from Oregon. After the takeover, they reformulated Budweiser, going to pellets even for aroma, and using mostly alpha up front. This has caused turmoil in the Oregon hop market. Willamette acreage was 3000 of the 6000 total acres of hops in Oregon during 2009. That 3000 acres of Willamette dropped to roughly 2000 in 2010, and is likely to settle somewhere around 1300 acres in the next two years. The price to the farms has also been pressed downward by over 30%. Farms are folding their hop businesses. A-B was the last macrobrewer that was buy-

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ing from the farms at this stage. A few of the large craft brewers do that as well, but the vast majority have contracts with merchants.

So that's where we come in. We've entered into long-term contracts with two established farms, Goschie and Coleman. There are still hops under cultivation, and the hop infrastructure still exists. We wish we could do it faster, but it takes time to build market share. We planted 100 acres this spring. The average yield for an acre is 1600 pounds per acre. We'll add more in spring 2011. We'll get this thing to where we have 500-1000 acres growing hops for craft brewers, but it will take a few years.

So you will contract with the farms...

Yes, we started out with some farms, and they were already growing varieties that are well-liked by craft brewers, so we purchased their excess hops in 2009—Cascade, Centennial, Golding, Fuggle, Liberty and Mount Hood. Also some Sterling, Willamette and US Tettnanger, and a little Nugget.

In addition to planting our own acreage—plantings from spring 2010 won't be harvested until 2011—we added Chinook, Crystal, Horizon, Perle, Santiam and Ultra. Also, Columbia, which is an interesting hop. Columbia was the semi-finalist with Willamette in the old A-B trials to find the finest aroma hop. The A-B brewmasters loved it, but Willamette had higher yield and lower alpha percentages, so economics won out. We already have our first customers lined up for that hop.

So craft brewers are showing interest?

Yes, they are. After the hop shortage debacle drove brewers into a panic, many of them signed up for long-term contracts for more hops than they needed. It will be a lean business for us for a couple of years, as those contracts wind down. But I think that what we are doing resonates well with craft brewers. And, as they start looking to the future, they may bring us in as a supplier. We are getting out into the market, and sitting down with brewers. We hear the refrain "we want another supplier" all the time. A lot of brewers don't feel that they have been treated well in recent years. And they see we are making a full-fledged effort at this. We built a new pellet mill, specifi-

At the Indie Hop Mill, baled hops are transformed into pellets



Top left: The Indie Hop pellet mill is a \$2 million, two-story assembly of machines that can churn out 6,000-7,000 lbs of high-quality aroma hop pellets per day. **Top right:** The process starts when 200-lb bales of whole-cone hops are broken up by the mill's bale breaker and soil, seeds and debris are separated from the hop cones. **Above left:** Finished hop pellets pour from Indie Hops' pellet die "at a lower temperature than typical processes, leaving more hop acids in each finished pellet." **Above, right:** In the final step of the process, aroma hop pellets are sealed in air-tight bags with inert gasses that preserve the hops' essential oils. **At right:** Jim Solberg, CEO of Indie Hops, uses a thermal gun to measure the temperature of hop pellets immediately after they come out of the pellet die. "As process temperatures approach 130 degrees Fahrenheit," he says, "the essential oils of hops begin to oxidize, leading to irregularities in flavor and aroma."



cally designed to preserve the essential oils in hops. We take the whole hop character, and change it as little as possible, except for form.

How do you do that?

We run at lower temperatures, and we don't grind the hops as fine, so there is less damage to the hops. Our pellets behave more like whole hops, but they have all the advantages of pellets—better utilization, easier storing and handling, and they keep better.

Did you get any interest at the Craft Brewers Conference this year?

We weren't ready in time to exhibit at this

year's Craft Brewers BrewExpo. We brought the mill on line in March, and the timing of the CBC in Chicago was too tight for us to set up. So between now and the next CBC, we are directly contacting brewers. We are taking out sample packs and giving them a chance to try these hops. We like to run little tests, comparing our pellets to other pellets out there. We put the pellets in a pint glass with hot water, and see how they behave in solution. Brewers immediately see the advantages of these pellets.

What are the advantages?

We've retained the essential oils, with all the aroma and flavor. We protect the hops

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from heat, oxygen and light, and we process them below 110 degrees 90% of the time. The average with mills in the Yakima Valley is 125-127 degrees. And that makes a difference. The typical ceiling is 130 degrees, after that there is tremendous damage to the hops. They cool their dies and slow their machinery to prevent them from going over that. A lot of them have gone to smaller diameter dies. We've stuck with larger diameter dies, there is less surface area exposed to heat.

Where is the Indie pellet plant?

We are outside Hubbard, OR, which is a little hop town. There is room for expansion. It's a good place to be. Our plant runs slower than similar-sized plants in Yakima, but we could still produce 6000-7000 pounds a day. So we can get up to a pretty substantial production level. We bought most of the machines right here in the U.S. Only one machine came from Europe, it's an Austrian-made machine for use in the separating process, to separate seeds. Brewers don't like seeds, there is potential for off flavors, and they also don't like paying for the weight. I don't think anyone else in the U.S. is using this kind of machine.

How do you convince brewers that your pellet is not just another pellet?

Craft brewers run the gamut, from young guys, very excited about variety, to professionals who are very buttoned down. Some brewers are very focused on this, and they have been quick to look at our pellets. It has been easy to get them interested in pilot trials. Even without a pilot trial, it doesn't take much hot water to see how these hops behave.

Is anyone in Europe making pellets the way you do?

No, but there are some that are getting very similar results. What Boston Beer is doing in Bavaria, for example. Basically they run a super-cooled pelleting process. They add a cleaning step after the first half of the process, that allows them to take the plant matter that is not part of the cone out of the process. It's a proprietary process that Boston Beer has the rights to.

What's the next step for Indie Hops?

The big thing is that we are communicating with brewers, so people know what we are

doing. We hope that people will consider bringing us in as another supplier. There is a quality element involved, of course, and when we get enough brewers on board we can get some momentum going. For example, our breeding program will take time, but we will get some exciting varieties out of it. We have funded a hop breeding program at Oregon State University. That's been the site of the main U.S. Dept of Agriculture hop breeding facility for 50 years. The great varieties like Cascade and Willamette came out of that program, but they are no longer breeding for variety spe-



Some of Indie Hops' aroma hops are grown at Century Farms near the company's mill in Hubbard, Oregon.

cific traits, but instead focusing on germ plasm, parents and particular traits for breeding, and molecular markers. Long story short, they are getting out of varietal breeding. We have donated \$1 million to OSU to carry on varietal breeding that is focused on the craft market, and we are engaging with craft brewers to help direct the program. This will allow craft brewers to be in on the early stages of a hop variety's development, and help us find the hops brewers want to brew with.

Here in Oregon, we found there was hop expertise all around us. We could tap into that at the breweries, at the farms, and at the universities.

Would you characterize the hop market as volatile now?

I'm only looking at the market as it pertains to craft brewers, but it does seem to be getting more volatile. I think it's largely because of what we were talking about earlier—the macrobrewers are going one way, and the craft brewers are headed in the opposite direction. Craft is what, 9 million barrels a year? And there is no end in sight, so that makes things a little more volatile. From our perspective, there is acreage out there for growing hops. It's hard to say what some of these farms will do. But some of them will be willing to grow smaller plots of aroma varieties, if they are paid enough. We are signing four-year contracts with growers. It's a roll of the dice, on our part, without contracts from the brewers. The cart is a little ways ahead of the horse, but

the horse will catch up. It will take a little time, matching up the relationships, the varieties that we're growing with the varieties the brewers want.

We went into this with our eyes wide open. We saw that the craft brewers are loaded down with contracts right now. They are all growing fast and are very busy, so it's hard to get them to look at future needs. The hardest thing is to break into the cycle, getting enough craft brewers to work with us. It's always hard to be a new entrant in an existing market, but this market is growing so fast that we see an opportunity. When

we get to sit down with brewers and show them our hops, they see we have something special to offer.

Right now, we're getting 20,000 pounds out there in pilot brews, it's enough for the brewers to see the quality. We are building for the future at the moment, really focusing on getting business lined up for 2011. We'd love to have 150,000 pounds of hops lined up, because we could deliver them.

And that's just a "getting started" number. We intend to be a much larger supplier than that in the future. Our goal is to be a quality supplier to the craft brewing industry. We'll try to orchestrate the work of the scientists, the farmers and the brewers. The scientists will help give us a stable future for these great varieties, and when those start to drop off, they can help us freshen things up with new ones. We have a great hop growing base in Oregon. These growers have it so dialed in, growing hops for so many generations. We'll work with them for the ideal oil profile for given varieties. Our pelleting technology is critical, but it doesn't mean diddly unless you are starting with great hops.

I think brewers will be impressed with the hops that we deliver after the next harvest. Our pellet mill came on line in March, and we pelleted the crop in April. So those hops had been harvested in August/September of 2009. This year, we will be pelleting right after the harvest, and I think brewers will see quality go one more notch up, with that just-harvested freshness.

Thanks for your time, Jim.