Dry Hopping

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What and Why Dry Hop

"Dry Hopping is the process of adding hops to the beer at a point anywhere from after the boil up to the bottle or keg" (Garetz, 1994, p.178).

The objective of dry hopping is to get the aroma and flavour of fresh hops into your beer. A beneficial side effect is the preservative qualities that hops impart.

This aroma/flavour sensation comes from the volatile hop oils (e.g., myrcene, humulene) which are otherwise driven off during boiling.

Method: Traditionally, in the Cask

This is the traditional method whereby hops were (and still are) added to the cask or barrel to provide fresh hop character and to act as a natural preservative.

If you have your own barrel, give it a try!

Methods: Start of Fermentation

This method involves adding the hops directly into the fermenter at the start of fermentation.

For best results, add the hops at the same time as the yeast.

• Pros:

- Easy to remember
- Less aggressive effect

Cons:

 A lot of the hop aroma is scrubbed out (and carried off by CO₂) during the vigorous periods of fermentation, so less efficient use of hops

Methods: During/End of Fermentation

This method involves adding the hops as fermentation is winding down.

Pros

- A much fresher hop character is attained
- More 'bang for your buck' – you get more from your hops

Cons

- It's easy to forget
- Hop character can be more aggressive

Methods: In the keg

In this method, hops are added directly to the keg.

In the keg, a hop bag or 'tea ball' (to hold the hops) is strongly recommended so the hops don't get caught in the spear.

Pros

- Super fresh hop character
- Technique can rescue an otherwise boring beer

Cons

- Hop character can be too fresh, like inhaling hops.
- Hops can easily get caught in your spear if you don't take precautions

Method: In the Bottle

In this method, hops are added directly to the bottle.

It's best to use a funnel and not your fingers to add the hops. This technique is very difficult with hop plugs or cones.

• Pros:

 Some people have found this favourable in their beers

Cons

 Most of the brewing literature slams this practice

Method: As you dispense

In this method, the beer runs through a bed of hops as you dispense the beer. This is a picture of a Randall.



• Pros:

- It looks really really cool
- The hop flavour is amazing
- It will reinvigorate any boring beer

Ons:

- A lot of hops are required
- It's a lot of mucking around

To Bag or Not to Bag

Using a bag or teaball will prevent the hops from floating all over the place. They can also reduce haze.

However, hop character is often reduced and the bag or teaball must be very meticulously sterilised.

- Definite Use
 - Keg
 - During Dispense
- Optional Use
 - Fermenter
 - Cask or Barrel

Hint: to sterilise your hop bag or teaball, add them to your half-full kettle. Boil for 15 minutes with the lid off your kettle (that will mean it won't turn itself off automatically).

Common Problems

- Haze: Hops contain tannins. Prepare for some haze.
- Vegetal Flavours: Too much hops can lead to vegetal and grassy flavours.
- Blocked Kegs: Transferring to your keg too early can lead to keg blockages. Cold conditioning and time will help prevent this
- Forgetfulness: Don't forget to add your hops
- Hop Addiction: It can be addictive
- Palate Fatigue: Too much hop and it's all you will taste.

Styles to Dry Hop

If you like to brew to style, the following styles generally utilise dry hopping:

- English Pale Ales
- American Ales
- India Pale Ales

Styles That Generally Don't Utilise Dry Hopping

- Scottish & Irish Beers
- Belgian Beers
- German Beers
- Australian Lagers
- American Lagers
- Dark Beers

Which Hops

Any hops can be used to dry hopping. However, some hops are better as bittering hops, while others have a superior flavour when they are boiled for a while.

Hops grown in regions where dry hopped beers are generally produced (England & USA) are generally some of the best for dry hopping. For example:

England – East Kent Goldings, Fuggles USA – Cascade, Centennial, Simcoe

Newer hop varieties from New Zealand are really starting to make a name for themselves as well.

Combining Hops

Like cooking, successfully combining hops in such a way that the flavours combine harmoniously is very difficult. However, it can be done.

Questions

Reference List

Garetz, M. (1994) Using Hops.