

Steve Dresler, who has been with Sierra Nevada since 1983, hosted a general Q&A session with the goal to stimulate conversation amongst all of the brewers present. First on the list of topics was their wet hop beer.

Sierra Nevada owns a hop field "Chico Estate" (I think they are expanding to 10 acres) which they use as a source for a special wet hop beer (I think it is their Extra Special Pale).

They are in the process of stepping up production on this beer from 3-5k barrels.

They load it up with Chinook, Cascade, and Centennial (may be missing another hop or two).

Throughout the years, they have been surprising close to their numbers and have kept a pretty consistent product, despite the variations that are likely to exist.

Someone asked about changes with evaporation / wort absorption due to using wet hops.

Steve hadn't noticed any changes though he agrees there was a finite difference for sure.

Probably very small compared to the larger evaporation rate factors.

He also felt that wet hop beers held up just fine in the bottle.

He did mention that they didn't bottle condition with their wet hop beers.

A question came up about contamination with using dry hops. Sierra Nevada has very good process control and routinely checks for infection. They do notice some increases in wild yeast but typically by that point they are overrun by the dominant strain. Someone else asked about how to avoid "grassy" flavors with wet or dry hop beers. Unfortunately, no good answer besides to be ready to have it balanced by malts. He also talked about their Torpedo which they use for some of their dry hopping. You can see the effects in their Torpedo Ale. In discussing ways to get hop flavors into beer he felt that hop backs were a great way to get the floral notes of hops in particular. Responding to a question of whether or not he would recommend leaving the hop back open or closed, he felt closed for sure to preserve aromatics and also reduce hot side oxygen pickup. He also said that they try to add dry hops with 1 degree Plato of fermentable beer left to help reduce oxygen pickup. That way the yeast is still active to help with oxygen scavenging. Someone asked if Sierra Nevada was looking into reusing hops (initially using hops for aroma and flavor, then using for bittering). Steve thought it was a possibly great idea except for the mess and logistics involved.

Going back to the concept of hot side aeration, Sierra Nevada used to use deaerated water and would routinely flush the grist mill with nitrogen. In general this is probably overkill for ales, but might be helpful for lagers. He recommended focusing oxygen pickup reduction efforts on post-fermentation processes.

Steve also had some recent experience with Southern Hemisphere hops. In particular he commented that apart from customs and logistics issues, he was very impressed with the quality of hops (in particular Southern Cross, Montelupe (sp), and Pacific Hallertau). He felt that Montelupe was like Cascade with orange and enjoyed the spiciness of Pacific Hallertau. In considering whether or not he felt they would be moving these into the US, he commented that basically there was no motivation for New Zealand to do such a thing since they were essentially proprietary hops and they'd like to keep them that way.

The concept of mash hopping came up as well and Tomme Arthur fielded the question. They have really had a hard time quantifying it but it puts a nice spin on the flavor and rounds out the mouthfeel. Someone brought up sparge water hopping and the main comment was that it does quite a number on your liquor tank with oils on the walls! Probably not the worst thing for a homebrewer, but imagine having to get in that liquor tank and scrub that film down.

Sierra Nevada is also doing a lot with regards to energy sustainability. They produce their own electricity, natural gas, and methane from waste water and products. Of interest, since they don't always have a perfectly continuous week cycle, on low times they dose yeast into their waste water processing plant to keep the gas production going. They have a ton of solar panels for electricity production - they've covered their parking lot and a lot of their structures. They naturally have a lot of heat recovery systems. Go check out their website for more details on their amazing green efforts. They are getting to the point where they are off the power grid and sometimes have to "dial down" production. In general, their efforts have paid for themselves very quickly.

Overall, this seminar was a great discussion and possibly the most informative of the conference.