



The Barleycorn Press

Monthly Newsletter Published by the Green Mountain Mashers of Vermont

December, 1997

Volume 9 Issue 4



Brewing with the Winners *India Pale Ale*

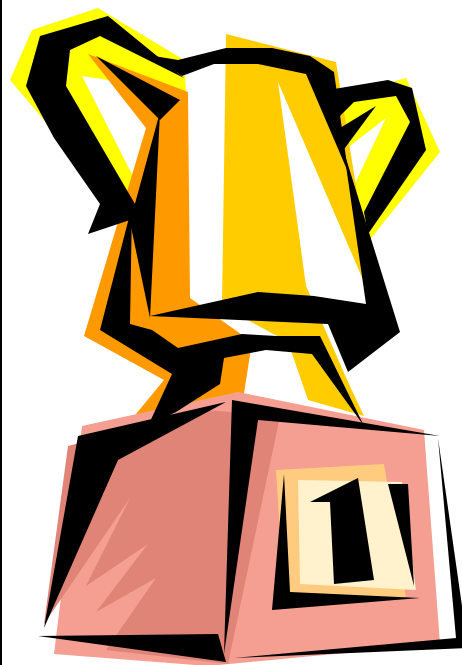
Dave Gannon

India Pale Ales are hoppy beers. And homebrewers love hops. So it's no wonder that the once nearly extinct IPA style is experiencing a tremendous revival. The number of IPAs entered in homebrew competitions and the number of craft-brewed IPAs available on store shelves have increased along with the growth of homebrewing and the growth of the craft brewing industry in general. And all these new variations on the traditional IPA theme have led us to reconsider, and even to change, our definition of the style. Once cast by sanctioning organizations as a specifically English-style beer containing exclusively English hops, the enormous number and popularity of the American craft-brewed versions of this style of beer has expanded our definition of what an IPA is, and now American IPA (containing American hops) has been recognized by judges and sanctioning bodies as a legitimate style.

In the next issue of *The Barleycorn Press*, Dave Clark will review the history of IPAs and will describe the parameters of the style. Now let's see how you can make this style of beer. And how you can make a winner!

Recipe Formulation

What goes into an IPA? And what distinguishes a great IPA from a good IPA? Let's have a look.



Fundamentally, an IPA is an ale. And being an ale, it should have all the fruity and estery characters of a top-fermented beer. And being (at least historically) a British beer from Burton-on-Trent, it should also be brewed with hard water and served with low levels of carbonation (these last two factors are certainly true of the British versions, but may be less important in the American versions).

But there is something else. Something which is vital to the very being of an

IPA. And that something is...hops.

Lots and lots of hops! IPAs derive their character from hops, and IPAs should feature hops in all their glory. IPAs should have prominent hop bitterness, prominent hop flavor, and prominent hop aroma. No sweet, malty beers allowed! Without a doubt, hops are the key factor that define an IPA. So if you want to win friends and influence judges with your IPA, don't be shy with the hops.

But there is more to making a good IPA than "throw in a lot of hops". There is an art to using hops. And even when using large amounts of hops, the successful IPA brewer needs to use some creativity, and some finesse. Beers brewed with a single type of hops just don't measure up. The brewer needs to combine hops of various types, and these hops must work together to offset and complement each other. Beers of this style should celebrate the diversity and complexity that can be achieved by using combinations of hops. A good IPA is a study in the artful use of hops. The best examples of this style use combinations of different hops to yield a unique depth and complexity to the beer.

Let's look at the some award-winning recipes to see how some of the best

...Continued on page 5

In this issue...

Champion IPA's
Texas Brewers Festival Report
Minutes of the November Meeting

Brewing Barley Wine
Cliff Timpson - 2nd Place in the "New Englands"
Brewer's Calender

New England Fall Regional Homemade Beer

In This Issue

Brewing Champion IPA's	1
MA Competition	2
Next Meeting	2
Staff Box	2
Brewers' Calendar	3
Cliff Kicks Butt	3
Brewing Barley Wine	4
Texas Brewers Festival Report	6



Staff Box

The Barleycorn Press is a monthly publication of the Green Mountain Mashers Homebrew Club. The following individuals are responsible:

Editors

Paul Hale
Robin Orr
Anne Whyte
Ellen Zeman

The Barleycorn Press appears in the final week of each month. **Contributions are due by the 15th of the month of publication.** Please mail contributions on 3.5" IBM compatible diskette (preferable) or via e-mail, or mail a hard copy to:

Paul Hale

111 Rivermount Terrace
Burlington, Vermont 05401
tel (802) 862-2702

e-mail address: halep@biotek.com

Contributions on any subject even remotely associated with the brewing and/or enjoyment of beer and related beverages are happily accepted by the editors. The editors reserve the right to edit any contribution as a function of available space, while making every attempt to maintain its integrity. The views expressed by contributors to the Barleycorn Press are not necessarily those of the editors or of the Green Mountain Mashers Homebrew Club.

This publication is made available free of charge to all dues paying members of the Green Mountain Mashers. Subscriptions are available to all other interested parties at \$10.00 yearly (US funds). Please mail your check or money order made out to the "Green Mountain Mashers" to Treasurer Lewis Greitzer at the following address:

Lewis Greitzer

33 Harbor View Road #1201
South Burlington, Vermont 05403

Advertising space is available to non-profit and for-profit organizations wishing to offer beer related items or services to the readers of this publication. The editors reserve the right to

The New England Fall Regional Homemade Beer Competition will be held on Saturday, December 6, 1997 in Deerfield, Massachusetts. This competition will be the first homebrew competition of the year in the New England Homebrewer of the Year (NEHBOTY) circuit.

Anyone who entered a homebrew competition in the New England circuit last year should receive a mailing containing a competition announcement and entry forms sometime within the next week. If you need entry forms but do not receive them, please contact me or Anne Whyte and we will copy them and make them available. (If none of us receive entry forms by the time we need to send entries, we can probably use last year's forms. The categories and forms will be mostly or entirely unchanged.)

Judges should also be receiving invitations to help judge the competition in the same mailing. If you do not receive a judge's invitation (new judges may not be on the mailing list) and you want to go, please contact Charlie directly.

Mashers Drop-Off Point

I am organizing transport of local entries to the competition. (Charlie O., the Competition Organizer, has arranged for the Seven Barrel Homebrew Store in West Lebanon, New Hampshire to be a drop-off point. I have a friend who is a grad student at Dartmouth and who is going to be home in Burlington for Thanksgiving, and he has agreed to transport our entries to the Seven Barrel.)

Please bring your entries to Vermont Homebrew Supply in Winooski by 7:00 PM on Friday, November 28 (that's the day after Thanksgiving). I will pick them up and give them to my friend who has graciously offered to do the transport duties.

Incidentally, Bill (my friend who has offered to do the transport) is a beer aficionado (all beers, including Belgian beers--he spent a year there doing a graduate degree) and beginning homebrewer. He is doing this even though he is not a Masher. Extra beers as a measure of gratitude are appropriate (and cheaper than UPS). 🍷

NEXT MEETING The New Magic Hat Brewery!



The next Green Mountain Masher meeting will take place on Monday, December 1st at the new Magic Hat Brewery on Bartlett Bay Road in South Burlington.

The meeting will commence promptly at 7:30 P.M. 🍷

Brewer's Calendar

November 29 - The Warrens (Tom Walters' band) will be at the Vermont Pub and Brewery.

December 1 - Green Mountain Mashers Meeting at the new Magic Hat Brewery. Bartlett Bay Road, South Burlington at 7:30 P.M. (former Grossman's site, off of Shelburne Road).

December 6 - Western Massachusetts Homebrew Competition, Greenfield, MA. The first competition in the yearly New England Homebrewer of the Year contest. For more details, see page 2.

A Reminder....

Your Club needs the following items for our annual homebrew competition:

- Cardboard 6-pack holders (lots and lots) -
- Cardboard case boxes (at least 40) -

So save 'em, bring 'em to Masher meetings, and give 'em to Dave Gannon.

--The preceding is a public service announcement from the GMHC Committee.

MASHER CLIFF TIMPSON TAKES SECOND PLACE IN 1996-97 NEW ENGLAND HOMEBREWER OF THE YEAR COMPETITION

Tom Ayres

For the third consecutive year, a member of the Green Mountain Mashers has taken the second-place honor in the annual New England Homebrewer of the Year (NEHBOTY) competition.

Cliff Timpson earned the award with a total of 21 NEHBOTY points notched in five competitions, beginning with the Western New England Regional Homebrew Competition in December 1996 and concluding with the Yankee Brewers Competition in Maine in June 1997. The NEHBOTY circuit also includes the Mashers' own Green Mountain Homebrewing Competition, where Cliff was named Vermont Homebrewer of the Year last May.

Perennial homebrewing powerhouse TJO3, M.D. (aka Thomas J. O'Connor



III, M.D.) once again took the top NEHBOTY spot with 46 points. Connecticut's Will Fields finished third with 16 points. The trio will be honored with a

trophy presentation at the upcoming Western New England Regional Homebrewing Competition in Greenfield on December 6.

Here's how members of the Mashers fared in the point tally for the 1996-97 NEHBOTY competition:

Cliff Timpson	21 points
Steve Lefebvre	12.5
Dan Marshall	12.5
Anne Whyte	7
Tom Ayres	5
Paul Hale	5
Joe Connolly	4
John McLaughlin	3
Dave Clark	1
Dave Gannon	1
Bob Genter	1
Rich Evans	.66
Phil Kaszuba	.66



Brewing Barley Wine

Steven Lefebvre

Cold and snowy nights, football, and warming beverages all remind me of winter in Vermont. In celebration of this time of year my brewing partner, Joe Connolly, and I like to brew the offensive tackle of all beers, the barley wine. When combined correctly its huge body, sweet malty flavors, high hopping rates, and incredible alcoholic strength make for a beer which is beyond comparison. In fact, to our chagrin, the alcohol by volume (>8%) is so high that it is one of the few beers which is illegal to sell in Vermont. Traquair House Ale is available locally and is close in style if you are interested in tasting an example, but note that it falls short in some of its characteristics.

Noteworthy of mention is the fact that this style is subject to a great deal of interpretation. In acknowledgement of this the A.H.A. recently divided the category into an American Style which emphasizes maximum hop intensity and the English Style which is dominated by a more dessert like malt character. I design my recipes after the English Style since I tend to enjoy them more as an apéritif than say with a meal where the intense hop bitterness helps to balance the meal. Color ranges from pale (a good technical challenge given the long boils required) to Imperial Stout which is sometimes placed in this category. The alcohol content for this style starts around 9% (v/v) and extends into the lower teens. Out of technical interest I have tried to create beers with high alcohol content (low in fusel alcohols), and with a malt character designed to allow only a hint of the beers true alcoholic strength while emphasizes its warming. So here we go, the recipe. I will be giving you both the 6 gallon 1996 and 1997 Barley Wine recipes which have been evaluated at competitions.

I feel that malt type is important, but the



mash schedule is crucial in the development of a full malt profile. We use strictly two-row English pale malt. I have used several different malt combinations including wheat, Munich, crystal, and carapils, however, I am finding that simplicity works best with these beers. The following is what we have used recently:

- 1996:** 28 lb. English Pale
¾ lb. Crystal 60
- 1997:** 19 lb. English Pale
¾ lb. Crystal 60

Believe it or not, that's it! I think the real trick is in the mash. In 1996, we mashed the grain in 38 quarts of water at 150 F for 1 hour. After 1 hour, the temperature was lowered to 145 F and 1 lb. of crushed grain (held in reserve) was added. Finally, we mashed out at 170 F for 5 min. The goal of this mash schedule was to maximize fermentables assuming that the body and residual sweetness should be more than adequate given the typically high finishing

gravity. This mash, however, left the beer with too many non-fermentables and a higher than desired final gravity. In 1997, we used less malt, but mashed at 145 F for 4 hours and then put the mash in a 185F stove and left it there for 5 hours. This brought the mash through all the remaining fermentation temperatures and conveniently completed the mash-out. This method seemed to significantly reduce the dextrin content and increase fermentable sugars. Both batches were sparged with 180 F water and approximately 11 gallons were collected. Finally, to enhance the malt character in the 1997 beer, we caramelized the first quart of wort, and added it back to the boil.

This beer takes about 2.5 hours to boil down to 6 gallons (plan accordingly). The hopping schedules are as follows:

- 1996:** Progress (4 oz) & Cascade (2 oz) 120 min.
Cascade (2 oz) 30 min.
Cascade (2 oz) 10 min.
- 1997:** Willamette (4 oz) 100 min.
Cascade (1.5 oz) 30 min.
Willamette (1.5 oz) 1 min.
Willamette (1 oz) dry hop in secondary.

Given these hopping schedules the 1997 beer had a better hop character which lasted throughout the taste without dominating the malt flavors. Ringwood was added to the cooled wort (65 F) and primary fermentation was kept under 70 F. I believe that this decreased the fusel alcohol concentration which is often detected in homebrewed versions of this style. The 1996 fermentation took place in a glass carboy and lasted 4 weeks. In an effort to decrease the primary fermentation time, I fermented the 1997 beer in a 20 gallon, square, plastic bucket. The beer was about six inches deep and fermentation was complete in an amazing 5 days. Both beers were then racked into a secondary and a small amount of fresh yeast was added. Dry hops were also added to the 1997 batch at this

....Continued on the following page

Barley Wine (cont. from page 4)

point. The beer was allowed to fluctuate with the room temperature (65-74F) for 1 month to introduce more estery flavors and complete fermentation. Finally, the beer is racked into a tertiary fermenter for 2 months and isinglass is added to clar the beer. Before bottling the beer is cooled to 40F for one week and bottled with the addition of 25 ml of Ringwood yeast and no bottling sugar.

The 1996 beer had an O.G. of 1.113 and finished at 1.035 (9.9% v/v) which I considered to be too sweet and not strong enough for me, but the overall flavor was very agreeable. The 1997 beer had on O.G. of 1.108 and finished at 1.020 (10.9% v/v). This beer finished more like I had desired, and after 8 months of aging seems to be better balanced than the 1996 beer. This style of beer is drinkable after 2 months, but is much better if consumed after 6 months to a year of aging. Incidentally, the 1996 Barley Wine took best of show at the Boston Homebrew Competition and first place at the Mashers Competition. The 1997 beer was also entered in the Masher Competition strong ale category as an old ale so that I could compare my comments with that of the judges on an all be it mislabeled and young beer. Surprisingly, this beer took second place in the Masher Competition behind the 1996 Barley Wine with a score of 40. The final comment was, "This beer would have scored much higher if entered as a Barley Wine." Oh well. 🍷



Happy Thanksgiving to All You Mashers!

IPA's (cont. from page 1)

examples of this style are made.

Recipes from the 1997 Green Mountain Homebrew Competition

India Pale Ale
 (Third Place in Category)
 "Deep Old File's IPA"
 Tom Martyn, Brattleboro, VT

Recipe for 11 Gallons

Grain Bill:

- 20.00 lb M&F Pale ale malt
- 0.50 lb U.S. Wheat malt
- 1.00 lb English Crystal malt (20° L)
- 1.50 lb Munich malt
- 0.06 lb Caramunich malt
- 0.04 lb Chocolate malt

Hops Schedule:

- 1.50 oz Columbus hops pellets (12.4% AA) - first wort hopped
- 4.50 oz Chinook hops pellets (12.0% AA) - 70 minutes
- 1.00 oz East Kent Goldings hops pellets (4.5% AA) - 15 minutes
- 1.00 oz Chinook hops pellets (12.0% AA) - 5 minutes
- 1.00 oz East Kent Goldings hops pellets (4.5% AA) - 5 minutes
- 2.50 oz East Kent Goldings hops pellets (4.5% AA) - dry hopped

Procedure:

Mashed in grains with 31 qt water, rested at 153° F for 120 minutes, then mashed out at 168° F.
 4 tsp gypsum and 1 tsp table salt added to sparge water.
 Second half of sparge water treated with lactic acid.
 Wort boiled for 75 minutes.
 1 tsp Irish Moss added 15 minutes before end of boil.
 Pitched with a slurry of Wyeast 1056 yeast obtained from local brewery.
 Fermented in primary fermenter for 10 days, then racked to secondary fermenter and dry hopped.
 Original gravity - 1.062

Final gravity - 1.016
 Judged 2.5 months after brewed.

Judges notes:

Estery nose, not much hop aroma. Would like a bit of alcohol and a stronger hop aroma. Hop bitterness in strong evidence--fairly well in balance with malt. A touch more alcohol would help. A bit more hop flavor would be nice. Overall, very drinkable beer--very good effort. Try dry hopping to improve aroma and flavor.

Good hop aroma, but could wish for even more. Hop flavor is good, but it needs more. Overall, a well made IPA. Your recipe is good, but try to increase everything a bit.

India Pale Ale
 (Second Place in Category)
 "American IPA II"
 Geoffrey McNally, Tiverton, RI

Recipe for 5.5 Gallons

Grain Bill:

- 5.00 lb M&F Pale ale malt
- 1.00 lb Weyermans Munich dark malt
- 0.38 lb Weyermans Crystal malt
- 0.25 lb DWC Caramel pils malt
- 0.25 lb DWC Aromatic malt
- 0.25 lb Weyermans Wheat malt
- 6.00 lb M&F extra light dry malt extract

Hops Schedule:

- 1.00 oz Columbus whole hops (15.4% AA) - 60 minutes
- 1.00 oz Cascade whole hops (6.0% AA) - 45 minutes
- 1.00 oz Cascade whole hops (6.0% AA) - 30 minutes
- 1.00 oz Cascade whole hops (6.0% AA) - 15 minutes
- 1.00 oz home-grown Cascade hops - knock-out
- 0.50 oz Cascade whole hops (6.0% AA) - dry hopped

...Continued on page 7



Brewers Festival Longhorn Style



For those of you that were unable to make it, the 3rd Annual Texas Brewers Festival was held in downtown Austin, Texas on November 15th and 16th. Even though the temperature was a wintry 55 degrees the popular outdoor event was well attended. Admission to the festival was free. For those whose quest was to sample some Texas brewed beer there was a \$10 fee which included a tasting mug and 3 generous 12 oz. samples. Continuous musical entertainment was provided by an array of local bands (including such favorites as "The Fence Cutters" and "Skunk Weed") from the proclaimed music capital of the U.S. In all, 16 breweries and brewpubs were represented at the event; most of them from the Austin area. The strong influence of a large Central Texas German population was evident by the selection of styles that many of the brewers offered. Bocks, Weizens, and Pilsners were abundant but there was something there to satisfy everyone's taste preferences. Austin's own Celis Brewery was well represented serving up 5 Belgian style ales (for "those" Belgian beer lovers - you know who you are!) however a disappointment in Celis' selection of available beers was the absence of "Pale Rider", a new variant of Celis Pale Bock (Note: Celis Pale Bock is really a pale ale but Texas law dictates that beers that are less than 5% abv cannot be called ales.). "Pale Rider" is a Clint Eastwood project (he's a friend of the Celis family) so you know that this one's gonna be a manly brew. Rounding out the brewers' selections (60 beers total) was a wide variety of Ambers, Bitters, Pale Ales, Stouts, Browns, Porters, various lagers, and random special creations. Attendees that still had some room left after quaffing all that fine brew were drawn in by the aroma of Texas barbecue wafting through the air. This brewers festival would not be complete without the numerous barbecued

and smoked delicacies that were offered by many vendors to satisfy the palate and complete the Texas brewfest experience.

Tasting Notes:

Pecan St. True Bock (Old City Brewing Co. - Austin Tx.): This beer had a deep copper color, was crystal clear, and held a thick frothy head. Malty sweetness was dominant in the aroma. Rich malt flavor with a mild sweetness was nicely balanced by hop bittering with a subtle hop flavor. Slight alcohol warming in the finish. Very Clean. (I could drink more of these.)

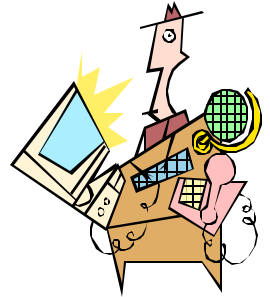
Luckenbach Pilsner (Furstenbrau Brewing Co.): Pale straw in color, this beer was crystal clear and held a white creamy head nicely. Clean aroma but there was little hop or malt character evident. Same in the taste. A very clean but very thin beer. This one would be a good thirst quencher served ice cold on a hot summer day.

Sledgehammer Express Stout (Bitter End Brewpub - Austin Tx.): I saved this one for last and here's why - With a starting gravity of 1.064 and 8 lbs of Texas Coffee Traders blend added to a 7 bbl batch of "Stout" (the style guidelines have been stretched a little but...) this stuff was a deep dark black. It gave a whole new meaning to the word "opaque". The head was coarse and relatively short lived giving way to a robust coffee aroma with dark malt and hop undertones. While the rich coffee flavor was most perceptible it rode atop a well crafted beer. There was a dark malt/subtly sweet character judiciously balanced with hop bitterness. Alcohol warming was evident in the finish. Understandably this is one of the Bitter End's most demanded rotational beer.



Minutes of the November Masher Meeting


**Recorded By
Phil Kaszuba,
Honorable
Secretary of
the Green
Mountain**



The well attended November 3rd meeting was held at the home of Matt and Anne Whyte. The business meeting was called to order at 8:15 p.m. by our humble president Paul Hale.

The first portion of the meeting consisted of a special presentation by club member Cliff Timpson entitled "Unhopped Brews". Cliff began with a discussion of some background information on brewing without hops along with a historical perspective of the evolution of hopless brews. He continued with an overview of various ingredients that may be used and some basic recipe guidelines. Cliff then discussed the many different varieties of herbs and other plants that may be used in flavoring unhopped brews along with recommendations on how and when to use them in the brewing process for proper flavor and/or aromatic extraction. Following Cliff's presentation was a tasting session that included three of his own unhopped brews; a Welsh Ale, Sahti (a Finnish Juniper-Rye Beer), and an Asian Jiu (Rice Beer).

The meeting continued with a fund raising club raffle. Prizes included a plethora of brewing supplies and equipment (grain, extract, iodophor, books and magazines, pint glasses, an assortment of brewing accessories). The prizes were generously donated by Vermont Homebrew Supply.

Following the raffle the business meeting was adjourned at 9:40 p.m. 

IPA's (cont. from page 5)

0.50 oz Columbus whole hops (15.4% AA) - dry hopped
 Procedure:

Mashed in grains with 9 qt water, and rested at 154° F for 60 minutes.
 1 tsp gypsum added to mash, and 2 tsp gypsum added to wort at boil.
 Dried malt extract added at boil.
 Wort boiled for 60 minutes.
 1.5 tsp Irish Moss added 15 minutes before end of boil.
 Pitched with 1 pint of slurry of Wyeast #1968 yeast obtained from the primary fermenter of a previous batch.
 Fermented in primary fermenter for 10 days, then racked to secondary fermenter and dry hopped for 25 days.
 Original gravity - 1.062
 Specific gravity at racking to secondary fermenter - 1.009
 Judged 2.5 months after brewed.

Judges notes:

Nice hop aroma--quite appropriate for style. Strong hop bitterness with moderate astringency. Hop flavor strong, but bitterness a little too much. Good alcohol notes. Smooth aftertaste once bitterness gone. Overall, a very well made beer, very appropriate for style, but is a bit too bitter and slightly harsh. Could use more hop flavor, and a little more hop aroma.

Very nice hop aroma with some esters apparent; could use even more hop aroma. Very strong hop flavor--perhaps too strong. Overall, very well made beer. Astringent flavor from hops detracts from overall flavor.

India Pale Ale

(First Place in Category)

Carol Hall, Tunbridge, VT

Recipe for 5 Gallons

Grain Bill:

11.50 lb M&F Pale ale malt
 0.13 lb Gambrinus Honey malt

0.25 lb M&F Crystal malt (60° L)
 0.25 lb Wheat malt (Ireks)

Hops Schedule:

1.00 oz Galena hops pellets (12.0% AA) - 60 minutes
 1.00 oz Cascade hops pellets (5.0% AA) - 60 minutes
 1.00 oz East Kent Goldings hops pellets (5.2% AA) - 20 minutes
 1.00 oz East Kent Goldings hops pellets (5.2% AA) - 10 minutes
 1.00 oz Cascade whole hops (7.8% AA) - 5 minutes
 1.00 oz Cascade whole hops (7.8% AA) - knock-out
 2.00 oz Cascade whole hops (7.8% AA) - dry-hopped

Procedure:

Mashed in grains and rested at 152-153° F for 60 minutes, then mashed out at 168° F.
 2 tsp gypsum and 1/4 tsp lactic acid added to sparge water.
 1 tsp Irish Moss added 15 minutes before end of boil.
 Pitched with 0.5 gallons of yeast starter of Wyeast #1056 yeast.
 Fermented in primary fermenter for 4 days, then racked to secondary fermenter and dry hopped for 15 days.
 Original gravity - 1.064
 Final gravity - 1.012
 Judged 2 months after brewed.

Judges notes:

Mild floral hop nose, moderate esters present. Very well balanced—nice hop flavor and good bitterness present. Alcohol noticeable but not overwhelming. Slight astringent aftertaste, but OK for style. Overall, wonderful job--hop flavor is so present it makes me think you used Northern Brewer to dry hop with. Very clean, well made--good attention to detail. Strong hop flavor...I like it and feel it is OK.

Get hops in nose, but could use more. Hops dominate in flavor over malt as they should; alcohol level is very

good; don't want any higher though. Hop flavor is borderline too much. Overall, very good IPA—hop bitterness/flavor and alcohol are very appropriate for style. Dry hop finish and yeast choice are good. I like this beer!

Comments

These three award-winning beers had many things in common. They also differed in some important ways. Let's look at the recipes and see how these three beers compare.

The 1st and 3rd place beers were all grain beers. The 2nd place beer was made using a partial mash technique. One of the beers was made in an 11 gallon quantity, whereas the other two were made as 5 gallon batches. Despite these differences, the grain bills of all three beers had significant similarities. All three beers used a British pale ale malt as the base malt (in fact, all three used Munton & Fisons pale ale malt). The 2nd and 3rd place beers also contained about 7% Munich malt, which is typical of commercially brewed American IPAs. All three brewers added two or three different types of crystal malts into the mix in order to add some depth to the malt character, but all were quite restrained in the amounts they used. All three beers contained a small amount of wheat malt, which can improve head retention. And all three beers had gypsum added to harden the water.

The original gravities of these beers was closely matched at 1.062-1.064, but the final gravities were quite different. The 1st and 3rd place beers finished at 1.012-1.016 whereas the 3rd place beer finished below 1.009. Although the judges did not think the beer with the low final gravity was lacking in body, the somewhat pointed bitterness and astringency they commented on may have been a result of the over-attenuation,

...Continued on page 8

IPA's (cont. from page 7)

which would leave a lower level of malt dextrins available in the finished beer to balance and offset the relatively high level of hops and dissolved minerals.

All three brewers combined different hop varieties together in order to add complexity and depth to the hop character of the finished beer. In addition, all three beers received multiple hop additions throughout the boil, and all three beers were dry-hopped in the secondary fermenters to ensure good hop aroma. These techniques were not lost on the judges, and it is this attention to detail that resulted in these three beers becoming the category award-winners. So how did the

judges decide between these three beers in order to make their final decisions? Well, an IPA is defined by its hops. And this principle was borne out in the final results of the competition. When the judging was completed, the three beers presented here ended up ranked in direct proportion to how much late hops were used to make them. Another interesting point is that the 3rd place beer used all pellet hops, whereas the other two beers used whole hops at least for the late additions. (I have read conflicting opinions on the aroma qualities of pellet hops, and I would be interested to hear from anyone who has compared late addi-

tions of pellet hops with late additions of whole hops.)

In conclusion, these three award-winning beers are all excellent examples of the IPA style of beer. All three brewers designed their recipes to contain the essential elements of an IPA, and all three brewers demonstrated a flair for using hops to create an assertive and memorable IPA. Since hops are so important to the IPA style, it was the hops that determined the final rankings in this category. But all three of these beers are excellent IPAs, and your personal preference for different types of hops will determine how you decide to



**Barleycorn Press
Green Mountain Mashers
c/o Paul Hale
111 Rivermount Terrace
Burlington, Vermont 05401
U.S.A.**

Place Stamp Here
Post Office will
not deliver
without sufficient
postage